

DETERMINING THE COMPETENCY OF CHILDREN WITH  
DEVELOPMENTAL DELAYS TO TESTIFY IN CRIMINAL TRIALS

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# FOREWORD

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One day, at the beginning of 1985, the Eros School held its house athletics meeting. As a recently appointed school psychologist, I watched a group of children unceremoniously getting themselves out of their wheelchairs to race and have fun. In retrospect, this event marked the start of a personal journey. One of the children I got to know at that time was eight-year-old Carlo, with paraplegia, and a hostel boarder, although I cannot remember whether Carlo also got out of his wheelchair on the day of the athletics. Later, in 1989, with the financial assistance of *Oom* Bey Naudé and the HSRC, I went to Jerusalem to be trained to use the LPAD, a dynamic assessment instrument developed by Reuven Feuerstein. Since then I have crossed paths with many other exceptional children, such as Ricardo, Alta, Sam, Robert, Lisa and Chantel – and I have learnt much. This research is dedicated to all of these children.

My thanks go to every participant, parent or caregiver, teacher, therapist, psychologist and fieldworker involved in the research for this thesis. The goodwill of the principals of the seven schools that participated, and of Dr Audrey Wyngaard at the Directorate Research WCED is also acknowledged.

I am greatly indebted to my research assistant, Tanya van der Lingen. Not only did she have a hand in almost every aspect of this study, but on occasions her computer skills came to my rescue. During the trials and tribulations of the fieldwork, her optimistic attitude and loving nature were a real pillar of strength. My gratitude goes to my colleagues, Pam Kerr and Tjaart van der Walt, who patiently endured the disruptions to our practice management caused by Tanya's involvement with the research. Obviously this was one of the ways in which they showed me their support.

The constructive input of Dr Karen Müller, my supervisor, is greatly appreciated. I am particularly grateful for the manner in which she supported and assisted me to finalise the thesis in time. I wish to express my appreciation to Prof Greg Foster of

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I am thankful for the love and support of my family, especially over the past two years. While mum Jeanette took over the household, Pieter paid me surprise visits every now and again during the many occasions that research took me away from home. Sonét's scrumptious meals and small gifts are valued as gestures of love and encouragement. I am indebted to both my mum and Pieter for their financial assistance with my studies, which far exceeded the amount initially budgeted for. However, now it is done!

Henri Nouwen writes,

"The mystery of life is that the Lord of life cannot be known except in and through the act of living. Without the concrete and specific involvements of daily life we cannot come to know the loving presence of him who holds us in the palm of his hand".<sup>1</sup>

Bothastrand, Great Brak River

November 2014

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<sup>1</sup> HJM Nouwen *A Cry for Mercy: Prayers from the Genesee* (1981) 174.

# ABSTRACT

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In South Africa children are required to testify under oath or admonition. The shortcomings of the competency test are of particular relevance to children with developmental disabilities, since courts are not equipped to adequately assess the competency of these children to give evidence. One component of testimonial competency, namely the understanding of the concepts truth and lies, is overemphasised and is examined with questions that are developmentally inappropriate for child witnesses in general. For children with cognitive disabilities, such questions create barriers for participation in the truth-seeking process. Consequently, convictions have been set aside on appeal owing to procedural irregularities found in the implementation of this test.

In the literature review on testimonial competency, attention was given to restrictions that specific developmental disabilities impose on the perceptual, cognitive, communication and moral development of children. Two of four components – narrative ability and moral capacity – were studied in a sample of 184 children in middle childhood. Participants' ability to give coherent and detailed accounts of events, their understanding of the concepts truth, lies, promises and the oath, and the Lyon and Saywitz oath-taking competency test, were investigated. Quantitative and qualitative methods were used for data analysis.

Three groups were identified: those children with very limited, average or full testimonial competency. Their capacities were found to be related to maturation of cognitive functions and level of intellectual functioning. Participants were better able to demonstrate their understanding of truth and falsity by responding to the oath-taking test than giving verbal descriptions of these concepts. Whereas 1% of participants had a conceptual understanding of an oath, 15% understood the concept of a promise. Syncretism and confabulation compromised the narrative accounts of a substantial number of participants. Syncretism relates to immature narrative ability: correct details are combined in an illogical fashion. Confabulation refers to filling memory gaps with fabricated information.

Guidelines on the competency determination of children with developmental disabilities were compiled. It is suggested that the competency examination be replaced by a formal, pre-trial competency assessment. The court should also receive expert evidence on how to facilitate meaningful participation when a child with sufficient testimonial competence is the witness.

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## **List of Abbreviations and Acronyms**

AAC	Augmentative and alternative communication
ABI	Acquired brain injury
ADHD	Attention-deficit/hyperactivity disorder
ALARM	Acronym for Neurocognitive deficits associated with FASD: Adaptive functioning, language, attention problems, reasoning, memory
ARBD	Alcohol-related birth defects
ARND	Alcohol-related neurodevelopmental disorder
ASD	Autism Spectrum Disorder
CA	Chronological age
CMH	Cape Mental Health
CNS	Central nervous system
CP	Cerebral palsy
DS	Down syndrome
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, 5 ed
ECED	Eastern Cape Education Department
FAE	Foetal alcohol effects
FAS	Foetal alcohol syndrome
FASD	Foetal alcohol spectrum disorder
GCS	Grover-Counter Scale of Cognitive Development
GMDS-ER	Griffiths Mental Development Scales – Extended Revised
HI	Hearing Impairment
HSRC	Human Sciences Research Council

ICF	International Classification of Functioning, Disability and Health
ID	Intellectual disability
IEP	Individual education plan
ISGSA	Individual Scale for General Scholastic Aptitude
IQ	Intelligence quotient
JSAIS	Junior South African Individual Scale
LD	Learning disability
LNFS	Little or no functional speech
LSEN	Learners with special educational needs
MA	Mental age
MDP	Minimum distance principle
MLE	Mediated learning experience
MR	Mental retardation
NC	Narrative condition
NNC	Non-narrative condition
OCD	Obsessive-compulsive disorder
PDD	Pervasive developmental disorder
SA	Scholastic aptitude
SALRC	South African Law Reform Commission
SASL	South African Sign Language
SAVE	Acronym for Sexual Abuse Victim Empowerment
SCD	Social communication disorder

SES	Socio-economic status
SLD	Specific learning disorder
SNE	Special needs education
SSAIS-R	Senior South African Individual Scale (Revised)
TBI	Traumatic brain injury
ToM	Theory of mind
VI	Visual impairment
VSMS	Vineland Social Maturity Scale
WCED	Western Cape Education Department
WHO	World Health Organisation
WISC	Wechsler Intelligence Scale for Children
ZPD	Zone of Proximal Development

# CHAPTER 1

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## TESTIMONIAL COMPETENCY OF CHILDREN WITH DEVELOPMENTAL DELAYS

### 1.1 BACKGROUND

During April 2012 a cell-phone video on social media networks of the gang rape of an adolescent from Soweto drew international attention. According to the victim's mother, her daughter was developmentally disabled and had "the mental capacity of a four-year-old".<sup>2</sup> Her daughter had been raped on two occasions, in 2010. Charges were laid with the police, but neither case proceeded to court "owing to lack of evidence".<sup>3</sup> Then, two years later, the gang rape happened. "I've reported two rape cases to the police, but nothing came of them. I felt there was no need to continue reporting because nothing happens anyway. The police have failed me and my daughter."<sup>4</sup>

Unfortunately it is not because this particular case was unique that it generated news coverage. Access to the South African legal system is acknowledged to pose a substantial challenge to people with developmental disabilities, so much so as that they have been identified as a vulnerable group.<sup>5</sup> The current study addresses access to the legal system by children in middle childhood<sup>6</sup> who are developmentally delayed, and investigates in particular their competency to testify during criminal trials.

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<sup>2</sup> "Cops have twice failed rape teen's family" *Sunday Times* 22 April 2012.

<sup>3</sup> *ibid.*

<sup>4</sup> *ibid.*

<sup>5</sup> Ministerial Advisory Task Team on the Adjudication of Sexual Offence Matters, Department of Justice and Constitutional Development "Report on the Re-establishment of Sexual Offences Courts" <http://www.justice.gov.za/reportfiles/other/2013-sxo-courts-report-aug2013.pdf> (accessed 26 April 2014).

<sup>6</sup> A Louw and D Louw "Middle childhood" in D Louw and A Louw (eds) *Child and Adolescent Development* (2007) 214: Middle childhood is the phase of development between approximately six and 12 years.

### 1.1.1 Vulnerable witnesses

There are two ways in which children with developmental delays and disabilities belong to the category of vulnerable persons in society.<sup>7</sup> Firstly, they are children.

“Child development research teaches us that children are not just short adults. They think and feel in ways that are different from the ways adults think and feel, and these develop over time.”<sup>8</sup>

Developmental immaturity causes children to be dependent on adult caregivers to protect and promote their well-being. Secondly, they are children with impairments that limit their capability to perform according to developmental expectations (demonstrated by peers of a similar chronological age). In accordance with the extent of their disability, these children have to rely on adult caregivers to facilitate the conditions in which they can function optimally.<sup>9</sup>

Children with developmental delays and disabilities are at higher risk of becoming victims of sexual abuse than peers not challenged by disability.<sup>10</sup> The combination of

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<sup>7</sup> A developmental disability is defined by an enduring developmental delay or delays. See ch 3.

<sup>8</sup> J Garbarino *Children and the Dark Side of Human Experience Confronting Global Realities and Rethinking Child Development* (2008) 4.

<sup>9</sup> World Health Organisation *International Classification of Functioning, Disability and Health (ICF)* (2001) 17 [http://apps.who.int/iris/bitstream/10665/42407/7/9241545429\\_tha%2Beng.pdf](http://apps.who.int/iris/bitstream/10665/42407/7/9241545429_tha%2Beng.pdf) (accessed 31 July 2014):

“Disability is characterized as the outcome or result of a complex relationship between an individual’s health condition and personal factors, and of the external factors that represent the circumstances in which the individual lives. Because of this relationship, different environments may have a very different impact on the same individual with a given health condition. An environment with barriers, or without facilitators, will restrict the individual’s performance; other environments that are more facilitating may increase that performance. Society may hinder an individual’s performance because either it creates barriers (e.g. inaccessible buildings) or it does not provide facilitators (e.g. unavailability of assistive devices).”

<sup>10</sup> M Page and G Precey “Child Protection Concerns When Questioning Children” in HL Westcott *et al* (eds) *Children’s Testimony. A Handbook of Psychological Research and Forensic Practice* (2002) 43; P Ainsworth and PC Baker *Understanding Mental Retardation. A resource for parents, caregivers, and counselors* (2004) 116.

their developmental immaturity and impairment makes them particularly vulnerable to perpetrators of sexual abuse, who easily target such children. Meaningful participation of children who have physical and/or mental disabilities in the legal system is frustrated when special facilitative arrangements are not made. For example, there is a lack of adequate psychological assessment services for this group.<sup>11</sup>

### 1.1.2 South African child legislation

The Children's Act 38 of 2005 corresponds with articles 12 and 13 of the United Nations Convention on the Rights of the Child. Section 10 of the Act states that a child has a right to participate in an appropriate way if the matter before the court is of concern to the child.<sup>12</sup> According to section 14, any child is entitled to bring a matter to court, either independently or with assistance.<sup>13</sup> Zaal regards these sections of the Act as the court's "preparedness to hear the voice of the child ... as a basic requirement", but he doubts to what extent the legal system is actually equipped to facilitate child participation.<sup>14</sup>

Furthermore, the Children's Act also corresponds with the United Nations Convention on the Rights of the Child (article 23) and the African Charter on the Rights and Welfare of the Child (article xiii(1)) regarding special measures for the child with a disability to participate in community life.<sup>15</sup> The child who is developmentally

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<sup>11</sup> N Zaal "Hearing the Voices of Children in Court: A Field Study and Evaluation" in S Burman (ed) *The fate of the child. Legal Decisions on Children in the New South Africa* (2003) 169-170.

<sup>12</sup> **Child participation**

10. Every child that is of such an age, maturity and stage of development as to be able to participate in any matter concerning that child has the right to participate in an appropriate way and views expressed by the child must be given due consideration".

<sup>13</sup> **Access to court**

14. Every child has the right to bring, and to be assisted in bringing, a matter to court, provided that that matter falls within the jurisdiction of that court".

<sup>14</sup> Zaal *Fate of the child* 158-159.

<sup>15</sup> **Children with disability or chronic illness**

11. (1) In any matter concerning a child with a disability due consideration must be given to -

delayed, as well as his or her caregiver, is supposed to receive adequate support with a view to maintaining this child's human dignity as a basic constitutional right.<sup>16</sup>

Ainsworth and Baker state that when persons with a mental disability<sup>17</sup> are victims of a crime, the possibility that society will react with prejudice is real.<sup>18</sup> In the criminal investigation their evidence is often overlooked due to stereotypical thinking about people with cognitive disabilities.<sup>19</sup> Should further enquiry clearly be indicated, interviewers might not proceed because of the overwhelming implications associated with the special needs of the child from a legal point of view.<sup>20</sup> Due to their disability, these children's evidence – if they are ever heard – is often approached with doubt.<sup>21</sup> Consequently, while child disability serves the criminal intent of

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(c) providing the child with conditions that ensure dignity, promote self-reliance and facilitate active participation in the community; and

(d) providing the child and the child's care-giver with the necessary support services".

<sup>16</sup> The Constitution of the Republic of South Africa, 1996 s 10.

<sup>17</sup> Mental disability is a manifestation of developmental disability. See ch 3.

<sup>18</sup> Ainsworth and Baker *Understanding Mental Retardation* 116. Also see N Archer and EA Hurley "A justice system failing the autistic community" (2013) 4 *Journal of Intellectual Disabilities and Offending Behaviour* 53 at 55.

<sup>19</sup> Endicott in R Milne and R Bull "Interviewing witnesses with learning disabilities for legal purposes" (2001) 29 *British Journal of Learning Disabilities* 93 at 93:

"[T]he law has traditionally concentrated on ways to establish formally the things that a person with disability *cannot* do. All too often a person's perceived inability to do *some* things is translated by legal processes into a finding of inability to do *anything*. The law has not demonstrated much capacity to find ways in which the person's special needs can be accommodated so that he or she can participate in ordinary human activities, including the activity of doing justice in society."

<sup>20</sup> Page and Precey *Children's Testimony* 43. Also see C Charles (2012) *Special measures for vulnerable and intimidated witnesses: research exploring the decisions and actions taken by prosecutors in a sample of CPS case files* 34

[www.cps.gov.uk/publications/research/cps\\_research\\_on\\_special\\_measures.pdf](http://www.cps.gov.uk/publications/research/cps_research_on_special_measures.pdf) (accessed 12 July 2014).

<sup>21</sup> K Müller "The Competency Examination and the Child Witness" in K Müller *et al The Judicial Officer and the Child Witness* (2002) 135-136. See for example, C Fraser and S McDonald *Identifying the Issues: Victim Services' Experiences Working with Victims with Fetal Alcohol Spectrum Disorder*

perpetrators well, these child victims' caregivers are left to their own devices since the legal system is not geared to reasonably accommodate restrictions associated with developmental impairments.<sup>22</sup>

According to the Guidelines on Justice for Child Victims and Witnesses of Crime, courts demonstrate non-discrimination when they are equipped to receive the testimony of the child with special needs.<sup>23</sup> This corresponds with the Equality clause

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(2009) 16 quoting a forensic worker's experience of a child witness with Fetal Alcohol Syndrome (FAS) testifying in court:

*"And I tried to warn the Crown that he probably wasn't going to make a good witness. That you're going to have to be really direct with your questions, because he doesn't ... I said this is what's going for him, he's not going to deal with the abstract questioning very well. And he was a horrible witness, and it was terrible. Because the judge ended up tearing a strip off him. And it was just terrible because nobody actually came out and asked specific questions to the information that was needed to be gotten and it never came out. So it made him look guilty and the father look innocent, which wasn't the case. And then here's this kid who, for the first time in his life, had spoken out against his abusive father, got a strip torn off him by the judge because he was an unreliable witness. It was just a nightmare. ... the boy was really nervous, so he was kind of coming across as being cocky because he was trying to, I don't know, appear calm ... I don't know. ... do you realize now these people have no place to go. Because now dad is being let loose. They have none of their clothing, they have nothing, and there's no place for them to go. And they had taken off and I couldn't find them. But they were in fear for their lives now because dad got released as a result of the whole process. I just thought the whole system failed this kid."*

<sup>22</sup> AL Pillay "The rape survivor with an intellectual disability vs. the court" (2012) 42(3) *South African Journal of Psychology* 312 at 312-313.

<sup>23</sup> International Bureau of Children's Rights in R Meintjes and SJ Collings "Issues raised by Judge Bertelsmann in connection with child sexual abuse victims and witnesses: The role and submission of the South African Professional Society on the Abuse of Children" (2008) 9(2) *CARSA* 1 at 20-21:

**"B. The right to be protected from discrimination**

15. Child victims and witnesses should have access to a justice process that protects them from discrimination based on the child, parent or legal guardian's race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability and birth or other status.

16. The justice process and support services available to child victims and witnesses and their families should be sensitive to the child's age, wishes, understanding, gender, sexual



of the Constitution of South Africa which determines that barriers associated with disability should not be the cause of unfair discrimination against witnesses.<sup>24</sup>

The two categories of vulnerable witnesses, children and persons with mental disabilities, are represented in the Criminal Law (Sexual Offences and Related Matters) Amendment Act.<sup>25</sup> One of the objectives of the Act is to promote the spirit of *batho pele*<sup>26</sup> by “giving proper recognition to the needs of victims of sexual offences through timeous, effective and non-discriminatory investigation and prosecution”.<sup>27</sup> The Victims’ Charter also pledges assistance to every (child) victim with “special needs”.<sup>28</sup>

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orientation, ethnic, cultural, religious, linguistic and social background, caste, socio-economic condition and immigration or refugee status, as well as to the special needs of the child, including health, abilities and capacities. Professionals should be trained and educated about such differences.

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18. Age should not be a barrier to a child’s right to participate fully in the justice process. Every child has the right to be treated as a capable witness and his or her testimony should be presumed valid and credible at trial unless proven otherwise and as long as his or her age and maturity allow the giving of intelligible testimony, with or without communication aids and other assistance” [emphasis by underlining added].

<sup>24</sup> The Constitution s 9(1)-(3). See Pillay 2012 *SAJP* 317; CME O’Kelly *et al* “Judicial intervention in court cases involving witnesses with and without learning disabilities” (2003) 8 *Legal and Criminological Psychology* 229 at 237-238.

<sup>25</sup> No 32 of 2007: Chapter 3 deals with child victims and Chapter 4 with victims who are mentally challenged.

<sup>26</sup> According to the Justice Department of South Africa, one of the eight *batho pele* principles is: “**Increase access to services**, especially to those people who experience barriers to access (such as their race, gender or disability; where they live; how much money they have; their access to modern communication systems; their culture and so on)” <http://www.justice.gov.za/paja/about/terms.htm> (accessed 01 September 2014).

<sup>27</sup> S 2(e)(ii).

<sup>28</sup> Service Charter for Victims of Crime in South Africa <http://www.doj.gov.za/2004dojsite/policy/vc/2004vc.pdf>:

“5. The right to assistance:

## 1.2 AIM OF THE RESEARCH

To have children testify in a South African criminal court is already no easy task.<sup>29</sup> Having vulnerable children – those with developmental delays – testify requires specialised expertise for “a fair trial” to take place.<sup>30</sup> “Research shows that individuals with ID [intellectual disability] and developmental disorders associated with ID do not often get their day in court” because their competency is underestimated.<sup>31</sup>

Reliable assessment of the competency of every child witness with developmental delays is crucial, because the legal competency test in particular is the gateway to his or her participation in the South African judicial process.<sup>32</sup> Only if the court is convinced that a child witness can distinguish between truth and falsity and that he or she is aware of the moral implications of lying, will his or her evidence be accepted.<sup>33</sup>

Henry *et al* caution that justice requires the court to be impartial with regard to both the child witness and accused during a trial.<sup>34</sup> It is thus accepted that not every

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- If you have special needs, all service providers will, within the scope of their functions, take all reasonable steps to accommodate you and ensure that you are treated in a sensitive manner.”

<sup>29</sup> A van der Merwe “Children as Victims and Witnesses” in T Boezaart (ed) *Child Law in South Africa* (2009) 567.

<sup>30</sup> Van der Merwe *Child Law* 572.

<sup>31</sup> LA Henry *et al* “Children with Intellectual Disabilities and Developmental Disorders” in ME Lamb *et al* (eds) *Children’s Testimony A Handbook of Psychological Research and Forensic Practice* 2 ed (2011) 275 [addition inserted].

<sup>32</sup> Van der Merwe *Child Law* 579.

<sup>33</sup> B Dickman *et al* “How could she possibly manage in court?’ An intervention programme assisting complainants with intellectual disability in sexual assault cases in the Western Cape” in B Watermeyer *et al* *Disability and Social Change: A South African Agenda* (2006) 126 [www.hsrcpress.ac.za](http://www.hsrcpress.ac.za) (accessed 9 July 2014).

<sup>34</sup> Henry *et al* *Children’s Testimony* 262:

“Our adversarial system recognizes a defendant’s right to challenge and test the evidence against them. Thus conflict is inherent in attempting to balance the rights of the defendant with those of the witness. ‘While it is important to cater for a child’s needs and comfort, judicial

child's evidence will be admissible in South African courts. There are children who are unable to testify in court because they do not enjoy the testimonial proficiency required. For justice to be served, the legal system is obligated to ensure that child victims with competency get the opportunity to participate by giving testimony. Consequently, every child witness with special needs should be evaluated, mindful of their needs, with a view only to exclude incompetent witnesses.<sup>35</sup> Bull expresses his concern that although investigative interviewers may have improved their forensic practice by being trained according to psychological research, this is not the case with the legal fraternity when a vulnerable witness enters the courtroom.<sup>36</sup>

In the South African legal context, the interpretation of "competency" is narrow, while elsewhere it is interpreted more broadly. For example, Le Roux and Engelbrecht state that an enquiry to the "child's standard of intelligence" would indicate "whether he can draw a distinction between the truth and a lie and whether he understands the danger of telling lies", and therefore, his or her competency as a witness.<sup>37</sup> The "hinges" of the current understanding of legal competency are thus

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efforts to that end should never be such as to amount to a suggestion that the child's evidence is likely to be more credible than that of any another (sic) witness. Consistently with that, steps to limit the distress experienced by a child must not overcome the necessity of ensuring that a party has been given a proper opportunity to challenge the evidence of the child'."

<sup>35</sup> Witnesses could be excluded erroneously for other reasons than that they unable to make a distinction between truth and lie, according to K Müller *Preparing Children for Court. A Handbook for Practitioners* (2004) 24.

<sup>36</sup> R Bull "The investigative interviewing of children and other vulnerable witnesses: Psychological research and working / professional practice" (2010) 15 *Legal and Criminological Psychology* 5 at 18. For example, AD Evans and TD Lyon "Assessing Children's Competency to Take the Oath in Court: The Influence of Question Type on Children's Accuracy" (2012) 36(3) *Law and Human Behavior* 195 at 203: "The fact that prosecutors, who are hardly inclined to attempt to disqualify their witnesses, nevertheless ask a substantial percentage of more difficult questions suggests that they would benefit from training regarding sensitive methods for assessing competency."

<sup>37</sup> J le Roux and J Engelbrecht "The Sexually Abused Child as a Witness" in CJ Davel (ed) *Introduction of Child Law in South Africa* (2000) 345.

the child's cognitive and moral development respectively.<sup>38</sup> On the other hand, Aarons and Powell claim boldly,

"[a]ny witness (even one with severe with communication difficulties) can potentially report forensically relevant and accurate information about a situation or event, provided (s)he encoded and stored the particular event in memory and is interviewed under appropriate conditions".<sup>39</sup>

From this angle, the child's language development is a pertinent issue.

The topic of this research study is the testimonial competency of children with developmental delays, with special reference to two of its components, moral and communicative competency. Testimonial competency is related to four abilities – perception, memory, communication and morality. While the first three abilities are clustered as "basic" competencies, the fourth, namely moral capacity, is described as a "truth-lie" competency<sup>40</sup> and relates directly to the swearability or oath-taking ability of a witness.

Melton *et al* argue that the issue of testimonial proficiency is of particular concern when the witness is a child or a person with a mental disability.<sup>41</sup> The current research aims to make a contribution to the theory of testimonial competency of child victims with developmental disabilities in the South African context. A set of guidelines will be compiled to be utilised as a tool to evaluate these victims' competency to testify in a court of law.

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<sup>38</sup> Cognitive development deals with the question, is the child able to distinguish the truth from a lie? Moral development pertains to the question, does the witness realise the obligation to tell the truth?

<sup>39</sup> NM Aarons and MB Powell "Issues related to interviewer's ability to elicit reports of abuse from children with an intellectual disability: A review" (2003) 14(3) *Current Issues in Criminal Justice* 257 at 261.

<sup>40</sup> TD Lyon "Assessing the competency of child witnesses: Best practice informed by psychology and law" in ME Lamb *et al* (eds) *Children's Testimony: A Handbook of Psychological Research and Forensic Practice* (2012) 71 and 73.

<sup>41</sup> GB Melton *et al* *Psychological Evaluations for the Courts. A Handbook for Mental Health Professionals and Lawyers* 3 ed (2007) 180.

## 1.3 RESEARCH METHODOLOGY

### 1.3.1 Method triangulation

Conducting assessment research was considered to be very appropriate to the research question (para 4.1). Assessment research refers to the utilisation of quantitative research activities with a view to problem-solving and eventual decision-making.<sup>42</sup> However, method triangulation was employed. This term refers to the analysis of data both quantitatively and qualitatively.<sup>43</sup> Quantitative research can be explained as methods that the researcher utilises to test a selection of calculated guesses as answers to a research question.<sup>44</sup> Data are expressed in numbers and analysed by means of statistical formulae.<sup>45</sup> Qualitative research can be described as the researcher taking an open stance towards the perspectives of those who are involved with the focus of enquiry.<sup>46</sup> While data are expressed in words, and language analysed in terms of thematic categories, an understanding of the research topic is gradually developed.<sup>47</sup>

In this study quantitative methods are primarily employed for data analysis and interpretation, with a view to generalising statistical findings to the population from which the test group is drawn.<sup>48</sup> Supplementing statistical results with descriptions

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<sup>42</sup> A Kanjee "Assessment research" in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 477.

<sup>43</sup> K Kelly "From encounter to text: collecting data in qualitative research" in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 287; K Kelly "Calling it a day: reaching conclusions in qualitative research" in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 380.

<sup>44</sup> K Durrheim "Research design" in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 47.

<sup>45</sup> *ibid.*

<sup>46</sup> M Vaismoradi *et al* "Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study" (2013) 15 *Nursing & Health Sciences* 398 at 398.

<sup>47</sup> Durrheim *Research in Practice* 47.

<sup>48</sup> K Durrheim and D Painter "Collecting quantitative data: sampling and measuring" in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 132; Durrheim *Research in Practice* 47.

and explanations emerging from the qualitative analysis of content, contributes to a deeper understanding of testimonial competency in the group of children studied.

The semi-structured format of the research instruments provided an opportunity to do content analysis which “is the process of organising information into categories related to the central questions of research”.<sup>49</sup>

### 1.3.2 Research design

An enduring developmental delay results in a developmental disability. Six Western Cape Education Department (WCED) schools catering for specialised educational needs for learners with developmental disabilities – representative of the population of children with various developmental disabilities – provide the sampling frame.<sup>50</sup> In order to allow for statistical analysis, a robust sample of 360 learners was originally planned with equal representation from three population groups, namely black, coloured and white to ensure equal representation. The aim was for an equal distribution of gender (female / male) and language of instruction (Afrikaans / English) respectively during sampling at each school.

The three criteria for inclusion in the sample were that:

- At the time of sampling, the child’s age be in the range of 06 years 00 months to 09 years 11 months.
- Psychometric results on his or her cognitive functioning be available.<sup>51</sup>

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<sup>49</sup> GA Bowen “Document Analysis as a Qualitative Research Method” (2009) 9(2) *Qualitative Research Journal* 27 at 32.

<sup>50</sup> Durrheim and Painter *Research in Practice* 133: “Because the sample is drawn not directly from the population but from the sampling frame, it is vital that the sampling frame is as close an approximation of the population as possible.”

<sup>51</sup> In the Western Cape Education Department (WCED), a learner is usually assessed before a formal application is made for the child to be transferred to special education. The form Application for assessment for admission to a unit / special school (/ school for learners with special educational needs) contains psychometric and scholastic test results. The general psychometric tests administered for intellectual proficiency assessment are the Individual Scale for General Scholastic Aptitude (ISGSA), the Junior South African Individual Scale (JSAIS) and the Senior South African Individual Scale (Revised) (SSAIS-R), and abbreviated forms of the latter two tests.

- The child attend a special school due to a neurodevelopmental condition.

Two aspects of the testimonial competency of each member of the sample were examined during an individual semi-structured interview at his or her school. For moral proficiency, the Lyon and Saywitz oath-taking competency test<sup>52</sup> was administered and an understanding of moral concepts was explored. Concerning communicative proficiency, the participant's narrative ability was evaluated (para 2.7.1).

An immature child has limited self-knowledge and understanding; even more so when the child's functioning is in some way compromised by neurodevelopmental factors (para 3.1.1). Consequently, with respect to issues of competency, the informed opinion of adults – parents, caregivers and teachers – involved in the child's life was very important to consider during this research.<sup>53</sup> While parents know their children and are positioned to provide important information about their children (para 3.6.6), the teacher was utilised as a more "objective" source of information particularly with regard to mental disability.<sup>54</sup> The assessment of each participant thus also included

- the completion of a semi-structured questionnaire by the participant's parent or caregiver;<sup>55</sup> with the questions pertaining to the child's developmental

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<sup>52</sup> TD Lyon and KJ Saywitz "Qualifying Children to take the Oath: Materials for Interviewing Professionals" (2000) <http://works.bepress.com/thomaslyon/9/> (accessed 25 March 2012).

<sup>53</sup> A Cunningham and L Stevens "Helping a child to be a witness in court: 101 things to know, say and do." (2011) [http://www.lfcc.on.ca/CCFJS\\_trainingmaterial.html](http://www.lfcc.on.ca/CCFJS_trainingmaterial.html) (accessed 01 June 2013); Advocacy Training Council of the Bar of England & Wales (2011) *Task Group Report on Vulnerable Witnesses and Defendants Handling* para 3.12

<http://www.advocacytrainingcouncil.org/images/word/raisingthebar.pdf> (accessed 12 July 2014).

<sup>54</sup> L Griessel *et al* "Administering psychological assessment measures" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) 122.

<sup>55</sup> According to the Children's Act 38 of 2005, the definition of caregiver is:

- ... any person other than a parent or guardian, who factually cares for the child and includes-
  - (a) a foster parent;
  - (b) a person who cares for a child with the implied or express consent of a parent or guardian of the child;

background and with specific reference to cognitive, moral and language development relevant to competency; and

- the completion of a semi-structured questionnaire by the participant's teacher on abilities related to testimonial competency.

Descriptive and inferential statistics were performed on the data set that combined data of the child interview, the parent questionnaire and the teacher questionnaire. Responses to the open-ended questions posed regarding the aspects of testimonial competency were subjected to content analysis. On the basis of the triangulation of methods as described (para 1.3.1), the guidelines for determining whether a young child with a developmental disability is competent to give evidence, were compiled. Figure 1.1 provides an overview of the research study.

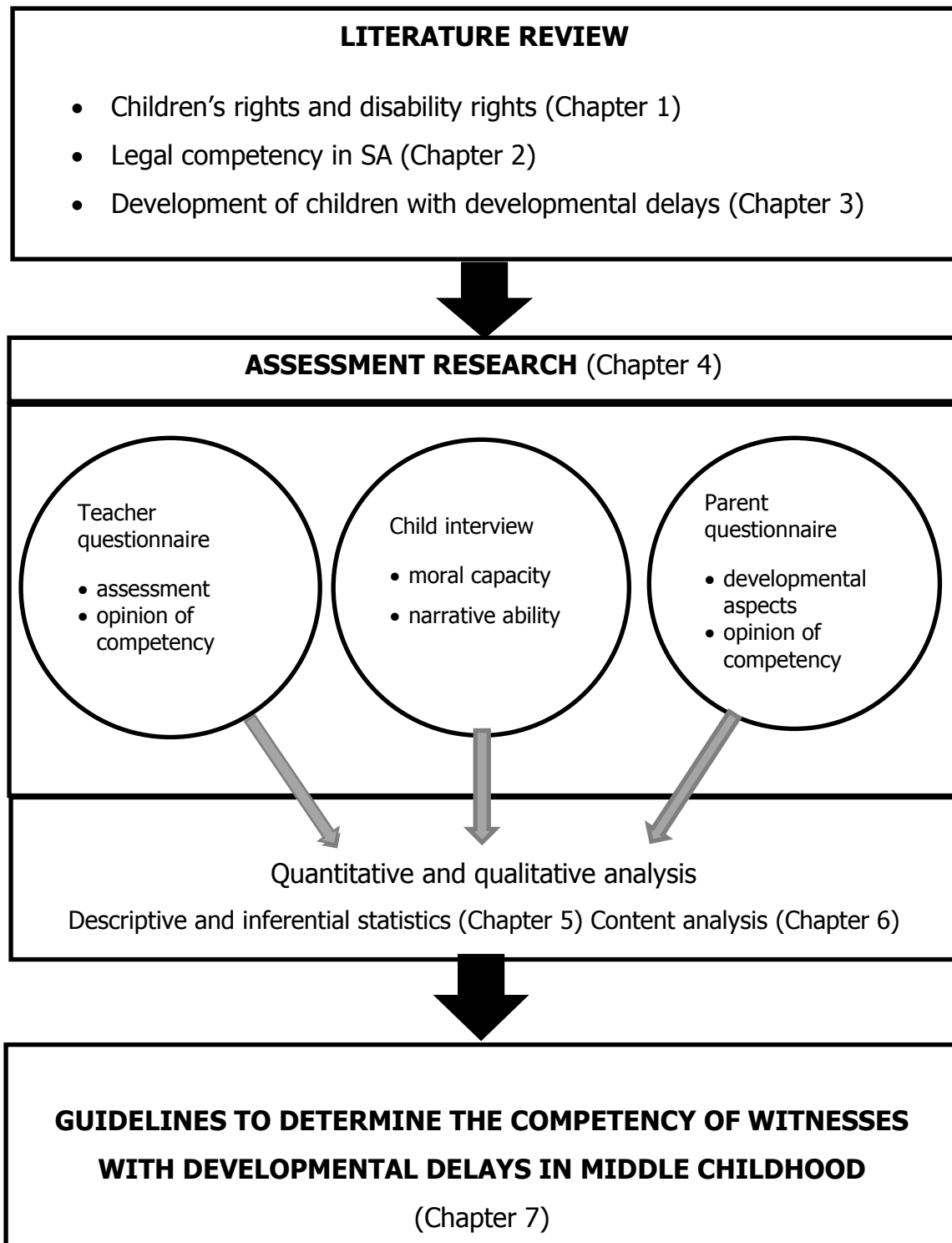
#### **1.4 EVALUATION OF RESEARCH**

From a statistical point of view, representation is the crucial feature that allows for the generalisation of findings. The national population of children with developmental disabilities in middle childhood was not represented in the composition of the sample of the current research study (para 4.5). Therefore the outcome of the current study is valid only for learners in the middle childhood phase who attend WCED schools for specialised education.

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- (c) a person who cares for a child whilst the child is in temporary safe care;
  - (d) the person at the head of a child and youth care centre where a child has been placed;
  - (e) the person at the head of a shelter;
  - (f) a child and youth care worker who cares for a child who is without appropriate family care in the community; and
  - (g) the child at the head of a child-headed household;"



Figure 1.1 Research plan



However, this research still contributes to the current legal discourse on child witness competency. A set of recommended guidelines to determine testimonial competency of child witnesses with developmental delays or disabilities was compiled. This will address a need among professionals working in the South African legal context to make accountable decisions about the suitability of individual children to give evidence in criminal court proceedings. The availability of functional principles to utilise during competency assessment will not only empower legal professionals with expertise to make sound decisions, but will also contribute to honouring the right to equality that children with developmental disabilities have. For example, children with developmental disabilities who have testimonial competence should be put in a position to give testimony by means of adaptations. Conversely, children who are unable to testify should not be exposed unnecessarily to the stress associated with a court appearance.

A reliable competency assessment procedure during trial preparation<sup>56</sup> will facilitate the participation in the legal process of those children faced with developmental challenges. And it is anticipated that an increase in the number of vulnerable competent witnesses bringing evidence before the courts will mean a decrease in the number of case withdrawals<sup>57</sup> or perpetrator acquittals.<sup>58</sup>

## **1.5 DIVISION OF CHAPTERS**

Following this introductory chapter, Chapter 2 deals with the theoretical construct of legal competency. Firstly, a historical background is provided on the concept of the swearability of child witnesses. An international perspective precedes a discussion of the interpretation of oath-taking ability by South African courts, with respect to specific court cases. The legal discourse pertaining to the Criminal Procedure Act 51 of 1977, namely sections 162 to 165 is of importance here.<sup>59</sup> Competency testing is

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<sup>56</sup> Van der Merwe *Child Law* 585-589.

<sup>57</sup> Dickman *et al Disability and Social Change* 131.

<sup>58</sup> K Müller *Preparing Children for Court* 163.

<sup>59</sup> Van der Merwe *Child Law* 578-579; J Prinsloo "The constitutional right to protection of child victims and witnesses in the South African criminal justice system: Director of Public Prosecutions, Transvaal v Minister of Justice and Constitutional Development, and others" (2010) 11(1) *CARSA* 1 at 5-6, 9.

furthermore discussed in relation to research on relevant aspects of moral and cognitive development. An overview of testimonial competency according to developmental psychological theory is given in terms of the following four abilities, i.e., perception, memory, language and morality. And lastly, approaches to competency assessment found in literature are provided. The oath-taking competency test developed by Thomas Lyon and Karen Saywitz is of particular interest because of its utilisation during this study.

Chapter 3 describes the sample of the present research study, i.e. children with developmental disabilities in the younger age bracket of middle childhood. In this chapter, important terminology related to developmental disability is elucidated, e.g., the concept "mental age". A general overview of different facets of atypical development follows, and intellectual disability (or ID) as a common manifestation of developmental disability is explained. The next two sections of the chapter describe various conditions that feature among the sample of children that participated in the research. The first section focuses on conditions generally associated with cognitive impairment. The second section addresses conditions not typically linked with intellectual disability. Lastly, participation restrictions to testimonial competency, i.e., those developmental challenges associated with various disabilities that serve as barriers to giving evidence, are covered. Means by which these challenges can be managed during competency assessments, as suggested by the experts, are also mentioned.

Chapter 4 serves as an introduction to the next two chapters on the outcome of the research project. Chapter 4 contains the details of the empirical research set out in two main parts. The first part reports on the planning of the research. The planned methodology is explained, as well as the envisaged operationalisation. The various instruments of assessment are discussed. The second part reports on the actual fieldwork conducted. The challenges that emerged during execution of the research plan are explained. Suggestions are made regarding future studies on testimonial competency.

The current research employed method triangulation to investigate the research question. Chapter 5 deals with the quantitative component of the study. The

statistical results and their interpretations are given. Chapter 6 addresses the qualitative component of the study. The outcome of the content analysis performed on the qualitative data of the child interview and two questionnaires is given. Chapter 7 contains guidelines for the legal competency assessment of child witnesses with developmental delays. This chapter therefore functions as an integration of the quantitative and qualitative findings of this research and of theoretical knowledge on legal competency to fit the present context of the criminal court system in South Africa.

# CHAPTER 2

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## LEGAL COMPETENCY

### 2.1 HISTORICAL BACKGROUND

From as early as the eighteenth century, allegations of maltreatment made by children were generally approached with suspicion in a court of law. According to British common law, a child's competency relied on his or her understanding of the oath.<sup>60</sup> Furthermore, the child had to believe that God would punish him or her if the oath was broken, and that eternal damnation awaited him or her for lying.<sup>61</sup> The prerequisite for accepting evidence from a child during a trial was that the child had to be sworn in – this was considered to be a demonstration that the child understood the moral obligation to speak the truth.<sup>62</sup> The test for competency did not take into account developmental immaturity. For example, it was assumed that young children would be able to understand the aforementioned abstract (religious) concepts.<sup>63</sup>

In 1885 in England, the law was reformed to allow testimony in sexual abuse cases.<sup>64</sup> However, prejudice towards children, and female children in particular, nevertheless prevailed during the beginning of the twentieth century.<sup>65</sup> While

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<sup>60</sup> N Bala *et al* "The Competency of Children to Testify: Psychological Research Informing Canadian Law Reform" (2010) 18 *International Journal of Children's Rights* 53 at 54.

<sup>61</sup> Spencer and Flinn in Müller *Judicial Officer* 138; Bala *et al* 2010 *Journal of Children's Rights* 55.

<sup>62</sup> Bala *et al* 2010 *Journal of Children's Rights* 54-55.

<sup>63</sup> JEB Myers "The Competence of Young Children to Testify in Legal Proceedings" (1993) 11 *Behavioral Sciences and the Law* 121 at 128-129.

<sup>64</sup> Bala *et al* 2010 *Journal of Children's Rights* 55.

<sup>65</sup> See C Thompson *Psychoanalysis: Evolution and Development A Review of Theory and Therapy* (1950) 132-133: This was the Victorian era and Sigmund Freud's psycho-analytical theory had a marked influence on the interpretation of the behaviour of women and children. For example, it was believed that psychological problems were caused by a child's unfulfilled wishes of a sexual nature that were repressed ("forgotten"); or, a female was considered to be unconsciously jealous of the male because she did not have a penis ("penis envy"). These unconscious processes subsequently determined behaviour.

unsworn evidence of child witnesses became legally permissible, the courts still remained cautious with regard to the reliability of their testimony.<sup>66</sup>

During the late nineteenth century, United States common law determined that the child's level of intellectual functioning should also be used as a criterion for competency, in addition to the verbal ability of the potential witness to distinguish truth from falsehood.<sup>67</sup>

## **2.2 INTERNATIONAL PERSPECTIVE**

As far back as 1981, Melton argued that a "formal assessment of the child's cognitive, moral, and emotional capacities" was needed to determine his or her actual level of competency to give evidence, rather than asking questions about the concepts of truth and lies.<sup>68</sup> This allowed for the testimony of the child to be plotted on the expected human developmental trajectory.<sup>69</sup>

It is a misconception to think that the legal competency test no longer exists in other parts of the world.<sup>70</sup> In Canada and Scotland, child witnesses' legal competency is not determined as a prerequisite for testifying.<sup>71</sup> However, should the court become concerned during the trial about the competency of a child witness, an enquiry pertaining to the issue can be made. In those American states where truth-lie questions are still asked, the questions serve either as a condition to proceed to giving evidence, or as a credibility check.<sup>72</sup> As in South Africa, there seems to be no

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<sup>66</sup> Bala *et al* 2010 *Journal of Children's Rights* 56.

<sup>67</sup> Bala *et al* 2010 *Journal of Children's Rights* 54-55.

<sup>68</sup> GB Melton "Children's Competency to Testify" (1981) 5(1) *Law and Human Behavior* 73 at 75.

<sup>69</sup> Melton 1981 *Law and Human Behavior* 78-79.

<sup>70</sup> Lyon *Children's Testimony* 2 ed 74; TD Lyon *et al* "Young Children's Competency to Take the Oath: Effects of Task, Maltreatment, and Age" (2010) 34 *Law and Human Behavior* 141 at 141; Bala *et al* 2010 *Journal of Children's Rights* 70.

<sup>71</sup> Lyon *Children's Testimony* 2 ed 75.

<sup>72</sup> Lyon *Children's Testimony* 2 ed 74.

uniform approach to competency testing among presiding officers.<sup>73</sup>

According to the California Rule of Evidence (s 710), children under 10 and those who are significantly cognitively handicapped, could be asked to “promise to tell the truth” rather than be sworn in.<sup>74</sup> This corresponds with the procedure in South Africa. Older children understand better what is meant by asking for a “promise”,<sup>75</sup> while younger children rather relate to being “willing” to tell the truth.<sup>76</sup> These questions also promote truthfulness.<sup>77</sup> According to Lyon and Matthews, the following is an age-appropriate model for the oath:<sup>78</sup>

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<sup>73</sup> L Shanks “Evaluating Children’s Competency to Testify: Developing a Rational Method to Assess a Young Child’s Capacity to Offer Reliable Testimony in Cases Alleging Child Sex Abuse” (2009) 11 *SelectedWorks of Laurie Shanks* [http://works.bepress.com/laurie\\_shanks/3](http://works.bepress.com/laurie_shanks/3) (accessed 14 June 2012).

<sup>74</sup> TD Lyon and M Matthews “Model Brief. Questioning of Child Witnesses” (2006) 2 *SelectedWorks of Thomas D. Lyon* <http://works.bepress.com/thomaslyon/38> (accessed 28 November 2012).

<sup>75</sup> According to TD Lyon “Child Witnesses and the Oath: Empirical Evidence” (2000) 73 *Southern California Law Review* 1017 at 1058-1059.

<sup>76</sup> Lyon 2000 *Southern California Law Review* 1062.

<sup>77</sup> V Talwar and K Lee “Social and Cognitive Correlates of Children’s Lying Behavior” 2008 79(4) *Child Development* 866 at 876. Bala *et al* 2010 *Journal of Children’s Rights* 59 found that the question to promise to tell the truth “significantly increases the likelihood that a child will tell the truth. Further, there is some evidence that if children tell a lie after promising to tell the truth, it may be easier to detect their lack of honesty”.

Four experiments conducted by the researchers, related to this finding, are recorded at 61-62. Their conclusion, at 63: “Thus, overall the psychological research has found that children’s abilities to answer questions about truth and lies is (sic) not a reliable indicator to the honesty of their actual testimony. However, asking children to promise to tell the truth does significantly increase the likelihood that children will tell the truth”.

However, K London and N Nunez “Examining the efficacy of truth/lie discussions in predicting and increasing the veracity of children’s reports” (2002) 83 *Journal of Experimental Child Psychology* 131 at 140, 141-142, have found that a discussion of truth and lies does not predict honesty or telling the truth, but that there is a case to be made that it promotes it.

<sup>78</sup> Lyon and Matthews “Questioning of Child Witnesses” 3. Also see AG Walker *Handbook on Questioning Children A Linguistic Perspective* 3 ed (2013) 42, 106.

"It's really important that you tell us the truth.  
Do you promise that you will tell us the truth?"  
...  
"Will you tell us any lies?"  
...

In terms of the current Canadian Evidence Act (s 16.1)<sup>79</sup> a child of 14 years or younger is presumed to be a competent witness.<sup>80</sup> His or her testimony would be received after he or she had made a promise to tell the truth. No questioning regarding the concept of a promise is allowed.<sup>81</sup> The two criteria for competency are that the witness (1) understands and (2) answers the questions of the court. It relates to the particular "cognitive, social and language abilities" of the individual child.<sup>82</sup> Since the competency criteria boil down to communication ability, the enquiry of the judge would relate to the child's strength of memory and his or her

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<sup>79</sup> See Bala *et al* 2010 *Journal of Children's Rights* 64-65 for the relevant excerpt of the bill that was passed in 2006.

<sup>80</sup> Bala *et al* 2010 *Journal of Children's Rights* 68: It is common practice to videotape every interview with a prospective child witness. These recordings serve as a tool of evaluating whether a child is able to participate meaningfully during the trial. The defence also receives these video recordings. While they usually are satisfied, disclosure beforehand does put them in a position to challenge the competency of the witness according to s 16.1(4) of the Canadian Evidence Act.

<sup>81</sup> For example, see Cunningham and Stevens "Helping a child to be a witness in court". According to Bala *et al* 2010 *Journal of Children's Rights* 67,

"[u]nder the new provisions, it is clear that children are not expected to demonstrate that they understand the duty to speak the truth or define abstract concepts. These changes to the competency inquiry reflect the psychological research which establishes that the former, cognitively based inquiry can exclude children who were in fact competent to give honest, reliable answers to questions, and did nothing to promote the search for the truth."

<sup>82</sup> Bala *et al* 2010 *Journal of Children's Rights* 65.



ability to answer questions regarding his or her past.<sup>83</sup> These questions on the ability to communicate furthermore also serve the function of putting the child at ease in the courtroom. It is the duty of the judge to ensure that “pre-interview” questioning as well as later questioning, is developmentally appropriate to each witness.<sup>84</sup> Evidence received after the promise of a witness to be honest, carries the same weight as sworn evidence.<sup>85</sup>

Canadian law concerning child witness competency (see above) resonates with section 33A of the Criminal Justice Act 1988 of England and Wales.<sup>86</sup> A child who is 14 years or younger will testify unsworn. His or her evidence is regarded on an equal footing with evidence given under oath. The only condition is that the child witness is able to give “intelligible testimony” to the court.<sup>87</sup> Such evidence is defined as when “he or she is able to understand questions and to answer them in a manner which is coherent and comprehensible”.<sup>88</sup> Thus the essence of competency boils down to understandable communication.<sup>89</sup> However, British courts do not require a promise from child witnesses to tell the truth, as they are not questioned about the meaning of truth and lies.<sup>90</sup>

## **2.3 CHILD WITNESS COMPETENCY IN SOUTH AFRICA**

### **2.3.1 The Act**

In South Africa, child witness competency is regulated by different sections of the Criminal Procedure Act.<sup>91</sup> For the sake of convenience, the relevant sections are:

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<sup>83</sup> *ibid.*

<sup>84</sup> Bala *et al* 2010 *Journal of Children's Rights* 67.

<sup>85</sup> *ibid.*

<sup>86</sup> Bala *et al* 2010 *Journal of Children's Rights* 72 quote this bill as well.

<sup>87</sup> Bala *et al* 2010 *Journal of Children's Rights* 72.

<sup>88</sup> A phrase of the ruling of the English Divisional Court in *D.P.P. v M*, quoted by Bala *et al* 2010 *Journal of Children's Rights* 73.

<sup>89</sup> Section 53(3) of the Youth Justice and Criminal Evidence Act 1999 (U.K.) as quoted by Bala *et al* 2010 *Journal of Children's Rights* 73.

<sup>90</sup> Bala *et al* 2010 *Journal of Children's Rights* 74.

<sup>91</sup> Act 51 of 1977.

## 162. Witness to be examined under oath

- (1) Subject to the provisions of sections 163 and 164, no person shall be examined as a witness in criminal proceedings unless he is under oath, which shall be administered by the presiding judicial officer, or in the case of a superior court, by the presiding judge or the registrar of the court, and which shall be in the form:

'I swear that the evidence I shall give, shall be the truth, the whole truth and nothing but the truth, so help me God.'

- (2) If any person to whom the oath is administered wishes to take the oath with uplifted hand, he shall be permitted to do so.

## 163. Affirmation in lieu of oath

- (1) Any person who is or may be required to take the oath and –
  - (a) who objects to taking the oath;
  - (b) who objects to taking the oath in the prescribed form;
  - (c) who does not consider the oath in the prescribed form to be binding on his conscience; or
  - (d) who informs the presiding judge or, as the case may be, the presiding judicial officer, that he has no religious belief or that the oath is contrary to his religious belief,

shall make an affirmation in the following words in lieu of the oath and at the direction of the presiding judicial officer or, in the case of a superior court, the presiding judge or the registrar of the court: -

'I solemnly affirm that the evidence that I shall give, shall be the truth, the whole truth and nothing but the truth'.

- (2) Such affirmation shall have the same legal force and effect as if the person making it had taken the oath.
- (3) The validity of an oath duly taken by a witness shall not be affected if such witness does not on any of the grounds referred to in subsection (1) decline to take the oath.

#### 164. When unsworn or unaffirmed evidence admissible

- (1) Any person who **[from ignorance arising from youth, defective education or other cause,]**<sup>92</sup> is found not to understand the nature and import of the oath or the affirmation, may be admitted to give evidence in criminal proceedings without taking the oath or making the affirmation: Provided that such person shall, in lieu of the oath or affirmation, be admonished to speak the truth **[, the whole truth and nothing but the truth].**<sup>93</sup>
- (2) If such person wilfully and falsely states anything which, if sworn, would have amounted to the offence of perjury or any statutory offence punishable as perjury, he shall be deemed to have committed that offence, and shall, upon conviction, be liable to such punishment as is by law provided as a punishment for that offence.

#### 165. Oath, affirmation or admonition may be administered by or through interpreter or intermediary

Where the person concerned is to give his evidence through an interpreter or an intermediary appointed under section 170(A) (1),<sup>94</sup> the oath, affirmation or admonition under section 162, 163 or 164 shall be administered by the presiding judge or judicial officer or the registrar of the court, as the case may be, through the interpreter or the intermediary or by the interpreter or intermediary in the presence or under the eyes of the presiding judge or judicial officer as the case may be.

...

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<sup>92</sup> The phrase in brackets is omitted in the amended subsection 164(1), as per s 68 of the Criminal Law (Sexual Offences and Related Matters) Amendment Act 32 of 2007.

<sup>93</sup> This phrase has also been omitted in the amended subsection 164(1), as per s 68 of the Criminal Law (Sexual Offences and Related Matters) Amendment Act 32 of 2007.

<sup>94</sup> S 170A (1) as amended by s 68 of Act 32 of 2007:

“Whenever criminal proceedings are pending before any court and it appears to such court that it would expose any witness under the biological or mental age of eighteen years to undue mental stress or suffering if he or she testifies at such proceedings, the court may, subject to subsection (4), appoint a competent person as an intermediary in order to enable such witness to give his or her evidence through that intermediary.”

## 192. Every witness competent and compellable unless expressly excluded

Every person not expressly excluded by this Act from giving evidence shall, subject to the provisions of section 206, be competent and compellable to give evidence in criminal proceedings.

## 193. Court to decide upon competency of witness

The court in which criminal proceedings are conducted shall decide any question concerning the competency or compellability of any witness to give evidence.

## 194. Incompetency due to state of mind

No person appearing or proved to be afflicted with mental illness or to be labouring under any imbecility of mind due to intoxication or drugs or the like, and who is thereby deprived of the proper use of reason, shall be competent to give evidence while so afflicted or disabled.”

### 2.3.2 The procedure

The criminal court decides whether a witness has testimonial competence, as only a witness who is regarded as competent is allowed to give evidence.<sup>95</sup> The child has to demonstrate an understanding of the difference between the truth and a lie<sup>96</sup> during a formal enquiry before admission as a witness to be heard by the court.<sup>97</sup>

Van der Merwe clarifies:

“In the view of the Constitutional Court, understanding what it means to tell the truth gives the assurance that the evidence can be relied upon. The evidence of a child who does not understand what it means to tell the truth is not reliable, and would undermine the accused’s right to a fair trial if such evidence were to be admitted. The

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<sup>95</sup> S 193.

<sup>96</sup> *S v V* 1998 (2) SACR 651 (C) Headnote; *State v Kato* 2006 (4) All SA 348 (SCA) paras 13-14.

<sup>97</sup> Van der Merwe *Child Law in SA* 579. In *State v Swartz* 2009 (1) SACR 452 (C), the conviction was set aside on appeal owing to the absence of the formal enquiry into competency. Conversely, due to the finding that the correct procedure was followed in *State v Williams* 2010 (1) SACR 493 (EGC) an appeal to set a conviction aside was dismissed.

risk of a conviction based on unreliable evidence is too great to permit the evidence of a child who does not understand what it means to tell the truth.”<sup>98</sup>

Although the religious sanction implied by the oath received less emphasis in the courts previously,<sup>99</sup> Steyn AJ held in *State v Swartz*,<sup>100</sup> “s 164 could be resorted to in order to procure a child’s evidence only if the child did not understand the nature of the religious sanction of the oath”.<sup>101</sup> South African case law confirms the link between the oath and its religious understanding at present.<sup>102</sup>

If the witness does understand the import of the oath,<sup>103</sup> he or she proceeds to take the oath.<sup>104</sup> Müller states that a “solemn promise to tell the truth with reference to

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<sup>98</sup> Van der Merwe *Child Law in SA* 578-579. This corresponds with *Director of Public Prosecutions Transvaal v Minister of Justice and Constitutional Development, and Others* 2009 (2) SACR 130 (CC) para 166:

“The reason for evidence to be given under oath or affirmation or for a person to be admonished to speak the truth is to ensure that the evidence given is reliable. Knowledge that a child knows and understands what it means to tell the truth gives the assurance that the evidence can be relied upon. It is in fact a pre-condition for admonishing a child to tell the truth that the child can comprehend what it means to tell the truth. The evidence of a child who does not understand what it means to tell the truth is not reliable. It would undermine the accused’s right to a fair trial were such evidence to be admitted. To my mind, it does not amount to a violation of section 28(2) to exclude the evidence of such a child. The risk of conviction based on unreliable evidence is too great to permit a child who does not understand what it means to speak the truth to testify. This would indeed have serious consequences for the administration of justice.”

<sup>99</sup> Müller *Judicial Officer* 138-139. Also see Bala *et al* 2010 *Journal of Children’s Rights* 56 on how the religious meaning of the oath evolved to having “social significance” in Canadian courts. It is argued in *Ndokwane v State* [2011] JOL 27316 (KZP) that an understanding of punishment associated with perjury is not expected from a child witness. “At most the importance of truthfulness is generally covered, as was done in the present matter, by an enquiry satisfying the court that the witness understands that an adverse sanction will generally follow the telling of a lie.”

<sup>100</sup> 2009 (1) SACR 452 (C).

<sup>101</sup> *S v Swartz* 2009 (1) SACR 452 (C) Headnote D.

<sup>102</sup> *S v Seymour* 1998 (1) SACR 66 (N) 69F-J; *S v M* 2004 (2) All SA 74 (D) para 35; *S v Gallant* 2008 (1) SACR 196 (E) 200D-G.

<sup>103</sup> Myers 1993 *Behavioral Sciences* 128:

God” is also understood as the oath.<sup>105</sup> When the witness objects to the prescribed oath or has “no religious belief” to swear by, he or she gives an affirmation of truthfulness to the court in terms of s 163(1).<sup>106</sup> According to Revelas J, a “promise” is not permitted as a form of “affirmation”.<sup>107</sup>

A witness who is ignorant of the meaning and moral significance of the oath will proceed to give evidence after an admonition by the court to speak the truth.<sup>108</sup> According to Le Roux and Engelbrecht, young children are too immature to understand the oath,<sup>109</sup> but the discretion of the presiding officer should be recorded as such before continuing with admonishment.<sup>110</sup> When a child witness is younger than eight years, he or she is generally regarded as not understanding the import of the oath due to youthfulness.<sup>111</sup> Also, children with developmental delays, the focus

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“The oath is not, technically speaking, a component of testimonial competence. Rather, the oath is required *in addition* to the cognitive and moral capacities that make up testimonial competence. Courts and commentators often overlook or ignore the distinction between testimonial competence and the oath, referring to both in the same breath.”

<sup>104</sup> See s 162(1). However, Müller *Judicial Officer* 139 puts forward two primary reasons why the oath has been “watered down”. There has been a cultural shift regarding the importance of religion and of church attendance. Furthermore, schools no longer necessarily provide religious instruction to learners. Consequently, morality on the basis of religious education can no longer be assumed. Furthermore, Bala *et al* 2010 *Journal of Children’s Rights* 57 argue that the former emphasis on religion obscures the focus on the actual purpose of the enquiry, i.e., to ascertain whether the child understands that it is expected of him or her to be honest during testimony.

<sup>105</sup> Müller *Judicial Officer* 139.

<sup>106</sup> S 163 (1).

<sup>107</sup> *State v Gallant* 2008 (1) SACR 196 (E) paras 12 and 21.

<sup>108</sup> S 164.

<sup>109</sup> Le Roux and Engelbrecht *Introduction to Child Law* 347.

<sup>110</sup> *S v Malinga* 2002 (1) SACR 615 (NPD) in Müller *Judicial Officer* 143-144; *S v Williams* 2010 (1) SACR 493 (ECG).

<sup>111</sup> *S v Gallant* 2008 (1) SACR 200-201 para 10.

of research in the current study, are also likely to not understand the meaning of the oath.<sup>112</sup>

Currently no formal enquiry is required to determine whether the child witness is unable to be sworn in.<sup>113</sup> However, this section of the Act has previously been interpreted as requiring a formal investigation as well as that the exact wording should be used – even if children had a limited understanding of these abstract concepts.<sup>114</sup> Furthermore, the evidence of an older child witness is considered

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<sup>112</sup> In *State v Vumazonke* 2000 (1) SACR 619 C, the complainant was a 10-year-old girl with a mild cognitive delay as a result of Down syndrome. On appeal it was confirmed that the procedure for competency evaluation does allow for the presiding officer to use his or her discretion as to whether the child witness would be able to understand the import of the oath. Furthermore, it was the essence of the admonition and not its exact words that needed to be communicated to the child, appropriate to her level of language development.

<sup>113</sup> Van der Merwe *Child Law in SA* 579.

<sup>114</sup> *State v Seymour* 1998 (1) SACR 66 (N); *State v Pienaar* 2001 (1) SACR 391 (C). Also in *Director of Public Prosecutions Kwazulu-Natal v Mekka* 2003 (2) SACR 1 (SCA), it was confirmed that a magistrate could proceed without a formal investigation into whether the witness understood the nature of the oath, if he or she formed an opinion of inability based on the child's age. Subsequently the magistrate enquired whether the nine-year-old child witness understood the distinction between truth and lies and then admonished her to tell the truth. The transcript of the competency examination is provided in para 4:

"*Court:* M, how old are you?

...

*M:* I'm nine years.

...

*Court:* Do you go to school?

*M:* Yes.

*Court:* What standard are you in or (sic) class?

*M:* Standard 2.

*Court:* You're a clever girl. All right, do you know the difference between truth and lies?

*M:* Yes.

*Court:* What happens to you at school if your teacher finds out you're telling lies?

*M:* You get punished.

*Court:* All right, its very important you tell us the truth today in court and you're warned to tell the truth."

inadmissible if he or she was admonished to speak the truth (but not sworn in) while, in actual fact, having had the ability to understand the oath and its meaning.<sup>115</sup> Consequently, the court should not omit the oath-taking procedure based on the assumption of inability only.<sup>116</sup>

The provision for unsworn evidence due to incomprehension of the nature of the oath originates from 1861 legislation.<sup>117</sup> In terms of an amendment to the current Act, the evidence of a witness who for some reason or other does not understand the concept of sworn evidence, may be allowed to proceed to testify after an admonition.<sup>118</sup> However, according to a Constitutional Court ruling, it is imperative that the court is convinced that the child witness understands what it means to "speak the truth"<sup>119</sup> and "[i]t is not an option to be applied at the whim of the magistrate".<sup>120</sup> This comprehension is said to ensure reliable testimony and is prerequisite to appear as a witness.<sup>121</sup>

In *Director of Public Prosecutions Transvaal v Minister of Justice and Constitutional Development*,<sup>122</sup> Ngcobo J states that skilful questioning during the legal competency examination of a (young) child witness would reveal whether he or she

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<sup>115</sup> *State v B* 2003 (1) SA 552 (SCA) 556D-F. In 556 para 2, it appears as if the presiding officer had not kept to the distinction between oath / affirmation and admonition. While he enquired about taking an oath to speak the truth, the court gave the complainant (13 years) a warning only.

<sup>116</sup> *State v Gallant* 2008 (1) SACR 196 (E).

<sup>117</sup> Müller *Judicial Officer* 144.

<sup>118</sup> S 68 of Act 32 of 2007.

<sup>119</sup> See *Motsisi v The State* (513/11) [2012] ZASCA 59 paras 11-13, also referring to *DPP Tvl v Min of Just and Const Dev, and Others* para 164: "If the child does not understand what it means to speak the truth, the child cannot be admonished to speak the truth and is therefore an incompetent witness. The child cannot testify."

<sup>120</sup> *S v Stefaans* 1999 (1) SACR 182 (C) 185D.

<sup>121</sup> *DPP Tvl v Min of Just and Const Dev, and Others* para 166.

<sup>122</sup> 2009 (2) SACR 130 (CC) para 167.



“understands what it means to speak the truth”.<sup>123</sup> This is regarded as one of the functions of the intermediary during the trial.<sup>124</sup>

### 2.3.3 Case law

There is a history of convictions being set aside on appeal owing to procedural irregularities regarding competency examination in the court *a quo*. For example, in *State v Mashava* the magistrate had not enquired whether the 12-year-old witness understood the nature of the oath and while she had been warned to relate her own experiences only, the court had not admonished her “to speak the truth, the whole truth and nothing but the truth”.<sup>125</sup>

The judgment of *State v T* is considered ironical.<sup>126</sup> While the honourable judge opined that the sentence of the court *a quo* in a rape case of this nature was too lenient, he also had to set the conviction and sentence aside owing to the procedural irregularity caused by an “extremely superficial enquiry” preceding the oath-taking of the two witnesses. The six- and seven-year-old girls were not probed to check whether they actually understood the meaning of truth and the potential consequences of lying. In both instances, the magistrate was satisfied with a mere “yes” to each and every closed-ended question put to them.<sup>127</sup> It was a similar

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<sup>123</sup> 2009 (2) SACR 130 (CC) paras 167-168.

<sup>124</sup> S 165.

<sup>125</sup> 1994 (1) SACR 224 (T) 228G-I.

<sup>126</sup> 2000 (2) SACR 658 (Ck) paras 25-28.

<sup>127</sup> First witness 2000 (2) SACR 658 (Ck) para 25:

“Court: Now does she understand the meaning of, and has the capacity to appreciate and accept the religious sanction of taking an oath?

Miss Diko: Yes, your Worship.

Court: Swear her in, Mr Interpreter.”

Second witness 2000 (2) SACR 658 (Ck) para 26:

“Court: ... Now do you understand to speak the truth? – Yes.

Now do you understand what happens to persons or people who do not speak the truth? – Yes.

Now are you going to tell this Court the truth of what you know? – Yes.’

Thereafter she was sworn in.”

situation with a 10-year-old complainant in *State v Kondile* due to the inadequacy of the enquiry.<sup>128</sup>

In *Henderson v State* the complainant was a 19-year-old with moderate intellectual disability.<sup>129</sup> According to Friedman JP and Van Reenen J,

“Despite the fact that he had been alerted to the fact that the complainant had a mental age of between 5 and 6 years the Magistrate, except for asking the complainant whether she knew what it was to take the oath and receiving a reply in the affirmative, made no effort to ascertain whether she understood the meaning of and possessed the capacity to differentiate between truth and falsity. The Magistrate, instead of satisfying himself that the complainant possessed the necessary capacity, relied on her assurance that she understood what it meant to take the oath. It is not necessary to speculate about the complainant’s mental capacity as the State adduced the evidence of a clinical psychologist ... and in a report expressed the view that she understood the difference between truth and falsehood and had a rudimentary understanding of court proceedings. The complainant’s mother testified that she attended special schools. In the light of that information and the absence of any enquiry whether the complainant possessed the mental capacity to understand the meaning of the oath and to appreciate and accept the religious sanction thereof, I am not satisfied that the oath was properly administered in the instant case. ... If the complainant’s evidence is disregarded, as it should be, there is no evidence to support the convictions and accordingly the accused should not have been convicted.”<sup>130</sup>

In *State v Seymour*<sup>131</sup> a procedural irregularity similar to that in *State v Mashava*<sup>132</sup> happened, i.e., the witness was sworn in as a result of the child exhibiting an

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<sup>128</sup> 2003 (2) SACR 221 (Ck). Ebrahim J contends in 223-224 para 7,

“The single question which the magistrate posed to this witness in this regard was, ‘*Do you know what it means to speak the truth?*’ to which she replied, ‘*Yes it is to speak the truth*’. This was simply a restatement of the question without any accompanying explanation and did not indicate that she indeed knew what it meant. I am at a loss to understand on what basis the magistrate was able to conclude from this reply that she ‘*appreciated what is meant by the truth*’ and was able to distinguish between truth and lies.”

<sup>129</sup> 1997 (1) All SA 594 (C).

<sup>130</sup> 1997 (1) All SA 594 (C) 597-598.

<sup>131</sup> 1998 (1) SACR 66 (N).

understanding of the difference between truth and falsity, but it had not been tested whether he or she understood the importance of the oath. Of interest in the matter of *S v Seymour* is the argument that a presiding officer should ascertain whether the child witness has the necessary “intelligence” not only to differentiate between truth and falsehood, but also to grasp the danger of telling lies.<sup>133</sup>

The competency examination of Ramon Fitzgerald,<sup>134</sup> the complainant in this case, actually gives a strong impression of a 13-year-old child witness with a developmental delay or even developmental disability.<sup>135</sup> The average age for a child in Standard 3 (Grade 5) is 11 years. The cognitive development of the typical 13-

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<sup>132</sup> 1994 (1) SACR 224 (T).

<sup>133</sup> 1998 (1) SACR 66 (N) 70-71H-B.

<sup>134</sup> 1998 (1) SACR 66 (N) 68-69G-A:

“Court: How old are you? – 13.

Do you go to school? – Yes.

What standard are you in? – Three.

Do you know what it means to take an oath to tell the truth? – (No reply.)

Do you know what it means? What does it mean? – I don’t quite understand.

Do you know what it means to tell the truth – (No reply.)

Do you know what it means to tell a lie?

You must please answer you must not nod your head. – Okay.

Do you know what it means to tell a lie? – Yes.

And what does it mean to tell a lie? – You get hit.

Sorry? – You get hit.

You get hit? – Yes.

Why? – If you tell lies, steal.

But what does it mean to tell a lie? – (No reply.)

Do you see this file? – Yes.

What colour is it? – Blue.

And if I told you it was white, would that be the truth? – No.

It would be a lie? – Yes.

So do you know what it means to tell the truth? Yes.”

<sup>135</sup> A developmental delay that persists, is later diagnosed as a developmental disability, i.e., an impairment. Examples of developmental disabilities are cerebral palsy, autism and intellectual impairment.

year-old (associated with Grade 7) would have allowed a witness to define the concepts truth and falsehood without difficulty. However, this was not the case with Ramon who was – at this age – still unable to give a verbal description of the moral concept of lying, but clearly implied that telling lies was like “stealing”, and that a child gets punished for such behaviour.<sup>136</sup>

When enquiries are made during the competency examination about verbal concepts like “truth” and “lie” and the difference between them, it is not at all unexpected that young children are unable to put their thinking into words. Walker points out that because preschoolers have major difficulties with abstract language, an expectation to define or even describe legal competency concepts is developmentally inappropriate.<sup>137</sup> To be able to give a definition or explanation of these abstract concepts requires cognitive development associated with children of 10 years and older.<sup>138</sup> However, the ability of older children should not be overestimated. For example, it was found that children as old as 11 years can still confuse the meanings of a “lie” and a “mistake”.<sup>139</sup> Consequently, the cognitive development of a witness seems indeed a valid factor to consider when determining competency.

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<sup>136</sup> See para 2.5: From a developmental point of view, this concrete understanding is usually associated with young children.

<sup>137</sup> Walker *Handbook on Questioning Children* 3.

In *S v V* for example, the court put the following question to a four-year-old: “L, are you able to differentiate between the truth and a lie?” Her answer through the intermediary was, “no”. In order to “differentiate”, the cognitive function of comparison with various steps of information processing is required, according to Walker *Handbook on Questioning Children* 67-68 –

- Firstly, the child needs to know what is meant by referring to one thing being different from (or the same as) another;
- Secondly, the cognitive skill to determine sameness and difference in an abstract concept needs to be operational; and
- Lastly, after such mental processing, he or she has to have the linguistic ability to describe in words the conclusion reached.

<sup>138</sup> Walker *Handbook on Questioning Children* 69.

<sup>139</sup> Walker *Handbook on Questioning Children* 67.

From the transcript of P, one of the two child witnesses in the *State v Pienaar* trial,<sup>140</sup> it not only transpires that this boy of 13 years was in Standard 2 (Grade 4), but that the court proceeded without further enquiry, to warn him to tell the truth after P replied that one is allowed to tell untruths.<sup>141</sup> As with Ramon Fitzgerald, the significant discrepancy between P's age and the expected level of education for such a chronological age should have alerted the court to the possibility of a developmental delay or disability. In light of his answer, it was impossible to assume P understood the difference between truth and lies without further enquiry.

Pinky was the eight-year-old complainant in *State v M*<sup>142</sup> and the complex language used by the court to communicate with this first-grader is noted.<sup>143</sup> In an attempt to

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<sup>140</sup> 2001 (1) SACR 391 (C).

<sup>141</sup> 2001 (1) SACR 391 (C) 393C-G:

"Die volgende passasies verskyn in die oorkonde:

*Aanklaer*: Ek roep dan vir P na die getuiebank.

(Meganiese onderbreking)

*Hof*: P, hoe oud is jy?

*P*: 13 jaar.

*Hof*: Gaan jy skool P?

*P*: Ja.

*Hof*: Watter standerd is jy?

*P*: 2.

*Hof*: Waar gaan jy skool?

*P*: Noll.

*Hof*: Ek kan nie hoor nie.

*P*: Noll.

*Hof*: Noll. Nou P mag mens leuens vertel?

*P*: Ja. (sic)

*Hof*: Nou wat moet mens dan vertel?

*P*: Die waarheid vertel.

*Hof*: Nou kyk jy word geroep as 'n getuie in hierdie saak. Jy mag vir my net die waarheid vertel. Jy mag nie vir my leuens vertel nie. Verstaan jy?

*P*: Ja."

<sup>142</sup> 2004 (2) All SA 74 (D).

<sup>143</sup> The interpreter in *S v Mokoena* 2008 (5) SA 578 (T) 587E-G told the court:

prevent a sentence being set aside due to procedural irregularities, the court let the child take the oath even though she had been unable to clearly distinguish between truth and lie.<sup>144</sup> However, Pinky did understand the negative consequence to lying. The following conclusions were made on review of her competency examination:

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"I do understand what the State wants to elicit from this witness, it is just that the Prosecutor does not have proper words which can be cut down to the level of the understanding of this. All the questions, the words that come, I saw a pitch high. The State does not have proper words which are curtailed to the level of the understanding of this, and I do understand what she is saying but I am just afraid to say what she did not say, because I end up testifying."

<sup>144</sup> 2004 (2) All SA 74 (D) 79 para 26 – 81 para 28 contains the following transcript:

"COURT: Okay. Can you see that door over there on the wall? Is that door open or closed?  
WITNESS: It's closed.  
COURT: Okay. If somebody had to tell you that door is open, will that person be speaking the truth or lies?  
WITNESS: Be telling the truth.  
COURT: If the person said the door is open, is that the truth?  
WITNESS: Telling lies.  
COURT: Oh good. Now, Pinky, do you believe in God? Do you pray to God?  
WITNESS: [No reply]  
COURT: (sic)  
WITNESS: Yes, I do.  
COURT: You do, okay. So do you know what's God?  
WITNESS: Yes.  
COURT: Okay. And, do you believe that if you told lies, that God will punish you?  
WITNESS: [No reply]  
COURT: Do you believe that, if you told bad lies?  
WITNESS: [No reply]  
COURT: Okay, let me ask you this. Do you get punished if you do anything wrong? Punished by your teacher or by your parents?  
WITNESS: [No reply]  
COURT: Do you understand what I'm asking you, Pinky?  
WITNESS: [No reply]  
COURT: Were you punished by anyone? By your teacher or by your parents?  
WITNESS: No.  
COURT: No, all right. Do you do everything that you are told to do?"

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WITNESS: Yes.

COURT: Do you have any chores?

WITNESS: [No reply]

COURT: Do you have any work to do at home?

WITNESS: Yes.

COURT: What? Tell me the one work that you have to do, example?

WITNESS: Wash dishes.

COURT: Okay. And, if you do not wash the dishes, what would happen?

WITNESS: I'll be punished.

COURT: How would you be punished?

WITNESS: [No reply]

COURT: Would you be not given sweets or would you be told you can't watch television or you can't go out to play, or would you be given a smack? What would happen? What punishment would you get?

WITNESS: I won't be allowed to go and play.

COURT: Okay. So, you do understand then, Pinky, that certain kind of behaviour leads to punishment? You understand that?

WITNESS: Yes.

COURT: Okay. So now, I want you to know, that it is very important that you speak the truth in this court when you are being asked questions. You have been called here to tell us something about something that happened to you, and it's very important that I hear the truth about what happened to you. And, you need not be afraid of any harm coming to you if you tell the truth. If you don't understand the question, then you must say you don't understand the question. You musn't answer something because you think that you have to answer something. And, you must say what you know happened, and not what somebody else may have told you happened, or what you think people want to hear you say happened. Do you understand what I'm saying?

WITNESS: [No reply]

COURT: Yes or no?

WITNESS: Yes, understand.

COURT: Okay. And do you know what it means to take the oath?

WITNESS: No.

COURT: Taking the oath means that you promise to tell the truth in the name of God, and if you do not tell the truth, you believe that God would punish you. Do you want to promise to tell the truth in the name of God?

WITNESS: [No reply]

- Due to her inability to understand the difference between truth and falsehood, Pinky was an incompetent witness and she was not supposed to have given evidence at all.<sup>145</sup>

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COURT: In other words, what you are going to say is, 'Yes, I'm going to tell the truth, and if I don't tell the truth, God is going to punish me.' Do you want to do that?

WITNESS: [No reply]

COURT: If you want to do that, please stand up and raise your right hand.

WITNESS: [No reply]"

At this stage the complainant's behaviour was interpreted as indicative of experiencing the presence of the accused as intimidating. It was ordered that Pinky would give evidence with the assistance of an intermediary from then on. On the next trial date the questioning continued:

"COURT: And, do you believe – you told the court you know – or, is it correct you know the difference between what is true and what is lies – made up stories?

WITNESS: No.

COURT: All right. So, if somebody were to tell you that you are now swimming in the swimming pool, would that be true or false?

WITNESS: True.

COURT: Are you swimming in the swimming pool, Pinky?

WITNESS: No.

COURT: What are you doing now?

WITNESS: I'm sitting.

COURT: Okay. So, if I said that you were swimming in the swimming pool, would that be true or not true or if your friend told you that?

WITNESS: No.

COURT: Okay. And you said you believed in God?

WITNESS: Yes.

COURT: And, if you said things that were not true – bad things that were not true – do you believe God would punish you?

WITNESS: Yes.

COURT: Okay. Do you know what it means to take the oath?

WITNESS: Yes.

COURT: All right. I want you to stand up and raise your right hand and say the following: okay, 'I, Pinky Duma, swear that the evidence I shall give shall be the truth, the whole truth and nothing but the truth, so help me God.'

WITNESS: So help me God."

<sup>145</sup> 2004 (2) All SA 74 (D) para 34.



- Also an admonition would only have had meaning to the child witness if he or she was able to distinguish between truth and lies.<sup>146</sup>
- The religious sanction linked to the oath would only have meaning if the child witness differentiated between truth and untruth.<sup>147</sup>
- Judicial discretion as required by the applicable section,<sup>148</sup> also accommodates the possibility that it is concluded in retrospect that a child witness had given “reliable” testimony.<sup>149</sup>
- The reliability of evidence is related to various factors, e.g. memory and the ability to narrate the event.<sup>150</sup>
- Contradictions during testimony indicate that the child witness is unable to “appreciate the importance of being truthful”.<sup>151</sup>

Conversely, in the *State v Chalale* the magistrate admonished the witnesses aged 15 and 17 to speak the truth without holding an enquiry as to whether they understood the nature of the oath.<sup>152</sup> This was found to be irregular, as it is developmentally expected that an adolescent of this age would understand the import of the oath and subsequently be sworn in.<sup>153</sup> As a result of the irregularity their testimonies

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<sup>146</sup> *ibid.*

<sup>147</sup> *ibid.*

<sup>148</sup> 2004 (2) All SA 74 (D) para 38.

<sup>149</sup> 2004 (2) All SA 74 (D) para 39. It is explained in para 37:

“A trial court can have doubts about the reliability of a witness, given the formative nature of an enquiry in terms of section 164(1). A proper assessment may only be possible at the end of the hearing. In that case, the trial court should record its reservations about the reliability of the witness, but allow her to testify under oath, affirmation or admonishment in the interests of justice.”

<sup>150</sup> 2004 (2) All SA 74 (D) para 45.

<sup>151</sup> 2004 (2) All SA 74 (D) para 50.

<sup>152</sup> 2004 (2) SACR 264 (W).

<sup>153</sup> 2004 (2) SACR 264 (W) 264B.

were considered to be inadmissible.<sup>154</sup> This was also the case in *S v Gallant* – the complainant’s age was 11 years and she was in Grade 5 (Standard 3).<sup>155</sup>

A legal argument raised in the case *State v Katoo* on appeal has relevance.<sup>156</sup> The complainant was a 10-year-old boy with Down syndrome and a language impairment. Clearly there is a difference between cognitive disability (or developmental disability) and mental illness.<sup>157</sup> While a person with a mental illness is generally considered to be incompetent owing to reasoning faculties being affected significantly, this cannot be said of a person who is intellectually challenged (para 3.1.3).<sup>158</sup> Even if the latter’s mental age is low, it cannot be assumed that such a witness is necessarily incompetent.<sup>159</sup>

“Doubts about a child’s testimonial competency are particularly likely when the child is mentally challenged, although most children with below average intelligence are capable of testifying”.<sup>160</sup>

A competency evaluation is needed in order to ascertain to what extent the cognitive impairment limits his or her moral reasoning, and thus testimonial competency. To simply assume that a person with a mental disability is an incompetent witness is discriminatory.

The trial of *State v Roux* also involved a 10-year-old boy with Down syndrome as the complainant in a rape case.<sup>161</sup> The court of appeal confirmed that the child witness with a speech disability should be accommodated in the legal process by means of a speech therapist “interpreting” his verbal testimony to the court.<sup>162</sup> However, the transcript of the competency examination reveals the complainant’s lack of

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<sup>154</sup> 2004 (2) SACR 264 (W) para 4.

<sup>155</sup> 2008 (1) SACR 196 (E).

<sup>156</sup> 2006 (4) All SA 348 (SCA).

<sup>157</sup> 2006 (4) All SA 348 (SCA) para 12.

<sup>158</sup> 2006 (4) All SA 348 (SCA). Also see s 194.

<sup>159</sup> 2006 (4) All SA 348 (SCA) para 12.

<sup>160</sup> Myers 1993 *Behavioral Sciences* 132.

<sup>161</sup> 2007 (1) SACR 379 (C).

<sup>162</sup> Criminal Procedure Act s 161(1) and 161(2).

understanding of the very long and complex questions that were put.<sup>163</sup> A significant positive correlation between mental disability and Down syndrome exists.<sup>164</sup> Here the court focused on one aspect of competent testimony, i.e., intelligible expressive communication. Obviously, it was vital for the court to understand the complainant while he gave evidence. The assumption must have been that his receptive language, i.e. his understanding of verbal communication, was functional and that the problem lay with the court's understanding of his communication. However, the complainant's responses rather revealed limited cognitive functioning.

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<sup>163</sup> In 2007 (1) SACR 379 (C) 381A:

*"Weet jy wat dit beteken om die eed te neem? ... Ja. ... (onduidelik)*

*Okay, sê vir my wat jy dink is hierdie eed waarvan ek praat? ... (onduidelik)*

*Onder. Waar het jy gehoor van hierdie eed? ... (onduidelik) Gebou. Gaan jy kerk toe? ... Ja.*

*Vertel my weer van die eed wat sê jy wat is dit? ... Gebou ... (onduidelik)*

*Ek weet nie van wat enige van die woorde beteken nie.*

*Mnr Maartens: Ek het gebou gehoor met diere en dan die woord bye.*

*Hof: En bye. En ek sukkel om die konteks van die eed daarby te kry. Kan u enige skakeling en dit wat hy gesê het en die eed?*

*Mnr Maartens: Met alle eerbied Agbare en (sic) breek my kop. Ek weet nie of u in terme van sinne maar wil begin dink nie, soos wat is dit om te sweer nie.*

*Hof: Maar ek gaan dink probeer dink daaraan maar ek ... (onduidelik). Het jy gehoor van sweer Shank. Weet jy wat dit beteken om te sweer? ... Ja sweer manne kom en ... (onduidelik) vat jou tronk toe.*

*Hof: 'n Hof. Wat doen 'n mens by hierdie plek? ... Praat.*

*Praat. Praat. Ja, want dit doen ons baie. Nou as jy hier by die hof en daar gesê word vir jou jy moet sweer, jy moet voor God sweer weet jy wat dit beteken? ... Nee, die ding is ... (onduidelik) ... en daar ... (onduidelik) om sit hier.*

*Ek moet eerlik sê ek het nie enige van die aspekte verstaan nie. Okay, ek kan probeer om 'n ander aspek te – Shank weet jy wat dit beteken om die waarheid te praat? ... Jok.*

*Jok. Wat beteken die waarheid? ... Pak slae."*

<sup>164</sup> S McDermott *et al* "Epidemiology and Etiology of Mental Retardation" in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 12: "Virtually all persons with DS [Down syndrome] have a cognitive impairment, with the majority functioning in the moderate to profound range of MR [mental retardation]" [descriptions added for clarity]. For further discussion, see para 3.4.3.

## 2.4 LEGAL COMPETENCY TESTING

"Swearability, or the ability to take the oath, refers to the commitment to tell the truth in court, a crucial requirement for a potential witness. This requires an understanding of the distinction between truth and falsehood. The concept of the 'whole truth and nothing but the truth' requires that the complainant understands that she must say everything that happened, but must not make up any part of the story. Finally the complainant needs to understand that there is a special responsibility to tell the truth in court and to the police, and perjury is punishable."<sup>165</sup>

According to common law, legal competency hinges on two developmental characteristics, i.e. intellectual functioning that includes the cognitive ability to distinguish between truth and lies,<sup>166</sup> and an understanding of the moral obligation to be truthful while giving evidence, which forms part of moral reasoning.<sup>167</sup> Therefore, the level of cognitive and moral development of the child witness is of factual importance to South African courts. As a result of the answers given to random questions by the presiding officer regarding right and wrong, truth and lies and the consequences of lying, the court comes to a conclusion whether the child is a competent witness or not.<sup>168</sup> This is known as the competency examination.<sup>169</sup> Having passed this "test", the court is allowed to receive the child witness's evidence on the basis that it carries weight.<sup>170</sup>

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<sup>165</sup> Dickman *et al Disability and Social Change* 126.

<sup>166</sup> TD Lyon and KJ Saywitz "Young Maltreated Children's Competence to Take the Oath" (1999) 3 *Applied Developmental Science* 16 at 17:

"The first element in understanding the nature and obligation of the oath is an awareness of the difference between the truth and lies. There are a number of ways in which such awareness can be assessed. The child can be asked to (a) define 'truth' and 'lie,' (b) explain the difference between the truth and lies, or (c) identify truthful statements and lies as such. Correct answers to any of these questions would establish understanding in a court of law."

<sup>167</sup> Müller *Judicial Officer* 148; Le Roux and Engelbrecht *Introduction to Child Law* 345.

<sup>168</sup> Le Roux and Engelbrecht *Introduction to Child Law* 346.

<sup>169</sup> Müller *Preparing Children for Court* 23.

<sup>170</sup> S Kruger *Competency testing for children: A proposed framework* 15<sup>th</sup> Annual SAPSAC conference Pretoria 11 November 2014.

#### 2.4.1 The problem

Müller refers to “a minefield of issues” that the court encounters when legal competency is in question.<sup>171</sup> The competency examination serves as the gateway to giving evidence. If this procedure is unreliable, it has “massive societal impact”.<sup>172</sup>

There is an opinion that children and persons with disabilities are exposed to unfair discrimination in the court of law when they have become victims of crime.<sup>173</sup> While they are vulnerable as greater targets for abuse, they are also the ones more likely to be excluded (also erroneously) by the competency examination.<sup>174</sup> The perception exists that perpetrators have more constitutional rights than their victims in the eyes of the law.<sup>175</sup> The conviction rate for sexual abuse offenders is particularly low.<sup>176</sup> In

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<sup>171</sup> Müller *Judicial Officer* 135.

<sup>172</sup> JZ Klemfuss and SJ Ceci “Legal and psychological perspectives on children’s competence to testify in court” (2012) *Developmental Review* <http://dx.doi.org/10.1016/j.dr.2012.06.005> (accessed 14 June 2012): “Mishandling of child witnesses or evidence provided by them can result in miscarriages of justice either through under-prosecution of criminals such as child abusers or over-prosecution of innocent people accused of heinous crimes.”

<sup>173</sup> L McLain “Sweet Childish Days’: Using developmental psychology research in evaluating the admissibility of out-of-court statements by young children” (2011) 64(1) *Maine Law Review* 78 at 80. At 98 she continues,

“When a young child is the victim of an alleged crime, our justice system is put to its severest test. Beyond cavil we must be scrupulously fair to the person accused of abuse. In criminal cases we apply a presumption of innocence and impose a burden of persuasion beyond reasonable doubt because we do not want to convict an innocent person. If the person accused of abuse is a parent, we do not want to lightly terminate parental rights.

Nor, however, do we want to create a group of helpless victims whom a perpetrator could ‘safely’ harm, whom we could not protect, and to whom we could never offer recourse. If the child is unable to testify at trial – or is permitted to testify, but is unable to testify effectively – the need for the fact-finder to hear, and the probative value of, the child’s earlier statements is greatly heightened.”

<sup>174</sup> Müller *Judicial Officer* 135-136.

<sup>175</sup> According to J Prinsloo “In the best interest of the child: The protection of child victims and witnesses in the South African Criminal Justice System” (2008) 9(2) *CARSA* 49 at 50, on appeal in *S v M* 1999 (2) SACR 548 (SCA), the convicted had “the benefit of the doubt”, although the honourable

sexual abuse cases, the child is frequently the only witness to the incident. If the child is found without legal competency, it is likely that the perpetrator would be acquitted.<sup>177</sup> Conversely, having “passed” an invalid competency test might result in the court uncritically accepting an immature child’s evidence. Consequently, a person accused innocently might then not have a fair trial.<sup>178</sup>

The cognitive and moral abilities that are evaluated by the court during the examination fall in the domain of developmental psychology, rather than in the domain of law.<sup>179</sup> Prosecutors do not necessarily possess the skill required to effectively question the child witness.<sup>180</sup> A competent child’s answers to age-inappropriate questions could disqualify him or her to testify.<sup>181</sup> Conversely, to have any value to the court, every witness’s evidence has to be intelligible and relevant.<sup>182</sup>

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judge had a strong suspicion that he was guilty as charged. Furthermore, the author argues that the cautionary approach was followed in *S v V* 2000 (1) SACR 453 (SCA):

“If the version of an accused is reasonably possibly true (and not whether he is believed or not), he is entitled to acquittal even though his explanation is improbable. Although it is permissible to look at the probabilities of a case to determine whether the accused’s version is reasonably possibly true, ‘a court is not entitled to convict unless it is satisfied not only that the explanation is improbable but that beyond reasonable doubt it is false.’”

<sup>176</sup> *S v Mokoena* 593G-H.

<sup>177</sup> Müller *Judicial Officer* 135. Also see Lyon 2000 *Southern California Law Review* 1020.

<sup>178</sup> Shanks “Evaluating Children’s Competency to Testify”. According to Lyon and Saywitz 1999 *Applied Developmental Science* 16, “A leading competency evaluation could easily overestimate a child’s understanding”.

<sup>179</sup> Shanks “Evaluating Children’s Competency to Testify”; Lyon 2000 *Southern California Law Review* 1020; Klemfuss and Ceci “Legal and psychological perspectives” 4; McLain 2011 *Maine Law Review* 110.

<sup>180</sup> *DPP Tvl v Min of Just and Const Dev, and Others* para 104.

<sup>181</sup> An excellent analysis of a child’s answers to age-inappropriate competency questions is provided in TD Lyon “Child witnesses and imagination: Lying, hypothetical reasoning, and referential ambiguity” to appear in M Taylor (ed) *The Oxford Handbook of the Development of Imagination* 5-11 <http://works.bepress.com/thomaslyon/77> (accessed 03 July 2012).

<sup>182</sup> Melton 1981 *Law and Human Behavior* 75; Klemfuss and Ceci “Legal and psychological perspectives” 4.

It should not be assumed that all children are the same.<sup>183</sup> Vulnerable child witnesses, e.g. those with developmental delays and disabilities, need to be identified, in order to put special measures in place to accommodate them during court proceedings.<sup>184</sup>

Furthermore, as is the case in other parts of the world,<sup>185</sup> a uniform approach to competency testing is not in operation in South African courts at present.<sup>186</sup> According to Pillay, "the South African Law Reform Commission (SALRC) ... expressed concern regarding the competency test for intellectually disabled witnesses in South African courts. They noted that the problem may lie, not as much with the legislation, but with the manner in which the courts may be applying the relevant section of the legislation."<sup>187</sup>

#### 2.4.2 Objections

While existing competency testing "may be ... legally acceptable",<sup>188</sup> the inquiry has little bearing on the ability of a child witness to give testimony<sup>189</sup> and is therefore a "meaningless ceremony".<sup>190</sup> Current assessment tools are neither reliable nor valid.<sup>191</sup>

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<sup>183</sup> Klemfuss and Ceci "Legal and psychological perspectives" 4.

<sup>184</sup> Lyon and Saywitz 1999 *Applied Developmental Science* 26.

<sup>185</sup> Melton 1981 *Law and Human Behavior* 75; Müller *Judicial Officer* 135, 142-143, 145.

<sup>186</sup> *State v Swartz* 2009 (1) SACR 452 (C) para 20. See Pillay 2012 *SAJP* 318.

<sup>187</sup> Pillay 2012 *SAJP* 319.

<sup>188</sup> Müller *Judicial Officer* 148.

<sup>189</sup> *ibid.* Judge Stafford in *State v Mathebula* 1996 (2) SACR 231 (T) 234-235G-C explains that, besides honesty that is required from the child witness, it is also very important to know whether he or she is a "trustworthy" witness. Consequently abilities to observe, recollect and narrate also need to be assessed. Judge Jali in *S v Vumazonke* 2000 (1) SACR 619 (C) para 18 mentions that the evaluation of the witness's competency was supposed to also include the skills of perception and memory.

<sup>190</sup> Shanks "Evaluating Children's Competency to Testify" 6.

<sup>191</sup> Klemfuss and Ceci "Legal and Psychological Perspectives" 11.

Walker raises three points of criticism in this regard.<sup>192</sup> Firstly, the truth-lie tests do not discriminate between young witnesses who are “more accurate and less suggestible” and those who are less accurate and more suggestible<sup>193</sup> – children of the same age do differ. Secondly, the tests cannot claim to boost witness accuracy. And, lastly, no consideration is given to other reasons why the child witness does not come across as “truthful”, besides being dishonest.<sup>194</sup> For example, having children with intellectual disabilities in mind, Rainville contends: “It is important to flush out, as best as possible, whether something is simply a lie ... , or an honest error caused by a child’s disability”.<sup>195</sup>

Further criticism against the current competency examination rests on two objections.

- On the one hand, “it does not test the real base of competency”.<sup>196</sup>
- On the other hand, when children’s cognitive development does not allow for understanding abstract concepts like “truth”, “lie” or “oath” yet, the outcome of the truth-lie inquiry is invalid, unless the examination is approached in a developmentally appropriate manner.<sup>197</sup>

Bertelsmann J contends that reliable evidence depends on the personal experiences of the child witness in the courtroom while giving testimony.<sup>198</sup> The honourable

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<sup>192</sup> NE Walker “Forensic Interviews of Children: The Components of Scientific Validity and Legal Admissibility” (2002) 65 *Law and Contemporary Problems* 149 at 160.

<sup>193</sup> *ibid.*

<sup>194</sup> For example, children also want to please or they pretend to know. See also Lyon and Matthews “Questioning of Child Witnesses” 5.

<sup>195</sup> C Rainville “Prosecuting Cases for Children with Intellectual Disabilities” (2012) 31(12) *Child Law Practice* 145 at 150.

<sup>196</sup> Müller *Judicial Officer* 153.

<sup>197</sup> Müller *Judicial Officer* 154; Advocacy Training Council of the Bar of England & Wales “Task Report on Vulnerable Witnesses” para 21.5.

<sup>198</sup> *S v Mokoena* 595F: “It follows logically that the circumspection with which the reliability of the child’s evidence must be regarded is directly proportionate to the amount of pressure, fear, aggression and rejection that a child may experience during the court proceedings”. Also see 598B-C and 599B.



judge states that there is no correlation between truth-lie distinction and the abilities required for being an eyewitness.<sup>199</sup> Jones J regards information on the truth-lie competency of a child witness as insufficient with a view to interpreting his or her evidence if complexities and/or idiosyncrasies arose during trial.<sup>200</sup> The court requires knowledge about different aspects of the child's functioning in order to evaluate his or her testimony.<sup>201</sup>

Klemfuss and Ceci make the following useful distinction in terms of a child's "accuracy" in the courts: <sup>202</sup>

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According to *State v Dyira* 2010 (1) SACR 78 (ECR) para 4, it is important to realise that court delays also have a negative impact on the reliability of the evidence of a child witness. Jones J, continues in para 11:

"We know that this child, aged 8 years at the time, and 9 years when she testified, was considered to be a competent witness, in the sense that she understood the duty to tell the truth, but that she was too young to understand the binding nature of the oath. Apart from that, there is no detailed assessment in the judgment of her intelligence, her maturity for her age, the degree of her knowledge of sexual activity, her exposure to suggestibility, her powers of narration and recall, her spontaneity, or an account of her personal make-up and characteristics, which might have bearing on her explanation that she did not report the matter for so long out of fear, seen against the background of her healthy relationship with her mother and the fact that she ultimately did report it."

In *DPP Tvl v Min of Just and Const Dev, and Others* para 105, Ngcobo J also refers to how it could happen that a child witness could give unreliable evidence due to "fear of punishment if he or she disagrees" when an accused conducts his or her own cross-examination.

<sup>199</sup> *S v Mokoena* 607-608 para 139.

<sup>200</sup> *State v Dyira* para 6:

"The courts should be aware of the danger of accepting the evidence of a little child because of the potential unreliability or untrustworthiness, as a result of lack of judgment, immaturity, inexperience, imaginativeness, susceptibility to influence and suggestion, and the beguiling capacity of a child to convince itself to the truth of a statement which may not be true or entirely true, particularly where the allegation is of sexual misconduct, which is normally beyond the experience of small children who cannot be expected to have an understanding of the physical, social and moral implications of sexual activity".

<sup>201</sup> *ibid.*

<sup>202</sup> Klemfuss and Ceci "Legal and Psychological Perspectives" 2.

- The witness is considered “competent” when his or her level of cognitive and moral development allows for adequate participation in the truth-seeking process.
- Evidence is regarded as “reliable” when the child witness’s account of what happened, corresponds with the actual incidents that are in question. The child’s account has therefore not been contaminated by suggestions or coaching.
- A testimony is regarded as “credible” when it is subjectively evaluated as conceivable. For example, the witness’s account of events remains consistent.<sup>203</sup>

The conclusion made after general truth-lie questions thus has a limited bearing on the accuracy of a child as witness.<sup>204</sup> A decision regarding the competency of the child witness is made before he or she in fact had the opportunity to demonstrate his or her level of capability by means of testifying.<sup>205</sup> Furthermore, it does not mean that if a child witness passes the competency test, he or she is going to speak the truth.<sup>206</sup> As Lyon states, “[a] finding that a child is competent to testify is not the same as a finding that a child should be believed”.<sup>207</sup> Legal competency and

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<sup>203</sup> Meintjes and Collings 2008 *CARSA* 7-8.

<sup>204</sup> Klemfuss and Ceci “Legal and Psychological Perspectives” 11, and at 14: “... there seems to be little utility in using truth-lie competency assessments in court. These assessments have little or no predictive validity, do not improve children’s performance on the stand, and are overshadowed by a simple request for honesty.”

<sup>205</sup> Lyon “Child witnesses and imagination” 8. In Melton *et al Psychological Evaluations for the Courts* at 179-180, Dean Wigmore once remarked,

“Recognizing on the one hand the childish disposition to weave romances and to treat imagination for verity, and on the other hand the rooted ingeniousness of children and their tendency to speak straightforwardly what is in their minds, it must be concluded that the sensible way is to put the child upon the stand and let the story come out for what it may be worth”.

<sup>206</sup> Müller *Preparing Children for Court* 67; Bala *et al* 2010 *Journal of Children’s Rights* 60 and see the experiment by The Child Witness Project at 60-61 on lying – 72% of the children who lied to the researchers did agree beforehand “that it is ‘bad’ to lie”.

<sup>207</sup> Lyon 2000 *Southern California Law Review* 1043.

reliability are not the same issues.<sup>208</sup> Furthermore, the distinction between competency and credibility is particularly relevant in the current research. As Valenti-Hein and Schwartz state, the testimony of persons with developmental disabilities is regularly a credibility issue, rather than a question of competence or incompetence.<sup>209</sup>

#### 2.4.3 The Evans and Lyon study

A study by Evans and Lyon is most informative.<sup>210</sup> The researchers analysed the answers of 318 witnesses between the ages of four and 15 years to 2 727 questions posed during the competency examinations in a sample of court cases.<sup>211</sup> The researchers found:

- The easier questions for enquiring about the truth / lie meanings were identification (e.g. "If I say my gown is green would that be a lie?") and differentiation (e.g. "Do you know the difference between the truth and a lie?") questions.<sup>212</sup>
- A "WH"-question ("What is a lie?") was a less difficult definition question than a yes/no definition question ("Do you know what it means to tell a lie?"), despite the fact that a response to this question required of the witness to generate information. The difficulty witnesses had with the latter question

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<sup>208</sup> According to Lyon *Children's Testimony 2* ed 78,

"Courts will sometimes cite truth-lie competency as a factor to be considered in assessing the reliability of children's statements, but as the research clearly documents, this is unwarranted. The use of truth-lie questions in interviews will unjustifiably undermine the credibility of children who fail the questions, and unjustifiably bolster the credibility of children who succeed." [reference omitted]

<sup>209</sup> DC Valenti-Hein and LD Schwartz "Witness Competency in People with Mental Retardation: Implications for Prosecution of Sexual Abuse" (1993) 11(4) *Sexuality and Disability* 287 at 292. See for example, Fraser and McDonald "Working with Victims with FASD" 9.

<sup>210</sup> Evans and Lyon 2012 *Law and Human Behavior* 195-203.

<sup>211</sup> Evans and Lyon 2012 *Law and Human Behavior* 198.

<sup>212</sup> Evans and Lyon 2012 *Law and Human Behavior* 199.

was found to be with the introductory clause "Do you know..." and they usually answered "no".<sup>213</sup>

- While more "truth" than "lie" questions were asked during the examinations, the difficulty of the questions was comparable. However, an age effect was found: the number of correct responses increased with age.<sup>214</sup>
- The witnesses found evaluation questions (e.g. "Is it good to tell the truth?") easier than consequence questions (e.g. "Does anything happen to someone who tells a lie?").<sup>215</sup> "Reasoning about evaluation (are lies good or bad) may be simpler than reasoning about consequences (given that lies are good or bad, what will happen when I tell them), and may be less aversive, because imagining negative consequences is likely to be unpleasant."<sup>216</sup> An age effect was also found for the moral reasoning questions.
- "Have you ever told a lie?" was employed as a "prior occurrence" morality question.<sup>217</sup> The older group (seven to 14 years) responded correctly with a significant higher frequency than the younger group (four to six years), but 30% of the older group still also denied ever having told a lie. The researchers comment:

"It is likely that children misunderstood the purpose of the question, which is not to determine whether the child is likely to be lying on this particular occasion (in which case a 'no' answer might, from the child's perspective, suggest honesty), but to lay the foundation for a question about the consequences to the child when he or she lied in the past. Ironically, the child's 'no' response is in itself a lie, which ... may serve to undermine the child's credibility. There are other possible problems with questions of this sort as well. Questions about whether the child has 'ever' performed a misdeed are vague, in that the child has to search a wide range of

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<sup>213</sup> Evans and Lyon 2012 *Law and Human Behavior* 199-200.

<sup>214</sup> Evans and Lyon 2012 *Law and Human Behavior* 200.

<sup>215</sup> Evans and Lyon 2012 *Law and Human Behavior* 199, 200.

<sup>216</sup> Evans and Lyon 2012 *Law and Human Behavior* 202.

<sup>217</sup> Evans and Lyon 2012 *Law and Human Behavior* 201.

experiences in order to answer the question, and problematic, because the word 'ever' is what linguists refer to as a negative polarity item'.<sup>218</sup>

Evans and Lyon contend that this is not an appropriate question to ask during the competency examination.<sup>219</sup>

## 2.5 DEVELOPMENTAL RESEARCH

From a developmental perspective, the following research findings need consideration in terms of moral conceptualisation necessary for legal competency.

- The chronological age of a child does not necessarily indicate witness competency.<sup>220</sup>
- There is no relation between a child's ability to answer the competency questions correctly and being honest or dishonest.<sup>221</sup>
- From the approximate age of 24 months, infants are developing the capacity to reject a falsity before they are able to identify it as such.<sup>222</sup>
- Developmentally, some three-year-olds and most four-year-olds are able to "understand that 'truth' refers to factual statements and 'lies' to counterfactual statements".<sup>223</sup>

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<sup>218</sup> Evans and Lyon 2012 *Law and Human Behavior* 202 [reference omitted].

<sup>219</sup> Evans and Lyon 2012 *Law and Human Behavior* 203.

<sup>220</sup> Müller *Judicial Officer* 137-138; Le Roux and Engelbrecht *Introduction to Child Law* 345.

<sup>221</sup> Bala *et al* 2010 *Journal of Children's Rights* 59. In fact, as Klemfuss and Ceci "Legal and Psychological Perspectives" 14 put it, "Truth-lie competency is rarely associated with truth-telling behavior".

<sup>222</sup> Lyon *Children's Testimony* 2 ed 80; TD Lyon *et al* "Right and Righteous: Children's Incipient Understanding and Evaluation of True and False Statements" (2012) *Selected Works of Thomas D. Lyon* <http://works.bepress.com/thomaslyon/81> (accessed 14 June 2012).

<sup>223</sup> Lyon *et al* 2010 *Law and Human Behavior* 142; Lyon and Saywitz 1999 *Applied Developmental Science* 17. According to Lyon *et al* "Right and Righteous", "(C)hildren's understanding of the meaning and morality of 'truth' and 'lie' emerges between 3 ½ and 4 years of age, and operates under a factuality rule: If a statement is factual, it is the 'truth' and presumptively positive; if a statement is counterfactual, it is a 'lie' and presumptively negative".

- True statements are associated with the term “right” and false statements are also labelled as “wrong” or “mistakes”.<sup>224</sup> It is only from four years that children progressively grow to realise a mistake is an unintentional false statement.<sup>225</sup>
- The word “truth” operates more actively in the vocabulary of the young child than “lie”, perhaps because of the negative emotive value attached to lying: children who lie are “naughty” and will get punished.<sup>226</sup> Another explanation is that they just do not (cognitively) grasp what it means to lie yet.<sup>227</sup>
- A child’s capability to lie increases with age because lying is linked to cognitive development. “In other words, it is more difficult for the child who *does not* know the difference between ‘truth’ and ‘lie’ to tell a lie.”<sup>228</sup> The irony is therefore, “children who [are] most likely to fail truth-lie competency tests are probably the least likely to lie”.<sup>229</sup>

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<sup>224</sup> L Wandrey *et al* “Does valence matter? Effects of negativity on children’s early understanding of truth and lies” (2012) 113 *Journal of Experimental Child Psychology* 295 at 302, confirm this with the results of a study done with four- to six-year-olds:

“Overall, the results suggest that the valence of statements and actions interfere with children’s initial understanding that the truth refers to factual statements about actions and that lies refer to untruthful statements about actions, independent of the rightness or wrongness of the actions themselves. The results are consistent with research findings that children overgeneralize the concept of lies to include bad words; our findings suggest that those bad words include wrongdoing and claims of wrongdoing. The results are similarly consistent with research in cognitive and linguistic development demonstrating that children often initially apply concepts broadly and only gradually acquire adult-like understanding.” [references omitted]

<sup>225</sup> Lyon *et al* “Right and Righteous”.

<sup>226</sup> Lyon *et al* 2010 *Law and Human Behavior* 142; Lyon and Saywitz 1999 *Applied Developmental Science* 17, 19, 21 and 22-23.

<sup>227</sup> Lyon and Saywitz 1999 *Applied Developmental Science* 23.

<sup>228</sup> Lyon *Children’s Testimony* 2 ed 77; Klemfuss and Ceci “Legal and Psychological Perspectives” 8.

<sup>229</sup> Lyon “Child witnesses and imagination” 3, 8 [word inserted].

- Young children would not easily admit to a lie if an authority figure enquired about it.<sup>230</sup> It is therefore important that a question on lying is phrased in the third person, i.e., "somebody else".<sup>231</sup>
- Children have an "aversion to lying" and this makes it a difficult topic to discuss.<sup>232</sup>
- From approximately three years of age, children start to tell lies.<sup>233</sup> Little children do not lie more than older children and adults. However, the

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<sup>230</sup> Lyon 2000 *Southern California Law Review* 1045.

<sup>231</sup> Lyon *Children's Testimony* 2 ed 76; Lyon and Saywitz 1999 *Applied Developmental Science* 23. Also, a good example appears in *S v V* 653C-D as the intermediary reported to the court on a witness of four years old -

"Miss Smith said that she had first had difficulty in ascertaining whether the child could differentiate between the truth and a lie. She discovered that the child would not contradict what an adult put to her, although untrue. By contrast, ... if complainant was told what another child had said, which was untrue, complainant would differentiate between the truth and a lie."

<sup>232</sup> Lyon "Child witnesses and imagination" 12. In *S v V* 653E-F the following transcript is provided of the truth-lie enquiry:

"` Court: What is your name? L.

Mediator: L.

Court: How old are you L?

Mediator: She shows four fingers.

Court: Has she responded?

Mediator: She shows four fingers, your worship.

Court: Four fingers. Thank you. Are you attending school L?

Mediator: She said no.

Court: L, are you able to differentiate between truth and a lie?

Mediator: She said no.

Court: Do you know what is a lie, L? Do you know what it is to tell a lie, put it that way.

Mediator: She said no.

Court: Do you know what is – what it is to tell the truth?

Mediator: She nods her head affirmatively to say yes.

Court: Are you going to tell the truth to this court, L?

Mediator: She said she doesn't know ... Ja."

motivation behind a falsehood may be different for the different age groups.<sup>234</sup>

- What “truth” means for a four-year-old in different contexts is not necessarily the same as for older children and adults.<sup>235</sup>
- Children have difficulty to define the words “truth” and “lie”, but from approximately seven years of age this cognitive competency develops.<sup>236</sup>
- While they may not have the vocabulary to communicate about abstract concepts, even young children comprehend “the social importance of truth-telling and promising”.<sup>237</sup>
- Developmentally, children understand more than what they are able to communicate. Putting it differently, receptive vocabulary exceeds expressive vocabulary.<sup>238</sup>
- The young witness may not yet understand (a cognitive capability) the moral significance of “truth”, but could be an excellent witness exactly due to

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<sup>233</sup> According to A Vrij “Deception in Children: A Literature Review and Implications for Children’s Testimony” in HL Westcott *et al* (eds) *Children’s Testimony A Handbook of Psychological Research and Forensic Practice* (2002) 177 three kinds of lies are distinguished:

- A blatant lie is a complete and direct falsification, by means of a verbal statement that consists of one or many words, or a gesture.
- A subtle lie can also be described as a lie of omission; for example, deception by way of withholding information.
- An exaggeration is when facts are blown out of proportion by the deceiver.

<sup>234</sup> Bala *et al* 2010 *Journal of Children’s Rights* 59.

<sup>235</sup> Walker 2002 *Law and Contemporary Problems* 160; Lyon “Child witnesses and imagination”: He gives the example of a four-year-old who explained truth not in its abstract sense, but in terms of what had actually happened to her. When one realises that she had answered the questions from a subjective point of view, her answers actually made good sense.

<sup>236</sup> Lyon and Saywitz 1999 *Applied Developmental Science* 17, 20.

<sup>237</sup> Bala *et al* 2010 *Journal of Children’s Rights* 60.

<sup>238</sup> For example, see Lyon *et al* 2010 *Law and Human Behavior* 142-143.



immaturity:<sup>239</sup> Young children do not interpret their perceptions, but perceptions constitute their experience.<sup>240</sup>

- Children between six and 10 years could attend to what the speaker regards as the truth, rather than objective reality.<sup>241</sup> This means children of this age group become able to shift perspective.

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<sup>239</sup> Myers 1993 *Behavioral Sciences* 121.

<sup>240</sup> The following verbal exchange happened between the prosecutor and a five-year-old witness in *Commonwealth v Corbett* in Lyon 2000 *Southern California Law Review* 1018:

“Q. What is the truth?

A. A lie isn’t the truth.

...

Q. If you tell a lie, will you get into trouble?

A. But I’m not going to tell a lie.

Q. Have you ever told a lie?

A. No.

Q. If you don’t tell the truth, do you know what will happen to you?

...

A. Well, I can tell you just what happened.

Q. What happened?

A. He just looked down my privates and touched me down there.

...

Q. Do you know if it is wrong to tell the truth in a court like where we are in this courtroom now?

A. No.

...

Q. [Regarding the color of an object] Is that green or is it blue?

A. Green

Q. And what if I said it was blue?

A. It is not the truth.

...

Q. ... And if you said it were blue, what would happen to you?

A. Well, then I will say it is a different color.”

(However, this case was withdrawn because the court found this preschooler incompetent to take the oath. An appeal was unsuccessful and the case was never reopened.)

<sup>241</sup> Walker 2002 *Law and Contemporary Problems* 160.

- Children who grow up in compromised social environments seem to form the moral link between lying and a negative consequence, e.g. punishment, before they discern between truth and falsity.<sup>242</sup>
- For young maltreated children, a positive correlation was found respectively between age and receptive vocabulary in their performance in competency tasks.<sup>243</sup> This means understanding of the competency questions improves with age. And, as the child's comprehension of language increases, so will his or her performance on the competency test.
- The preferred form of questioning used in the courtroom is closed questions. An incorrect "yes" or "no" would leave a witness's misinterpretation of a complex and/or ambiguous question undetected.<sup>244</sup>
- Children do not share adults' understanding of the oath as a social contract to speak only the truth.<sup>245</sup> Some children older than 10 years are not cognisant

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<sup>242</sup> Lyon *et al* 2010 *Law and Human Behavior* 143.

<sup>243</sup> Lyon and Saywitz 1999 *Applied Developmental Science* 17, 22 - The research group consisted of four- to seven-year-olds with either abuse or neglect allegations.

<sup>244</sup> Lyon "Child witnesses and imagination" 13.

In *S v Mathebula* 1996 (2) SACR 231 (T) the learned judge mentions an appropriate example of two questions combined in one closed question: "*Toe sy onder kruisondervraging deur die beskuldigde gevra is 'Wil u sê u ken my?' was haar antwoord 'Nee'.*" ("When she was asked by the accused during cross-examination, 'Do you want to say you know me?' her answer was 'no'") To which part did she reply, no? Did she actually follow what the accused meant? Afrikaans children are not used to being addressed as "u".

Or, the seven-year-old witness in *State v Swartz* 2009 (1) SACR 452 (C) 455F-G, gave a negative nonverbal response to the following question that combine various syntactical clauses; "*Hof: Kan jy onthou dat {jy} {met 'n dame} {vanoggend} {by die hof} {gepraat het} {oor die saak}?*" ("Court: Can you remember that {you} {have spoken} {to a lady} {this morning} {at court} {about the case}?"") Her negative answer either indicated that she had not forgotten and therefore did not remember (the reasoning typical of this age, according to Walker *Handbook on Questioning Children* 43), or she disagreed with one of the clauses or it merely communicated incomprehension relating to the very complicated question she was asked.

<sup>245</sup> J Perner "Children's Competency in Understanding the Role of a Witness: Truth, Lies, and Moral Ties" (1997) 11 *Applied Cognitive Psychology* s21 at s31.

of “the full moral impact” of an oath, more so in relation to its religious connotation.<sup>246</sup>

- The verb “to promise” is a difficult word for children to master.<sup>247</sup> The difficulty lies with its syntax in English and not so much in its meaning.<sup>248</sup>
- From the age of nine years children start to understand the meaning of the word “promise” as a verbal commitment to an action preceding the action itself. From this age onwards, children are able to express “an intention to act in accordance with their words”.<sup>249</sup>
- The interpretation of children of 10 years and even older is still narrow in the sense that they link the meaning of “promise” to a consequence: “a promise is only a promise when the promised action was actually carried out but not otherwise”.<sup>250</sup>

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<sup>246</sup> *ibid.*: “The moral severity of breaching this social obligation has traditionally been further underlined by its religious connotations: ‘as a conditional self-curse under which the swearer call upon God to damn his soul for all eternity if he fails to tell the truth’.” [reference omitted]

<sup>247</sup> Walker *Handbook on Questioning Children* 41-42.

<sup>248</sup> Walker *Handbook on Questioning Children* 42:

“From a strictly linguistic perspective, ‘promise’ is a tricky verb in English, because it violates a basic grammatical rule – the Minimum Distance Principle (MDP) – which states that the subject of a verb in a complement phrase is the noun closest to, and in front of, that verb. As an illustration of how the principle works, consider that in each of the following questions, ‘Do you want *me to sing?*’, (complement phrase is italicized) and ‘Would you tell *me to sing?*’, the prospective singer is the speaker ‘me,’ the noun right in front of the verb ‘to sing.’ However, in the common court question, ‘Will you promise *me to tell the truth?*’, the rules change. The prospective truth-teller is now the *hearer* ‘you,’ the noun in front of both the main verb ‘promise’ *and* of the infinitive verb phrase ‘to tell the truth.’ Adults understand the violation of the MDP without thinking. But children up to the age of 10 may not.”

The MDP violation also occurs in the Afrikaans syntax: “*Sal jy my belowe om die waarheid te praat?*”.

<sup>249</sup> Lyon 2000 *Southern California Law Review* 1058-1059. Also see RE Owens *Language Development An Introduction* 4 ed (1996) 375, who also claims that it is only at nine years of age that the word “promise” is functional in the child’s vocabulary.

<sup>250</sup> Perner 1997 *Applied Cognitive Psychology* s30.

- Furthermore, the typical 10-year-old does not make a distinction between a real promise and a prediction in which the word “promise” is used colloquially and eventually turned out to be true.<sup>251</sup>
- Eliciting a promise to be truthful seems to promote witness reliability.<sup>252</sup> Lying while giving evidence is subsequently more easily detected.<sup>253</sup>
- Maltreated children who are younger than seven years prefer the word “will” despite its connotative value being less than “promise”. For the six-year-olds in the maltreated group, the two concepts “will” and “promise” are synonymous. Children who have not been affected by maltreatment have an advantage of one to two years in terms of language development in this regard.<sup>254</sup>

## 2.6 COMPONENTS OF TESTIMONIAL COMPETENCY

Melton *et al* argue that the issue of testimonial capacity is of particular concern when the witness is a child or a person with a mental disability.<sup>255</sup> Researchers agree that testimonial capacity or legal competency in actual fact involve four abilities, and not only one:

“An individual must be competent to testify as a witness at any trial or hearing. Competence to testify involves four factors: (1) the mental capacity, at the time of the occurrence in question, to observe or receive accurate impressions of the event; (2) memory sufficient to retain an independent recollection of the observations; (3) the capacity to communicate that memory in words and to understand questions about

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<sup>251</sup> *ibid*: For example, “I promise you, it’s gonna rain today”.

<sup>252</sup> Lyon *Children’s Testimony* 2 ed 76: A deliberate lie can be avoided by eliciting a commitment from the child to tell the truth. However, for a promise to have an effect, the witness does need some understanding of the moral concept “truth”. Also see JN Anderson *et al* “The CornerHouse Forensic Interview Protocol: An Evolution in Practice for Almost 25 Years” (2013) 25(4) *APSAC Advisor* 2 at 4 and ME Lamb *et al* “Interviewing Victims and Suspected Victims Who Are Reluctant to Talk” (2013) 25(4) *APSAC Advisor* 16 at 17.

<sup>253</sup> Bala *et al* 2010 *Journal of Children’s Rights* 62.

<sup>254</sup> Lyon 2000 *Southern California Law Review* 1062, 1063.

<sup>255</sup> Melton *et al Psychological Evaluations for the Courts* 180.

the event; and (4) a present understanding of the difference between truth and false testimony and an appreciation of the obligation to speak the truth.”<sup>256</sup>

Müller categorises the first three abilities as the “eyewitness ability” component and moral capacity as the “willingness to tell the truth” component.<sup>257</sup> Lyon also makes this distinction, but identifies the components as “basic” and “truth-lie” competencies respectively.<sup>258</sup> The various components are discussed below.

### 2.6.1 Perceptual abilities

Humans receive information through their sensory organs, i.e., their eyes, ears, tongue, nose and skin, in order to be processed neurologically. The “mental ability to observe and receive accurate impressions of the event”<sup>259</sup> refers to the witness’s perceptual abilities which are acquired very early in life.<sup>260</sup> With regard to identification in particular, the eyewitness’s capacity of observation is of specific importance.<sup>261</sup>

It is generally expected that both children and people with cognitive deficits will be able to perceive events by means of their senses adequately, unless they have a visual and/or auditory impairment.<sup>262</sup> However, according to Melton *et al*, observations that require complex sensory processing may be problematic.<sup>263</sup> It is important to keep in mind though that an event does not need to be understood for

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<sup>256</sup> D Katner and HJ Plum “Legal Issues” in AP Giardino and ER Giardino *Recognition of Child Abuse for the Mandated Reporter* 3 ed (2002) 341-342. Also see Müller *Judicial Officer* 149-150 and Melton *et al Psychological Evaluations for the Courts* 180-185.

<sup>257</sup> Müller *Judicial Officer* 153, paras 2.6.1 – 2.6.3 and para 2.6.4.

<sup>258</sup> Lyon *Children’s Testimony* 2 ed 71 and 73.

<sup>259</sup> Katner and Plum *Recognition of Child Abuse* 341.

<sup>260</sup> Myers 1993 *Behavioral Sciences* 123.

<sup>261</sup> In *S v Mthetwa* 1972 (3) SA 766 (A) 768A – B, “Because of the fallibility of human observation, evidence of identification is approached by the Courts with some caution. It is not enough for the identifying witness to be honest: the reliability of his observation must also be tested”.

<sup>262</sup> Melton *et al Psychological Evaluations for the Courts* 180.

<sup>263</sup> *ibid*.

it to be registered by means of the senses.<sup>264</sup> Only attention is required to register a stimulus in sensory memory.<sup>265</sup>

Therefore, the relevant ability is “personal knowledge”<sup>266</sup> of the event in question,<sup>267</sup> obtained by means of visual, auditory, gustatory, olfactory and/or tactile perception.

## 2.6.2 Memory

There are two forms of long-term memory, i.e., episodic and semantic memory.<sup>268</sup> A child witness requires both when giving evidence.<sup>269</sup>

It is by means of semantic memory that a knowledge base or “frame of reference” is shaped.<sup>270</sup> The child’s knowledge base refers to what he or she knows about a particular topic<sup>271</sup> and is formed by direct instruction and/or personal experience.<sup>272</sup>

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<sup>264</sup> *ibid.*

<sup>265</sup> D Louw and R Kail “Basic Concepts of Child and Adolescent Development” in D Louw and A Louw (eds) *Child and Adolescent Development* (2007) 25.

<sup>266</sup> Myers 1993 *Behavioral Sciences* 128.

<sup>267</sup> Müller *Judicial Officer* 150.

<sup>268</sup> D Schacter *The Seven Sins of Memory {How the Mind Forgets and Remembers}* (2001) 27.

<sup>269</sup> Schacter *Seven Sins of Memory* 27-28:

“Retaining information across days, weeks, and years depends on two major forms of long-term memory. Episodic memory supports remembering of personal experiences that occurred in a particular time and place: recollections of the birthday party you attended last week, or of the Broadway play you saw on your first visit to New York as a child. Semantic memory allows the acquisition and retrieval of general knowledge and facts: knowing that John Adams and Thomas Jefferson were principal architects of the Declaration of Independence, or that Yankee Stadium is the House That Ruth Built.

But a third type of memory intervenes between the moment of perception and the eventual establishment of long-lasting episodic or semantic memories. Referred to as ‘working memory,’ it holds on to small amounts of information for short periods of time – usually a few seconds – while people engage in such ongoing cognitive activities as reading, listening, problem solving, reasoning, or thinking.”

<sup>270</sup> Shanks “Evaluating Children’s Competency to Testify” 23.

<sup>271</sup> Louw and Louw *Child and Adolescent Development* 219 [underlining inserted].

When the child has the necessary vocabulary to communicate about this knowledge, explicit referencing becomes possible:<sup>273</sup> for example, he or she can communicate about recollections (paras 2.6.3 and 3.2.4).

The child's knowledge base appears initially to rely quite heavily on his or her perceptual knowledge.<sup>274</sup> If the child knows the topic well, he or she will retrieve information quickly.<sup>275</sup> His or her ability to learn and remember other information related to the topic will also be significantly better.<sup>276</sup> Furthermore, the more meaningful information is, the easier memory storage and retrieval happen.<sup>277</sup> Sensory experiences increase its significance.<sup>278</sup> Moreover, personal meaningful events and information pertaining to the self are generally easily encoded and retained in the child's knowledge base.<sup>279</sup>

"Episodic memory is about happenings in particular places at particular times, or about 'what', 'where,' and 'when'".<sup>280</sup> This kind of memory system relates to remembering personal experiences oriented in time and space, while semantic memory pertains to recalling general factual information.<sup>281</sup> During recall, both these forms of declarative memory require "conscious awareness" which is triggered by a statement or an image.<sup>282</sup>

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<sup>272</sup> JP Das and JA Naglieri "Mental Retardation and Assessment of Cognitive Processes" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) 124.

<sup>273</sup> Owens *Language Development* 364-365.

<sup>274</sup> Owens *Language Development* 365.

<sup>275</sup> Louw and Louw *Child and Adolescent Development* 220.

<sup>276</sup> Louw and Louw *Child and Adolescent Development* 219.

<sup>277</sup> *ibid.*

<sup>278</sup> Anderson *et al* "RATAC" 304-305.

<sup>279</sup> A Louw "Die bevoegdheid van kinders as getuies II: Die rol van sosiaal-emosionele kontekste in geheue" (2004) 5(2) *CARSA* 16 at 17.

<sup>280</sup> E Tulving "Episodic Memory: From Mind to Brain" (2002) 53 *Annual Review of Psychology* 1 at 3.

<sup>281</sup> *ibid.*

<sup>282</sup> V Anderson *et al* *Developmental Neuropsychology A Clinical Approach* (2001) 83.

According to Tulving, episodic memory is associated with the unique human capability of “mental time travel”, an awareness of subjective time that spans both past and future.<sup>283</sup> It is based on an understanding that knowledge originates from some source or another, and that a memory is an individual’s conscious representation of a personally experienced event in the past.<sup>284</sup> Perner *et al* put it that episodic memory is about “remembering the past” rather than having “knowledge of the past”.<sup>285</sup> “It goes beyond mere knowledge that something has happened and also beyond knowledge that one has experienced the event. By re-invoking (parts of) the original experience, episodic memory gains particular intimacy that pure knowledge cannot provide.”<sup>286</sup>

Source memory is regarded as a part of episodic memory and is defined as “the ability to recall precisely when and where an event occurred or the precise source of semantic information”.<sup>287</sup> A memory is encoded by the event that made it personal knowledge; and its source can be personal experience, communication from another or an inference drawn.<sup>288</sup> Personal experience is regarded as a direct source, while another’s communication or an inference is indirect.<sup>289</sup> Preschoolers have major difficulty with source memory.<sup>290</sup>

The witness needs to store and retain the perceptions of the incident or incidents in question in memory. When there is a significant time span between the event and the opportunity to testify about it, this is especially relevant. Retention of observations is dependent on two kinds of memory:

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<sup>283</sup> Tulving 2002 *Annual Review* 2; E Tulving “Memory and Consciousness” (1985) 26(1) *Canadian Psychology* 1 at 5.

<sup>284</sup> Tulving 1985 *Canadian Psychology* 4.

<sup>285</sup> J Perner *et al* “Episodic Memory Development: Theory of Mind is Part of Re-experiencing Experienced Events” (2007) 16 *Infant and Child Development* 471 at 472.

<sup>286</sup> *ibid.*

<sup>287</sup> PM Crittenden *Raising Parents: Attachment, parenting and child safety* (2011) 102.

<sup>288</sup> *ibid.*

<sup>289</sup> Perner *et al* 2007 *Infant and Child Development* 472.

<sup>290</sup> Schacter *Seven Sins of Memory* 134.



- recognition memory, which allows even a witness of three or four years old to recognise a place or person;<sup>291</sup> and
- recall memory that is required to relate the past event or events that is/are of concern.<sup>292</sup>

Recall requires a more complicated memory process than recognition.<sup>293</sup> Research has shown that little difference exists between the short-term recall of (young) children compared to that of adults. However, with time, children's recollections fade significantly quicker than those of adults.<sup>294</sup>

Powell and Thomson report two kinds of errors that are related to memory processes:<sup>295</sup>

- Internal intrusion errors can occur when a child recalls an episode of an event that happened repeatedly over a period of time. The details of one event become confused with details of another due to the recurrence of similar details from incident to incident.<sup>296</sup>
- External intrusion errors are described as details that are erroneously recalled to have happened.<sup>297</sup> This corresponds with the term confabulation – when gaps in memory are filled with details that were not part of the course of events. This phenomenon is much less common than internal intrusion.<sup>298</sup>

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<sup>291</sup> Melton *et al Psychological Evaluations for the Courts* 181.

<sup>292</sup> *ibid.*

<sup>293</sup> *ibid.*

<sup>294</sup> *ibid.*

<sup>295</sup> M Powell and D Thomson "Children's Memories for Repeated Events" in HL Westcott *et al* (eds) *Children's Testimony A Handbook of Psychological Research and Forensic Practice* (2002) 72-73. At 73 the researchers comment that these errors should not be confused with reliability issues, i.e. as a result of suggestions or coaching.

<sup>296</sup> *ibid.*

<sup>297</sup> Powell and Thomson *Children's Testimony* 73.

<sup>298</sup> *ibid.*

Therefore, the second aspect of competency is the ability of the child witness to accurately recall what he or she perceived at the time of the incident in question in a way that makes sense to him or her.

### 2.6.3 Communication

Anne Walker draws a distinction between linguistic and communicative competency.<sup>299</sup> Linguistic competence is defined as the understanding and production of words, phrases and sentences.<sup>300</sup> When a child has developed the understanding of how to use language, including the different speech acts, in a culturally appropriate manner, he or she is considered to have communicative competency.<sup>301</sup> Coggins *et al* describe communicative competence within a social setting as the integration of three developmental processes, i.e., language, social cognition and higher-order thinking.<sup>302</sup>

A distinction is made between receptive and expressive language.<sup>303</sup> Both vocabularies play a role when a witness gives evidence.<sup>304</sup> Receptive language refers

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<sup>299</sup> AG Walker "Questioning Young Children in Court: A Linguistic Case Study" (1993) 17 *Law and Human Behavior* 59 at 60.

<sup>300</sup> *ibid.*

<sup>301</sup> Walker 1993 *Law and Human Behavior* 60, 64-65: Examples of acts of speech are questions, requests, commands and promises. The child also understands indirect questions. An example of an indirect question is: *Won't you please speak up?* Whereas, *I would like you to speak up please*, is a direct question.

<sup>302</sup> TE Coggins *et al* "A State of Double Jeopardy: Impact of Prenatal Alcohol Exposure and Adverse Environments on the Social Communicative Abilities of School-Age Children With Fetal Alcohol Spectrum Disorder" (2007) 38 *Language, Speech, and Hearing Services in Schools* 117 at 118:

- Language consists of syntax, semantics and pragmatics.
- Social cognition refers to "understanding why people act in certain ways and what they are likely to do next," an aspect of theory of mind (ToM) (para 3.4.5).
- Higher-order thinking involves the executive mental functions such as planning, problem-solving and decision-making (para 3.2.3).

<sup>303</sup> BD Garber *Developmental Psychology for Family Law Professionals: Theory, Application, and the Best Interests of the Child* (2010) 57.

<sup>304</sup> Of interest, in Shanks "Evaluating Children's Competency to Testify" 11, the fourth and fifth competency criteria deal with these communicative abilities:

to the child's understanding of what is being communicated to him or her during the court session, while expressive language refers to being able to use his or her vocabulary to communicate perceptions retained in memory during testimony to the court and answer questions about these recollections.

An important facet of successful verbal information exchange is that both speaker and listener draw similar inferences from a context formed by the words that are used.<sup>305</sup> In the courtroom, young children (less than five years old) find conceptualisation of "complex events" difficult due to cognitive immaturity.<sup>306</sup> Furthermore, as a participant in the verbal exchange during testimony, the child witness needs a basic knowledge of the general and specific communication rules. Young children are not yet aware of the responsibility a speaker has to communicate clearly, nor of the need to continue communicating until the listener has grasped the meaning of the intended message.<sup>307</sup>

The child's developing use of language may create conditions for miscommunication during testimony.<sup>308</sup> Usually preschoolers' language use contains idiosyncrasies before standard language is acquired with the purpose to communicate meaning.<sup>309</sup> Adults generally understand complex syntax, indirect speech and embedded

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"(1) present understanding or intelligence to understand and obligation to speak the truth;  
(2) mental capacity at the time of the occurrence in question to observe and register the occurrence;  
(3) memory sufficient to retain an independent recollection of the observations made;  
(4) ability to translate into words the memory of those observations; and  
(5) ability to understand and respond to simple questions of occurrence."

<sup>305</sup> Klemfuss and Ceci "Legal and Psychological Perspectives" 4 give an example:

"A: Is there another pint of milk?

B: I'm going to the supermarket in five minutes."

<sup>306</sup> Melton *et al Psychological Evaluations for the Courts* 184.

<sup>307</sup> Walker 1993 *Law and Human Behavior* 75 and at 77: "[I]f I have reason to believe that *you* are misunderstanding *me*, then it's my obligation to clear things up for us both. In adult conversations, there is a *reciprocal* obligation toward clarity. / But children don't necessarily know that ... "

<sup>308</sup> Lyon "Child witnesses and imagination".

<sup>309</sup> As Walker *Handbook on Questioning Children* 44 states, "An act does not cease to be an act if the words used to describe it are not mutually understood; nor does it become a lie".

referential phrases, while children do not. Furthermore, the general vocabulary of adults contains many words and concepts that are foreign to children.<sup>310</sup>

Besides the possibility of a personal interpretation of meaning, it is also bound to culture and the moral environment in which a child is raised.<sup>311</sup> For example, children's understanding and use of the words "truth" and "lie" do not necessarily correspond with the meaning of these words as given in a dictionary.<sup>312</sup> And the word "promise", apart from its connotation with swearability, can also be used in a different context during testimony, e.g. exploring the possibility that another person could have promised the child witness something.<sup>313</sup>

Children develop the capacity to participate in communication as a purposeful exchange of meaningful information only with time. In the legal context, it is therefore particularly risky to assume that, merely because a preschooler responds

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<sup>310</sup> Walker *Handbook on Questioning Children* 44.

<sup>311</sup> Walker *Handbook on Questioning Children* 69-70. Also see Cunningham and Stevens "Helping children to be a witness" 46, 47: In the context of some cases of sexual abuse these moral concepts can burden the role of the witness's evidence in the quest for justice to a significant degree:

"Our research on children's reactions to sexual abuse shows that fear of disbelief is a major impediment to disclosure. They assume that the word of an adult will always be taken over the word of a child. Some abusers are well regarded in the community or members of trustworthy professions such as the clergy, people children are taught to see as honest and reliable. Research on children's predictions about their reactions to testimony shows fear of disbelief is also a salient one for many prospective child witnesses. Indeed, by entering a not guilty verdict, the accused has (apparently) denied the child's version of events. Worries about disbelief are entwined with worries about the accused lying and being believed. ... If an accused can go to prison for 'losing' the case, can a child go to prison if he or she 'loses' by not being believed?"

<sup>312</sup> Walker *Handbook on Questioning Children* 69: Truth is "what really happened" and a lie is an intention or an action to "deceive".

<sup>313</sup> Walker *Handbook of Questioning Children* 43: Then care should be taken that the sentence is phrased as simply as and concretely as possible in order to avoid misunderstanding (para 2.5).

to questions asked by an adult, these responses are the full and relevant answers to the questioning.<sup>314</sup>

The narrative ability of the witness allows him or her to report on personal experiences of interest to the court. Melton *et al* make the point that if the child witness is unable to communicate his or her observations and memories of the relevant event(s) intelligibly, it obviously has little meaning to the courts.<sup>315</sup> On the other hand, the attitude of the fact finder regarding the immaturity of the child witness plays an important role during the trial.<sup>316</sup> Communication difficulties as a result of incomplete cognitive<sup>317</sup> and language development, are supposed to be anticipated and accommodated.<sup>318</sup>

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<sup>314</sup> Walker 1993 *Law and Human Behavior* 67.

<sup>315</sup> Melton *et al Psychological Evaluations for the Courts* 183.

<sup>316</sup> Melton *et al Psychological Evaluations for the Courts* 184.

<sup>317</sup> According to Piaget, the preschooler's egocentricity results in "peculiarities" of logic. The young thinker does not generalise, because of an inability to make internal connections between pieces of information. Thinking is therefore vague and even contradictory.

- Transductive reasoning is employed, which means that unrelated events are causally linked. (Also see Louw and Louw *Child and Adolescent Development* 158.)
- Syncretism refers to the particular phenomenon of indiscriminately "lumping all things together". Heterogeneous elements become fused when perceived simultaneously and from then on explain one another.

According to J Piaget *The Child's Conception of the World* 2 ed (2007) xii,

- juxtaposition refers to putting one statement after the other, absent of any logical system. Consequently elements are not synthesised by means of inclusion, causality or implication.

Also see "In a Nutshell: The Principle Features of Child Logic: From the work of Jean Piaget Judgement and Reasoning in the Child" [www.telacomunications.com/nutshell/principle\\_features.htm](http://www.telacomunications.com/nutshell/principle_features.htm) (accessed 11 September 2013).

<sup>318</sup> *ibid.* According to Walker 1993 *Law and Human Behavior* 75,

"Asking a young child if some unspecified something is the truth, asking her if the truth of today is the same as yesterday, is to ask her to express in adult language a concept that she may on some level know, but *may not know that she knows*. ... [N]ot all of the problems or potential problems ... could be laid in the lap of grammar and ambiguity. Some of them clearly had to do more with (the) child's ability to use language as a *tool for expression* of ideational and relational concepts."

A narrative model operates within a cultural context.<sup>319</sup> The model taught to children in the broader South African community is based on the chronological order of events.<sup>320</sup> A narrative is defined as an uninterrupted account of a personal event,<sup>321</sup> which can either be a single episode or several episodes.<sup>322</sup> Narratives serve the purpose of making meaning of information.<sup>323</sup> Narrative ability is linked to pragmatic development, i.e., maturation of language use.<sup>324</sup> However, contextual factors interact with both the nature of the speaker's narrative and his or her stage of development.<sup>325</sup>

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<sup>319</sup> Anderson *et al* "RATAC" 206; A McCabe and PR Rollins "Assessment of Preschool Narrative Skills" (1994) 3 *American Journal of Speech and Language Pathology* 45 at 52-53; Owens *Language Development* 347.

<sup>320</sup> Crittenden *Raising Parents* 101.

<sup>321</sup> Anderson *et al* "RATAC" 205.

<sup>322</sup> Owens *Language Development* 349: "An episode contains a statement of the problem or challenge, and all elements of the plot are directed towards its solution".

<sup>323</sup> Owens *Language Development* 346-347 contends, from school-going age, children become familiar with different kinds of narratives. In the forensic the account applies: An account is a spontaneous and idiosyncratic narrative. Usually the listener does not have knowledge of the personal experience that the child tells about.

<sup>324</sup> Owens *Language Development* 346. At 351-354, Owens provides an exposition of story grammar development:

Preschool:

- A heap refers to descriptions in the story that are not linked in any causal or temporal fashion.
- An action sequence is given when actions happen in a time sequence, but actions are not explained in terms of cause.

Middle childhood until nine years:

- A reaction sequence forms a story when the consequence of one action causes another consequence which in turn results in another change. It remains unclear what motivated these respective changes.
- When the story consists of an implicit or explicit goal linked to a consequence, it is described as an abbreviated episode.

<sup>325</sup> Owens *Language Development* 354: "The more familiar the audience, the longer the clauses and the more use of embedded clauses."

Walker explains that the ability to give an “autobiographical report” of past experiences is a conversational skill that develops gradually<sup>326</sup> as it is dependent on the unfolding of various discourse and linguistic skills and cognitive abilities, particularly the comprehension of temporal (time) concepts.<sup>327</sup>

The precursor to providing a narrative is the child’s ability to create a script.<sup>328</sup> A script is associated with generic memory of ordinary or usual events, and generally younger children rely heavily on script memory.<sup>329</sup>

Although young children already have some ability to relate a recollection in terms of the elements of a narrative, it often lacks coherency.<sup>330</sup> According to Louw, incoherency is caused by the preschooler’s limited skill to use connectives. At first, young children tend to focus their report on a salient aspect and begin to use prepositions to link more than one aspect only later.<sup>331</sup> Another reason why the

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<sup>326</sup> Walker *Handbook on Questioning Children* 22.

<sup>327</sup> Walker *Handbook on Questioning Children* 22-23, 73; Crittenden *Raising Parents* 101; Lamb and Brown 2006 *British Journal* 216; Owens *Language Development* 350:

It starts with the young child answering specific questions posed by significant adults about something that happened. Initially with yes/no questions and later with open-ended questions as the child gets older, he or she learns how to narrate an incident according to the expectations of adults. By persisting with particular questions until the child has provided all relevant details, the adults erect the scaffolding (para 3.2.3) until the child has internalised its “mental structure” or a “story grammar”, i.e., the basic components and rules. Owens *Language Development* at 351-354, provides an exposition of story grammar development.

<sup>328</sup> Owens *Language Development* 346, 348.

<sup>329</sup> Louw 2004 *CARSA* 11. According to Louw and Louw *Child and Adolescent Development* 166 and AE Louw “Die bevoegdheid van kinders as getuies: Die rol van kognitiewe faktore in die vatbaarheid van suggestie” (2005) 6(1) *CARSA* 18 at 22, the typical three-year-old is able to relate the actions that accompany some or other routine, e.g. his or her bedtime ritual. However, as a script is the result of the ability to generalise (para 3.2.2), an exception is usually overwritten by the familiar (and therefore the expected) pattern of events.

<sup>330</sup> Owens *Language Development* 344: “Prior to age five, narratives are a collection of utterances rather than a single structured unit. In mature narratives, each utterance becomes constrained by the manner in which it advances the overall theme and purpose of the narrative.”

<sup>331</sup> Louw 2005 *CARSA* 20.

account of young children lacks detail, is their limited ability to be specific.<sup>332</sup> Also, from one telling to another, details are provided inconsistently.<sup>333</sup> Importantly, it often happens that young children are not motivated to participate in a conversational exchange about their experiences.<sup>334</sup>

A narrative developmental continuum is found in terms of the narration of personal events.<sup>335</sup> According to Owens, the narration of the typical seven-year-old will include a beginning and an end, a problem and its resolution.<sup>336</sup> The child masters the ability to use "causal chains within episodes" only gradually, after which he or she no longer gives an abbreviated version that lacks detail of exactly how the plot is solved.<sup>337</sup> Developmentally, the typical preadolescent (the higher range of middle childhood) is able to give a spontaneous narration of personal events,<sup>338</sup> but it is only during adolescence, when all skills concerned have developed fully, that a narrative is considered to be properly organised and complete.<sup>339</sup>

In summary of the third component of competency then; the ability of the child witness to understand "court language" has importance and his or her capacity to give expression to his or her perceptions, feelings and thoughts in relation to the court's questions. Furthermore, the court requires a logical narration of the event(s) in question in order to weigh factual information. These aspects all rely on the language and communication skills of the child.

#### 2.6.4 Moral capacity

Firstly, moral capacity as the fourth ability requires the child to be able to distinguish between the truth and a lie. Secondly, it is necessary for the child to have developed the moral proficiency to be bound to the values of honesty and truthfulness.

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<sup>332</sup> *ibid.*

<sup>333</sup> Louw 2004 *CARSA* 9.

<sup>334</sup> *ibid.*

<sup>335</sup> McCabe and Rollins 1994 *Journal of Speech and Language Pathology* 46-48, 51.

<sup>336</sup> Owens *Language Development* 345.

<sup>337</sup> Owens *Language Development* 349.

<sup>338</sup> Anderson *et al* "RATAC" 220.

<sup>339</sup> Walker *Handbook on Questioning Children* 23.



Whitcomb *et al*/ describe it as having developed “a sense of moral responsibility”.<sup>340</sup> A basic understanding of moral concepts is required.<sup>341</sup> However, it has emerged from relevant literature that although the cognitive and moral aspects of development are linked, the “cognitive” activity of discussing moral concepts – i.e. of truth-telling and lying – does not explain the child’s moral functioning. A child can act morally without knowing what it boils down to. In fact, this is the point that Melton *et al*/ make:

“Justice will be served if witnesses tell the truth, regardless of their reasons for doing so, and most courts recognize that fact. If there *is* some reason to ascertain a child’s conceptualization of the duty to tell the truth, however, the yes-no and definition questions traditionally used in the common law *voir dire* of witnesses are inadequate measures. One of the philosophical underpinnings of current cognitive-developmental theories of moral development is that a given behaviour may be motivated by vastly different levels of moral reasoning. Thus, asking a child to explain the meaning of ‘truth,’ ‘oath,’ or ‘God’ probably tells more about the child’s intellectual development than about his or her propensity to tell the truth.”<sup>342</sup>

Consequently, the fourth aspect of competency pertains to the child’s moral development, in interaction with his or her cognitive development (para 2.5).

## **2.7 FORMAL COMPETENCY ASSESSMENT**

Walker takes a broad perspective on witness competency:

“[C]ompetency in a trial is a matter both of an underlying linguistic and communicative competence, and the performance which that competence make possible. And

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<sup>340</sup> D Whitcomb *et al* “When the Victim Is a Child: Issues for Judges and Prosecutors” (1985) 33 <http://files.eric.ed.gov/fulltext/ED271684.pdf> (accessed 31 August 2014).

<sup>341</sup> Lyon 2000 *Southern California Law Review* 1028:

“The rules of competence do not require that a witness demonstrate an abstract understanding of the nature of truth and lies. If the witness understands that the truth refers to what ‘really happened’ and lies do not, she understands the difference between the truth and lies. If a witness recognizes that lying in court is wrong and subjects the liar to punishment, she understands her obligations under oath.”

<sup>342</sup> Melton *et al* *Psychological Evaluations for the Courts* 184.

performance fluctuates. It depends on what task is being set linguistically for the child, where the child is cognitively in her journey to adult capabilities, how the question was phrased, who the questioners are, and what the surroundings are like – not to mention the child’s own interior landscape ...”<sup>343</sup>

Various competency assessment models are discussed below. The competency test of Lyon and Saywitz and the Truth and Lie Story of McCarron *et al* are discussed first, followed by the competency assessment of Laurie Shanks and Sherrie Bourg Carter respectively, as well as the competency evaluation sections of the APSAC forensic interview protocol. A discussion of the competency questions of Julie Kenniston and Thomas Lyon concludes the section.

### 2.7.1 Lyon and Saywitz oath-taking competency test

According to Lyon,

“[t]he competency evaluation is designed to determine if taking the oath will be meaningful to the child. If a child does not know what ‘the truth’ refers to, asking her to ‘tell the truth’ is hardly likely to awaken her conscience. Although the courts routinely inquire of children’s understanding of ‘the truth’, they rarely assess the child’s understanding of the oath or affirmation they administer.”<sup>344</sup>

Lyon states that various developmental factors need to be considered when child witness competency is established.<sup>345</sup>

- At approximately two years of age the infant is capable of rejecting a false statement and telling the truth, albeit without being able to apply the verbal concepts of “a lie” and “the truth”.<sup>346</sup>
- The ability to label a false statement as a lie precedes the ability to explain the difference between truth-telling and lying.<sup>347</sup> Identification is a concrete mental

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<sup>343</sup> Walker 1993 *Law and Human Behavior* 78.

<sup>344</sup> Lyon 2000 *Southern California Law Review* 1057.

<sup>345</sup> Lyon 2000 *Southern California Law Review* 1029-1057.

<sup>346</sup> Lyon *et al* “Right and Righteous” 13, 16.

<sup>347</sup> Pipe and Wilson in Lyon 2000 *Southern California Law Review* 1030.

activity, while defining requires the abstract cognitive operation of classification.<sup>348</sup>

- Therefore, the young child may not yet be able to have a conversation about these moral concepts due to the absence of, or limited, expressive vocabulary in this regard.<sup>349</sup>
- There is a 50% chance that young children who do not know the answer to a forced-choice question will guess correctly.<sup>350</sup> The child would rather guess the second of the two options. However, if he or she had to choose between “yes” or “no” as the two options, the young child would likely favour “yes”.<sup>351</sup>
- The more simple and straight-forward the task, the less the risk that the young child gets distracted from it by personal factors or that the child will fail because he or she does not yet command complex language.<sup>352</sup>
- A child first understands the “objective meaning” of a lie, i.e. a false statement, between the ages of three and four. An understanding of the “subjective meaning” of lying is developed only later.<sup>353</sup> Its subjective meaning relies on the theory of mind (ToM)<sup>354</sup> of the child (as listener), as he or she needs to interpret

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<sup>348</sup> Lyon 2000 *Southern California Law Review* 1032.

<sup>349</sup> *ibid.*

<sup>350</sup> Lyon 2000 *Southern California Law Review* 1030.

<sup>351</sup> Lyon 2000 *Southern California Law Review* 1030-1031.

<sup>352</sup> Lyon 2000 *Southern California Law Review* 1035.

<sup>353</sup> Lyon 2000 *Southern California Law Review* 1036, 1037.

<sup>354</sup> According to L Flobbe *et al* “Children’s Application of Theory of Mind in Reasoning and Language” (2008) 17 *Journal of Logic, Language and Information* 417 at 418, “A child who has a theory of mind understands that other people have minds too, with beliefs, desires, and intentions possibly distinct from his own. He can formulate hypotheses about what those beliefs, desires and intentions are.”

M Sprung “Clinically Relevant Measures of Children’s Theory of Mind and Knowledge about Thinking: Non-Standard and Advanced Measures” (2010) 15(4) *Child and Adolescent Mental Health* 204 at 205-206 and 208; A Bright-Paul *et al* “Theory-of-Mind Development Influences Suggestibility and Source Memory” (2008) 44(4) *Developmental Psychology* 1055 at 1055:

the mental state of the speaker as deceitful in order to determine if a lie was told or not.<sup>355</sup> Only the objective definition of lying has relevance to giving evidence.<sup>356</sup> In fact, to add a subjective dimension to questioning is likely to complicate his or her understanding.<sup>357</sup>

- Generally, maltreated children show significant delays in terms of cognitive and language development.<sup>358</sup>
- At the age of five years, maltreated children are able to identify “truth” and “lie”. At the age of seven years, most maltreated children are able to give a definition

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Theory of mind (ToM) forms part of metacognition, i.e., the ability to think about thought processes. Current research shows it is a skill that “develops” and consequently, it is no longer a question of whether a child “has” theory of mind or not. ToM consists of different components which are related to abilities such as language, reasoning, executive functions and memory.

<sup>355</sup> According to Vrij *Children’s Testimony* 176, a lie is defined by three features. Firstly, a lie is motivated by a deliberate intention to create an untrue belief. Secondly, the deceiver does not prepare the other party concerned of such an intention. And thirdly, the lie is based on the deceiver’s persuasion that the portrayed belief is false. To expect of a child to give a subjective definition of lying, is to expect that the child applies the definition of a lie when making the judgment if a statement is a lie.

Lyon 2000 *Southern California Law Review* 1036: When a child is able to distinguish between a lie and a joke or a trick (feature 1), or a lie and a mistake (feature 3), he or she will also be able to give a subjective definition of a lie.

<sup>356</sup> Lyon 2000 *Southern California Law Review* 1036:

“Researchers sometimes claim that children’s understanding of the subjective definition of lies is relevant in assessing competence to testify. This is not so. A child who believes that all untrue statements are lies has an *overinclusive* definition of lies that includes jokes and mistakes. Such a child can meaningfully promise to tell the truth: in addition to avoiding subjective lies, she believes she must also avoid making jokes and mistakes. The danger is not that the child will commit perjury, but that she may be overly hesitant in answering questions for fear a mistake will land her in jail.”

Also see Lyon 2000 *Southern California Law Review* 1048.

<sup>357</sup> Lyon *et al* “Right and Righteous” 16: “... scenarios presented to children to test their understanding should not incorporate information regarding the intent of the speakers, as this is likely to complicate the scenarios and impair performance.”

<sup>358</sup> Lyon 2000 *Southern California Law Review* 1034-1035.

of either “telling a lie” or “telling the truth”.<sup>359</sup> Similar to most four- and five-year-olds,<sup>360</sup> less than 50% of the seven-year-olds are able to compare<sup>361</sup> these concepts.<sup>362</sup>

- There are dynamics involved when young maltreated children discuss lying. The younger the children, the more they tend to deny having knowledge of lies or lying.<sup>363</sup>
- From an early age (non-maltreated three-year olds and maltreated four-year olds) children understand the negative consequences to lying.<sup>364</sup> However, young children find it very difficult, if not impossible, to converse hypothetically about wrongdoing.<sup>365</sup> It appears that this stems from the developmental group’s immature ToM (see above), and thus an inability to interpret the mental state (intention) of the speaker correctly.<sup>366</sup>
- Answering questions about children in stories lying or telling the truth is much easier than having to answer such questions about himself or herself.<sup>367</sup>

Prof Thomas Lyon and Dr Karen Saywitz developed a picture test to determine the child’s ability to take the oath.<sup>368</sup> Verbal expression is not required.<sup>369</sup> The test consists of two sections that correlate significantly with each other:<sup>370</sup>

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<sup>359</sup> Lyon 2000 *Southern California Law Review* 1039: In the research study, children gave a definition of the truth or a lie, if they (a) referred to its relationship to reality, e.g. “The truth is what really happened”; (b) gave an example of either of the concepts; or (c) defined one by means of negating the other, e.g., “A lie is not the truth”.

<sup>360</sup> Lyon 2000 *Southern California Law Review* 1039.

<sup>361</sup> How is it the same? How is it different?

<sup>362</sup> Lyon 2000 *Southern California Law Review* 1039.

<sup>363</sup> Lyon 2000 *Southern California Law Review* 1045.

<sup>364</sup> Lyon 2000 *Southern California Law Review* 1050-1051.

<sup>365</sup> Lyon 2000 *Southern California Law Review* 1052. According to Lyon “Child witnesses and imagination” 4, up to the age of six years typical children would not approach a question such as, “what if you told a lie?” with hypothetical reasoning. They would rather correct the questioner.

<sup>366</sup> Lyon 2000 *Southern California Law Review* 1052.

<sup>367</sup> Lyon “Child witnesses and imagination” 5.

- four identification tasks, in which a child makes a concrete distinction between telling the truth and lying; and
- four morality tasks, in which the child has an opportunity to link a negative consequence to lying.<sup>371</sup>

The authors claim, “our tasks provide a sensitive means of assessing young children’s competence to take the oath”.<sup>372</sup> It also includes those children of three years and older who have been maltreated.<sup>373</sup> The test is structured in such a way that a false positive score, i.e., that the incompetent witness gets a score that indicates competency, is reduced significantly.<sup>374</sup> The test also avoids a situation where the young child becomes uncooperative due to fear resulting from a misinterpretation of a conversation about punishment as a consequence to lying.<sup>375</sup> Lyon *et al* found that, while passing the competency test does have a predictive value regarding the accuracy of the witness during testimony, there is also a group of children who “fail” the test but whose testimonial accuracy is increased by having them promise to be truthful.<sup>376</sup>

Recently Lyon *et al* suggested a simplified version of the truth-lie tasks to be used for very young children who do not yet have the concept of “truth” in their receptive vocabulary.<sup>377</sup> Furthermore, a trend seems to have emerged from research on the oath-taking competency test of Lyon and Saywitz: there are children who fail the competency tasks, but who do have an implicit understanding of the importance of

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<sup>368</sup> Lyon and Saywitz “Qualifying Children to take the Oath”.

<sup>369</sup> Klemfuss and Ceci “Legal and Psychological Perspectives” 10.

<sup>370</sup> TD Lyon *et al* “Coaching, Truth Induction, and Young Maltreated Children’s False Allegations and False Denials” (2008) 79(4) *Child Development* 914 at 924.

<sup>371</sup> *ibid*; Lyon and Saywitz 1999 *Applied Developmental Science* 24.

<sup>372</sup> Lyon and Saywitz 1999 *Applied Developmental Science* 26.

<sup>373</sup> Lyon 2000 *Southern California Law Review* 1044.

<sup>374</sup> Lyon 2000 *Southern California Law Review* 1040-1044.

<sup>375</sup> Lyon 2000 *Southern California Law Review* 1056.

<sup>376</sup> Lyon *et al* 2008 *Child Development* 924, 926.

<sup>377</sup> Lyon *et al* 2010 *Law and Human Behavior* 147; Lyon *et al* “Right and Righteous”.

keeping a promise.<sup>378</sup> This once again highlights the significance of taking a developmental approach to children who find themselves as witnesses in a court of law – while moral development and cognitive development are related to each other, they must surely be understood as two different aspects of human development.

### 2.7.2 The Truth and Lie Story

McCarron *et al* developed the Truth and Lie Story as an age-appropriate tool for children (and adolescents) in taking the competency examination.<sup>379</sup> Witnesses should not be excluded from giving evidence solely on the basis of assumed incompetency.<sup>380</sup> A structured approach to competency testing gives all witnesses – even those who are very young – an opportunity to demonstrate whether they are legally competent or not.<sup>381</sup> The Truth and Lie Story is read to the potential witness and three questions are asked.<sup>382</sup> The story is also suitable to use with adults with cognitive impairments.<sup>383</sup>

### 2.7.3 The competency hearing of Shanks

It is of paramount importance to Prof Laurie Shanks<sup>384</sup> that competency testing of a young child witness is expanded to include a developmental assessment as well as

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<sup>378</sup> Klemfuss and Ceci "Legal and Psychological Perspectives"10.

<sup>379</sup> AL McCarron *et al* "The Truth and Lie Story: Developing a Tool for Assessing Child Witnesses' Ability to Differentiate between Truth and Lie" (2004) 13 *Child Abuse Review* 42 at 45.

<sup>380</sup> McCarron *et al* 2004 *Child Abuse Review* 47-48.

<sup>381</sup> McCarron *et al* 2004 *Child Abuse Review* 47.

<sup>382</sup> McCarron *et al* 2004 *Child Abuse Review* 49:

"John (Mary) was playing with his/her ball in the kitchen and he/she hit the ball against the window. The window broke and John (Mary) ran upstairs into his/her bedroom. John's (Mary's) mummy saw the broken window, and asked John (Mary) if he/she had broken the window. John (Mary) said, 'No, Mummy'."

The questions are:

- "Did John (Mary) tell a lie?"
- "What should he/she have said?"
- "Why do you think he/she said, 'No, Mummy?'"

<sup>383</sup> McCarron *et al* 2004 *Child Abuse Review* 47.

<sup>384</sup> Shanks "Evaluating Children's Competency to Testify" 32-40.

an evaluation of his or her ability to give an accurate account of the events that constitute the criminal allegations.<sup>385</sup> She proposes the following approach to legal competency testing:

1. Before the hearing, information regarding the child's developmental background should be collected from caregivers (excluding those who are involved in the court case) and medical and school records perused.<sup>386</sup> A developmental profile is created.<sup>387</sup>
2. Either the prosecutor and defence attorney conduct the assessment of the child witness during a preliminary hearing,<sup>388</sup> or a law guardian is appointed for this function.<sup>389</sup>
3. A visit to the (pre)school of the potential child witness beforehand could provide material, e.g. a story or lesson, for questioning. Such inquiry will provide information on the child's narrative and recall abilities and to what extent he or she is prone to fabricate information "to please the questioner".<sup>390</sup>
4. The child should also be questioned on fictitious facts that do not actually form part of the subject.<sup>391</sup> In the event of the child participating in such fabrication, it

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<sup>385</sup> Shanks "Evaluating Children's Competency to Testify" 32.

<sup>386</sup> Shanks "Evaluating Children's Competency to Testify" 33.

<sup>387</sup> *ibid.*

<sup>388</sup> *ibid.*

<sup>389</sup> Shanks "Evaluating Children's Competency to Testify" 37-38, and at 38:

"It is critical that the law guardian be truly independent and not part of either the prosecution or defense 'team.' A child who has been abused must be supported if she is competent to testify. A child who has not been abused must be protected from the trauma of testifying falsely. Further, it would be the responsibility of the law guardian to insure that proper questioning techniques are utilized with children in both categories."

<sup>390</sup> Shanks "Evaluating Children's Competency to Testify" 33.

<sup>391</sup> *ibid.*



develops into a conversation regarding “truth”. The young witness’s understanding of the concept of truth is explored in different ways.<sup>392</sup>

5. The child’s concept of number and time respectively is explored.<sup>393</sup>
6. The law guardian is responsible for providing the court with a background profile on the child, as well as the material to be used for the competency examination.<sup>394</sup>
7. The law guardian could practise with the child witness beforehand, using an age-appropriate story unrelated to the material that is to be used during the hearing.<sup>395</sup> It could be videotaped.<sup>396</sup>
8. A child psychologist would be responsible for conducting a supplementary developmental assessment, if necessary. This assessment should be video-recorded.<sup>397</sup> The court – independent of the prosecution or defence – appoints the psychologist as expert witness.<sup>398</sup>

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<sup>392</sup> Shanks “Evaluating Children’s Competency to Testify” 34, 35-36.

<sup>393</sup> *ibid.*

<sup>394</sup> Shanks “Evaluating Children’s Competency to Testify” 38.

<sup>395</sup> Shanks “Evaluating Children’s Competency to Testify” 38-39.

<sup>396</sup> According to Shanks “Evaluating Children’s Competency to Testify” 39, such video recording serves the following purposes:

- for the information of the court;
- for preservation in case it needs to be reviewed;
- as proof of the absence of prompting by the law guardian;
- evaluation of the child’s attention and concentration; and
- observation of his or her verbal and non-verbal cues.

<sup>397</sup> Shanks “Evaluating Children’s Competency to Testify” 39-40.

<sup>398</sup> Shanks “Evaluating Children’s Competency to Testify” 40:

“The expert must be confident that the court is interested only in an accurate appraisal of the child’s ability to testify under the standard set forth ... - not in ‘preparing’ an incompetent child to take the stand or preventing a competent one from doing so.”

#### 2.7.4 The competency assessment of Bourg Carter

According to Dr Sherrie Bourg Carter, the Legal Standard for testimonial competency includes the following:

- “adequate intelligence and memory to store information;
- the ability to observe, recall, and communicate information;
- an awareness of the difference between the truth and a lie;
- an appreciation of the meaning of an oath to tell the truth; and
- an understanding of the potential consequences of not telling the truth.”<sup>399</sup>

She provides the following framework to assess the testimonial competency of child witnesses:

##### 1. Intelligence and memory

With young children a conversation on various topics such as school, family and friends and questions related to early learning skills can give a general impression of their cognitive functioning (that includes memory).<sup>400</sup> With older children, scholastic skills can be assessed, as well as their ability for problem-solving.<sup>401</sup>

The reports of parents and teachers are also useful.<sup>402</sup>

##### 2. Perceptual, recall and communication abilities

The parent or caregiver is requested (in the absence of the child) to provide details of two events that the child experienced: a recent event and one in the distant past.<sup>403</sup> Then, in a separate conversation with the child, enquiries are made about his or her recollection of these experiences.<sup>404</sup> The two versions are compared.<sup>405</sup>

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<sup>399</sup> S Bourg Carter “Child Witness Competency: When Should the Issue be Raised?” <http://nmvictimsrights.org/wp-content/uploads/2012/11/Child-Competency-to-Testify.pdf> (accessed 22 October 2014).

<sup>400</sup> *ibid.*

<sup>401</sup> *ibid.*

<sup>402</sup> *ibid.*

<sup>403</sup> *ibid.*

<sup>404</sup> *ibid.*

<sup>405</sup> *ibid.*

The teacher(s) of the child can also be involved as an unbiased source.<sup>406</sup>

### 3. Comprehension of truth and a lie

An exploration of the child's understanding of these concepts will include developmentally appropriate questions about truth and falsity, right and wrong and reality and pretense.<sup>407</sup> Children should not be asked, "*What is the difference between the truth and a lie?*" but rather "questions such as, '*What does it mean to tell the truth?*' and '*What does it mean to tell a lie?*'"<sup>408</sup>

Furthermore, the developmental progress that children make in terms of the language skills needs to be recognised. Young children may have the understanding of the moral concepts, but not yet the expressive language to communicate about them.<sup>409</sup>

Bourg Carter claims that some questions used to examine children's understanding of these moral concepts actually do not address the fundamental issue, i.e.

"of whether the child *understands* what it means to tell the truth and what it means to tell a lie. ... The pertinent question is whether a child who is placed in a particular situation (the courtroom) and asked questions about an event they either witnessed or experienced (the alleged incident) can distinguish what is the truth and what is a lie. Therefore in addition to the relatively simple questions, more situationally relevant questions should be asked when assessing a child's competency to testify, such as:

- ◆ *If I told your mom that you just yelled at me, would that be the truth or a lie?*<sup>410</sup>

### 4. Understanding the meaning of the oath

Usually children are unfamiliar with the word "oath", but know about the word "promise".<sup>411</sup> It is therefore developmentally appropriate to focus on the child

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<sup>406</sup> *ibid.*

<sup>407</sup> *ibid.*

<sup>408</sup> *ibid.*

<sup>409</sup> *ibid.*

<sup>410</sup> *ibid.*

<sup>411</sup> *ibid.*

witness's conceptual knowledge of making a promise.<sup>412</sup> The substitution of "oath" with "promise" during the swearing in of child witnesses has become acceptable practice.<sup>413</sup>

Bourg Carter cautions that some children may not be able to answer the question, "*What does it mean to make a promise?*"<sup>414</sup> Alternative questions can be employed, such as "*If you promise your mom that you are going to eat your lunch, what should you do?*" and "*Why?*"<sup>415</sup>

#### 5. Comprehension of the potential consequences of lying

Examples of questions to explore the child witness's understanding of the potential consequences of lying, are: "*When you get caught telling a lie, what usually happens to you?*" and "*If you said that your sister hit you and it really didn't happen, but your dad believed you, what could happen to your sister?*"<sup>416</sup>

#### 2.7.5 APSAC forensic interview

The APSAC Practice guidelines for forensic interviewing contains two interview sections that cover components of testimonial competency.<sup>417</sup>

1. With the truth/lie discussion two aspects are considered. The first is an appeal for reliable evidence and the second pertains to the child's moral capacity.
  - The child is asked to speak about the truth ("things that really happened") during the interview and a promise to do so is elicited.<sup>418</sup>

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<sup>412</sup> *ibid.*

<sup>413</sup> *ibid.*

<sup>414</sup> *ibid.*

<sup>415</sup> *ibid.*

<sup>416</sup> *ibid.*

<sup>417</sup> American Professional Society on the Abuse of Children (APSAC) *Forensic Interviewing in Cases of Suspected Child Abuse Practice Guidelines* (2012) 17-18.

<sup>418</sup> APSAC *Practice Guidelines* 17: "[E]xisting research shows when a child does promise to tell the truth, it increases (though not guarantee) honesty. Research demonstrates increased honesty, even with children who have been coached to make false reports or to keep silent about an adult's wrongdoing".

- Truth-lie competency is only assessed if it is legally required.<sup>419</sup> It is recommended that an evaluation of the child's understanding of these moral concepts and obligation to speak the truth happens at the end of the interview. A third party scenario is employed to do the enquiry, but not much time should be devoted to it.<sup>420</sup>
2. The narrative event practice provides an opportunity for the child to exhibit basic testimonial capacity.<sup>421</sup> The following developmental aspects are evaluated when the child is taught to respond elaborately: cognition, receptive and expressive vocabulary, perception, memory and communication skills.<sup>422</sup>

#### 2.7.6 The competency questions of Kenniston and Lyon

As an appendix to Anne Walker's most recent publication, Julie Kenniston and Thomas Lyon have provided questions to assess testimonial competency.<sup>423</sup>

1. The basic competencies – i.e. perceptual, memory and communication abilities – are assessed.<sup>424</sup> The child's capacity to narrate a complete event is evaluated in particular, by requesting him or her to tell about an activity from the beginning to the end.<sup>425</sup> Follow-up questions are used as prompts to evaluate how much detail the child is able to give.<sup>426</sup>

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<sup>419</sup> *ibid.*: "[S]uch assessments do not increase the reliability of information elicited during the interview and may not accurately indicate a child's actual understanding of the concepts."

<sup>420</sup> *ibid.*

<sup>421</sup> APSAC *Practice Guidelines* 18. Also see J Kenniston "Using Narratives and Narrative Event Practices in Interviews with Children" in AG Walker *Handbook on Questioning Children A Linguistic Perspective* 3 ed (2013) 122, 123.

<sup>422</sup> APSAC *Practice Guidelines* 18.

<sup>423</sup> J Kenniston and TD Lyon "Questions Designed to Assess Competency" in AG Walker *Handbook on Questioning Children A Linguistic Perspective* 3 ed (2013) 117-118.

<sup>424</sup> Kenniston and Lyon *Handbook on Questioning Children* 117.

<sup>425</sup> *ibid.*

<sup>426</sup> *ibid.*

2. Generally, the legal competency evaluation is limited to preschoolers only.<sup>427</sup> The simplified version of the Lyon and Saywitz test (para 2.7.1) is given: A picture is presented with a girl pointing to an object. The potential witness is asked to name the object. Then the questioner tells him or her that the girl identified it as the object to which the girl is not pointing. Then two questions are posed:
- “Did the girl tell the truth?” (with reference to an incorrect label for the object the girl is pointing to)
  - “Did the girl say something good?” (still referring to the incorrect label)<sup>428</sup>

Since Kenniston and Lyon work from the finding that children of middle childhood already understand the meaning of “truth” and are aware of the obligation to tell the truth,<sup>429</sup> this group is only expected to give a promise of truthfulness (para 2.2).<sup>430</sup>

In conclusion, children should not be discriminated against because they differ developmentally from adults.<sup>431</sup> Conversely, discrimination is also unfair when the reason why a testimony is approached with suspicion is because it is a child who has given it – adults also make mistakes and their memories also fail.<sup>432</sup> In the words of McLain, “[c]hildren who are in greater need of protection, ought not be treated less respectfully than adults”.<sup>433</sup>

In *State v Mokoena*, Bertelsmann J has followed a similar perspective, but based on the rights enshrined in the South African Constitution.<sup>434</sup> It is not the child witness’s choice to be involved in a court case. His or her functioning during the trial is directly related to his or her developmental stage. A child’s immature development should

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<sup>427</sup> Kenniston and Lyon *Handbook on Questioning Children* 117.

<sup>428</sup> Kenniston and Lyon *Handbook on Questioning Children* 118.

<sup>429</sup> Kenniston and Lyon *Handbook on Questioning Children* 117.

<sup>430</sup> *ibid.*

<sup>431</sup> Garbarino *Children and the Dark Side of Human Experience* 4; Bala *et al* 2010 *Journal of Children’s Rights* 67-68, 69, McLain 2011 *Maine Law Review* 110.

<sup>432</sup> McLain 2011 *Maine Law Review* 110-111.

<sup>433</sup> McLain 2011 *Maine Law Review* 116.

<sup>434</sup> 2008 (5) SA 578 (T).

not be the reason why he or she is denied an opportunity to be heard. In fact, the witness is supposed to be assisted to give testimony.<sup>435</sup>

Clearly, the legal competency of child witnesses is a burning issue internationally. While South African courts still require competency testing and no uniform approach to it exists, procedural guidelines would make a significant contribution to honouring children's rights.

"The judicial system's treatment of child victims and child declarants may legitimately be criticized as having underutilized knowledge that can be gained from research in the social sciences field of developmental psychology. Recent research in that field continues to shed new light on the abilities of children to perceive, relate, and remember events. ... Yet the courts lag behind, and tend to hold children at an unjustified disadvantage."<sup>436</sup>

The current research has its focus on young witnesses in the criminal court who have developmental delays. When children with special needs are concerned, it is all the more necessary to utilise the knowledge base of developmental psychology. The next chapter is devoted to gaining a better understanding of the children who are the focus of the current research – children in middle childhood with specialised needs. Various conditions will be discussed in relation to their deviations from

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<sup>435</sup> According to the learned judge, at 580D-G:

"The proviso to s 164(1) of the Criminal Procedure Act, as amended by Act 32 of 2007, that prevents children who cannot convey an appreciation of the abstract concepts of truth and falsehood to the court from testifying is in conflict with the Constitution because it fails to protect the paramountcy of children's interests, as entrenched in s 28 (2) of the Constitution. Section 164(1), even in its amended form, does not take into account that a witness who, for whatever reason, may not be able to understand or to verbalise an understanding of the abstract intellectual concepts of truth or falsehood, may nonetheless be perfectly able to convey the experience that has led to the witness becoming involved in the criminal trial. By the very nature of things, such a witness would more often than not be a young child who could explain, with the help of devices such as anatomical dolls, whatever harm might have befallen him or her, without knowing what the word 'truth' means."

<sup>436</sup> McLain 2011 *Maine Law Review* 110.

developmental expectations, as well as the obstacles they impose with regard to testimonial competency.



## CHAPTER 3

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### ATYPICAL DEVELOPMENT: DEVELOPMENTAL DELAYS AND DISABILITIES

This chapter deals with characteristics of the population of vulnerable witnesses who, when giving evidence, are entitled to special accommodations by the legal process.<sup>437</sup> Firstly, relevant terminology is clarified with a view to a shared frame of reference pertaining to developmental delays and disabilities. Secondly, an overview of atypical development precedes the discussion of intellectual disability (ID), the most general diagnosis in the sample of children who participated. Specific attention is given to the development of cognition and morality respectively, due to their pivotal role when it comes to establishing competency. Thirdly, a selection of conditions related to persistent developmental delays are described in the section that follows. And then, fourthly, limitations to witness competency, as well as facilitations associated with these conditions are addressed. Lastly, the assessment of competency of children with significant developmental challenges is discussed.

#### 3.1 TERMINOLOGY

##### 3.1.1 Developmental delay or disability

The course of human development is plotted by means of milestones,<sup>438</sup> behaviour associated with and expected to occur during a specific period of growth.<sup>439</sup> When a child's maturation in one or more developmental aspects is slower than that of his or

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<sup>437</sup> Henry *et al Children's Testimony* 2 ed 256.

<sup>438</sup> Ainsworth and Baker *Understanding Mental Retardation* Appendix B.

<sup>439</sup> Owens *Language Development* 70-71:

"Even though there are predictable stages and ages for development, the range of normality is broad. No individual child should be expected to conform to all of the averages or milestones presented. Mean ages, weights or heights do not describe any given child but rather some fictitious 'average' child, who is a combination of all children. A child who is outside the norms may be experiencing a momentary acceleration or delay or may be proceeding at his own individual pace. Even a child with severe retardation is a developmental being; his personal schedule may be delayed beyond the normal period, but development proceeds nonetheless."

her peer group, this difference in pace is described as a *developmental delay*. For example, a motor skills delay means the infant has not attained the specific developmental milestones in gross and fine motor skills at the expected time, and this can be a precursor to a diagnosis of cerebral palsy.<sup>440</sup>

Causal factors related to delays in early development include complications, trauma and injury before, during or after the child's birth.<sup>441</sup> Serious accidents or life-threatening illnesses can also be a cause of significant disruption in development.

The magnitude of the delay, i.e., the lag between the child's developmental attainment and that of typical children of his or her chronological age, is often expressed by means of an age equivalent (para 3.1.2). Some children with developmental delays catch up with their age group, but many do not.<sup>442</sup> At some stage the latter group reach a "developmental ceiling", which is not at the same level as that of their peers.<sup>443</sup>

According to Walker-Hirsch, the chronological age of five years is an important developmental marker. From this age onwards, a deviation from the expected developmental trajectory is no longer referred to as a "developmental delay", but as a "developmental disability".<sup>444</sup> Additionally, the category "Global Developmental Delay" is used only for children younger than five years.<sup>445</sup> This group of preschoolers do not meet expectations on a number of the developmental

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<sup>440</sup> S Winter "Cerebral Palsy" in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 65-66.

<sup>441</sup> Garber *Developmental Psychology for Family Law Professionals* 64.

<sup>442</sup> DP Hallahan and JM Kaufman *Exceptional Children: Introduction to Special Education* 4 ed (1988) 70.

<sup>443</sup> EJ Mash and DA Wolfe *Abnormal Child Psychology* 4 ed (2010) 281.

<sup>444</sup> L Walker-Hirsch "Foundations in social development education and sexuality education techniques" in L Walker-Hirsch (ed) *The facts of life ... and more. Sexuality and intimacy for people with intellectual disabilities* (2007) 54.

<sup>445</sup> However, this has not been found in actual practice in South Africa. See para 4.4.6.

milestones typical for their age,<sup>446</sup> and they are either too young for cognitive assessment, or their delays are so severe that formal testing is impossible.<sup>447</sup>

*Developmental disability* refers to a developmental delay or delays that have proved to be enduring and the adverse impact of which continues throughout the individual's life-time. It is defined as "a substantial handicap or impairment originating before the age of 18 that may be expected to continue indefinitely".<sup>448</sup> It is characteristic of (neuro)developmental disorders that the degree of developmental delay is marked, to the extent that it is usually already recognisable in different aspects of daily functioning during preschool development or when the child enters school.<sup>449</sup> Differences can be specific, e.g., problems with learning and, consequently, scholastic challenges (spelling, reading and/or maths),<sup>450</sup> or they can be comprehensive, e.g. general cognitive impairment.<sup>451</sup>

Furthermore, neurodevelopmental conditions often co-occur:<sup>452</sup> autism (ASD) is associated with intellectual disability (ID), and attention-deficit/hyperactivity disorder (ADHD) with specific learning disorder (SLD). Some other conditions that are considered developmental disorders are cerebral palsy (CP), foetal alcohol spectrum disorder (FASD), and Down syndrome (DS). Sensory deficiencies present in childhood, e.g. visual or hearing impairment and traumatic brain injury (TBI) also resort under developmental disabilities.

In South Africa, the extent and effect of the developmental disability or disabilities of a child determine placement in specialised education. When the impact of learners'

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<sup>446</sup> American Psychiatric Association (APA) *Diagnostic and Statistical Manual of Mental Disorders* 5 ed (2013) 31, 41.

<sup>447</sup> APA *DSM-5* 41.

<sup>448</sup> Melton *et al Psychological Evaluations for The Courts* 707-708.

<sup>449</sup> APA *DSM-5* 31.

<sup>450</sup> CSH Aarnoudse-Moens *et al* "Meta-Analysis of Neurobehavioral Outcomes in Very Preterm and/or Very Low Birth Weight Children" (2009) 124(2) *Pediatrics* 717 at 722; EB Isaacs "Calculation difficulties in children of very low birth weight A neural correlate" (2001) 124 *Brain* 1701 at 1706.

<sup>451</sup> APA *DSM-5* 31.

<sup>452</sup> *ibid.*

developmental disabilities cannot be sufficiently accommodated in mainstream schooling, specialised education is required to serve the special needs associated with the disability or disabilities.

### 3.1.2 Mental age (MA)

The term *age equivalent* refers to the “age level at which the average person in the population performs the same as the individual who is being assessed”.<sup>453</sup> For example, particular behaviours at a certain age are grouped according to severity of intellectual impairment in *adaptive behaviour attainment age* lists.<sup>454</sup> While it is useful to express the scale of delay by means of an age equivalent, there are caveats associated with its application. Firstly, a child may fall behind in one developmental aspect, but not on others.<sup>455</sup> An age equivalent applies only to the particular area of development that was evaluated. Secondly, the younger the child, the less certainty there is that the particular developmental delay will remain.<sup>456</sup> Consequently, this kind of norm score cannot be used in a generalised fashion over an indefinite period of time.

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<sup>453</sup> SS Sparrow *et al Vineland-II Vineland Adaptive Behavior Scales Survey Forms Manual 2* ed (2005) 65.

<sup>454</sup> Editorial Board “Definition of Mental Retardation” in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) 39-53.

<sup>455</sup> Ainsworth and Baker *Understanding Mental Retardation* 73. Furthermore, Garber *Developmental Psychology for Family Law Professionals* 109-110 gives an excellent metaphor to bring this point across:

“Our hypothetical triathlete answers the question [of where he stands relative to his peer group] by comparing his speeds with others’ documented speeds or by actually entering a competition. This is where he learns where he stands in the pack. Could it be that his slowest run is fast enough to win that segment of the competition? Or is it possible that his fastest swim doesn’t even qualify to enter? For the child, the question then concerns his or her development in each domain relative to age-specific norms.” [addition inserted to clarify]

<sup>456</sup> Ainsworth and Baker *Understanding Mental Retardation* 73; Mash and Wolfe *Abnormal Child Psychology* 273. In fact, according to APA *DSM-5* 39, “it is common practice when assessing infants and young children to delay diagnosis of intellectual disability until after an appropriate course of intervention is provided”.

Sparrow *et al* urge that age equivalent scores, which are often misinterpreted by the uninformed, be cautiously applied.<sup>457</sup> When a raw score is linked to a chronological age,

“the scale scores are unequal. ‘One year’s growth’ has a very different meaning at different points in the age continuum and for different areas of adaptive behavior. For instance, children acquire communication skills more rapidly between the ages of 2 and 3 than between the ages of 10 and 11; thus a 3-year-old who obtains an age equivalent of 2 years is further behind his or her age mates than is an 11-year-old who obtains an age equivalent of 10”.<sup>458</sup>

Grieve and Foxcroft explain that during the period of intellectual development (birth to approximately 17 years), the person’s mental age (MA) and chronological age (CA) correspond.<sup>459</sup> Mental age represents intellectual maturation:

“As children grow older, their intelligence increases with respect to their ability to perform intellectual tasks of increasing difficulty and to perform them faster”.<sup>460</sup>

Mental age is thus understood as “a measure of a child’s overall level of intellectual development”.<sup>461</sup>

However, while mental age may also be quite useful to express the stage of cognitive development and capacity to learn of an adult with an intellectual impairment,<sup>462</sup> Ainsworth and Baker rightfully state that a person’s mental age does not simply mean he or she “has the mind of a younger person”.<sup>463</sup> In fact, this term is considered by various professionals as a (patronising) misnomer – the life

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<sup>457</sup> Sparrow *et al* *Vineland-II* 65. Also see M Robinson *Manual for the Individual Scale for General Scholastic Aptitude (ISGSA) Part III: Norm Tables* (1998) 81 with a similar caution.

<sup>458</sup> Sparrow *et al* *Vineland-II* 65.

<sup>459</sup> KW Grieve and C Foxcroft “Factors affecting assessment results” in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* (2009) 240.

<sup>460</sup> *ibid.*

<sup>461</sup> DK Routh “Intellectual Development” in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) 86.

<sup>462</sup> Walker-Hirsch *The facts of life* 54; Henry *et al* *Children’s Testimony* 2 ed 255.

<sup>463</sup> Ainsworth and Baker *Understanding Mental Retardation* 70; Dickman *et al* *Disability and Social Change* 124.

experience that the individual gained over time is not reflected in any way.<sup>464</sup> For example, in *State v Denga*,<sup>465</sup> the evidence of two adolescent boys of respectively 17 and 18 years turned into a credibility issue (para 2.4.2), because their mental ages and their sexual knowledge were not considered to be compatible.<sup>466</sup>

A research study conducted by Henry and Gudjonsson on recall accuracy of children with intellectual disability further demonstrates the necessity for caution when applying the concept of mental age. The experimental group (participants with an intellectual disability) recalled a higher frequency of accurate information during free recall in comparison to the control group, matched on mental age.<sup>467</sup> Conversely, the same experimental group made changes to their answers more often during a repeated recall condition than the MA control group.<sup>468</sup> The effect of cognitive disability on developmental attainments can therefore not be generalised.<sup>469</sup> Children with disabilities do not simply share all characteristics with their mental age counterparts.<sup>470</sup> Bennett-Gates and Zigler conclude that mental age cannot be considered as “a perfect measure of cognitive functioning” due to the role of

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<sup>464</sup> Advocacy Training Council of the Bar of England & Wales “Task Report on Vulnerable Witnesses” para 11.2.

<sup>465</sup> Case number 43.411.12B.

<sup>466</sup> According to the transcript of the judgment,

“Miss Kruger told the court that we should deal with the two boys as people of ages of between six and eight but the court was surprised of the sexual knowledge they had. I will give an example for example when one of the boys wanted to have sex with ... Palesa accused 2 requested them to have sexual intercourse because he want a baby and this is beyond the person’s knowledge of a person that age.

Issues that they had sexual intercourse Palesa was on top of at some stage he was at the bottom all of this above the knowledge of a person that age.”

<sup>467</sup> LA Henry and GH Gudjonsson “Eyewitness Memory, Suggestibility, and Repeated Recall Sessions in Children with Mild and Moderate Intellectual Disabilities” (2003) 27(5) *Law and Human Behavior* 481 at 498-499.

<sup>468</sup> *ibid.*

<sup>469</sup> Henry and Gudjonsson 2003 *Law and Human Behavior* 499.

<sup>470</sup> RM Hodapp and EM Dykens “Behavioral Effects of Genetic Mental Retardation Disorders” in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 117.

affective and motivational factors during the performance of children with cognitive impairments (paras 3.2.5 and 3.2.6).<sup>471</sup>

Although the concept *mental age* (MA) is best known, a synonymous concept, *test age*, is mentioned as well since developmental challenges are the main concern at present. On the Individual Scale for General Scholastic Aptitude (ISGSA),<sup>472</sup> the test age indicates with which required level of cognitive performance at school the test-taker's raw score is a match.<sup>473</sup> This is particularly useful when the court needs to be informed of the competency of adult witnesses with cognitive disabilities,<sup>474</sup> although it is important to be aware of the relativity of the quantitative value of a test age, as well as its meaning.<sup>475</sup>

Caution is also necessary because each child with a developmental delay or disability remains a unique person. He or she may therefore not fit the pattern associated with a condition or syndrome.<sup>476</sup> In this vein Hale and Fiorello challenge the notion of a

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<sup>471</sup> D Bennett-Gates and E Zigler "Resolving the development-difference debate: An evaluation of the triarchic and systems theory models" in JA Burack *et al* (eds) *Handbook of Mental Retardation and Development* (1998) 125.

<sup>472</sup> S Manson *Sexual Abuse Victim Empowerment Programme Cape Mental Health Outreach Programme* (2009) 5; B Dickman *Access to Justice for People with Intellectual Disabilities Guidelines for identification, interviewing and supporting complainants with intellectual disabilities in cases of sexual offences* (2013) 20.

<sup>473</sup> According to Robinson *Manual for ISGSA 80*, the test age "gives a rough indication of the age level with which the testee's score corresponds, in other words the expected comprehension level at which the testee will function at school".

<sup>474</sup> Robinson *Manual for ISGSA 80*; Manson *Sexual Abuse Victim Empowerment Programme* 5; A Allan "Intellectual disability" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) 290; Dickman *Access to Justice for People with Intellectual Disabilities* 20.

<sup>475</sup> LA Henry and GH Gudjonsson "Eyewitness Memory and Suggestibility in Children with Mental Retardation" (1999) 104(6) *American Journal on Mental Retardation* 491 at 496: For example, the researchers combined test ages to calculate a mental age for the different participating groups of the study.

<sup>476</sup> Hodapp and Dykens *Intellectual and Developmental Disabilities* 117; Henry *et al Children's Testimony* 2 ed 254-255.

“flat profile”<sup>477</sup> of scores on developmental tests.<sup>478</sup> Thorough assessment of the specific child reveals an individualised profile of relative strengths and weaknesses in terms of the developmental tasks concerned.<sup>479</sup>

### 3.1.3 Developmental disability or mental disorder

John Locke first distinguished mental illness from “mental retardation” (as intellectual disability was known before).<sup>480</sup> This differentiation introduced a major change to the treatment of persons with cognitive impairment. Nevertheless, at some time during the twentieth century the mistaken belief that mild mental disability and antisocial behaviour were linked through hereditary traits led to harsh acts of discrimination.<sup>481</sup>

At present, the distinction between *mental disorder* and *mental disability* is crucial in relation to the application of particular sections of two pieces of legislation, i.e., the Criminal Law (Sexual Offences and Related Matters) Amendment Act<sup>482</sup> (Chapter 4 and s 57) and the Criminal Procedure Act<sup>483</sup> (s 194 and amended s 170A).<sup>484</sup>

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<sup>477</sup> For example, Sparrow *et al Vineland-II* 143, “The pattern of mean domain scores reflects the theoretical expectation that those with mental retardation would show a generalized or flat pattern of deficits”.

<sup>478</sup> JB Hale and CA Fiorello *School Neuropsychology A Practitioner’s Handbook* (2004) 252. Also see Mash and Wolfe *Abnormal Child Psychology* 275, 281, 282.

<sup>479</sup> Hallahan and Kaufman *Exceptional Children* 66; Hale and Fiorello *School Neuropsychology* 252.

<sup>480</sup> Ainsworth and Baker *Understanding Mental Retardation* 51.

<sup>481</sup> Ainsworth and Baker *Understanding Mental Retardation* 53. According to Mash and Wolfe *Abnormal Child Psychology* 272,

“the appearance, ability, and behavior of persons with mental retardation were considered evidence of their lack of moral fiber, a belief that led to the diagnostic term *moral imbecile*, or *moron*, used to describe and explain their differences. This concept became a straightforward explanation for acts of deviance, and justified wide-ranging attempts to identify and control such individuals. Morons, considered the least intellectually impaired (roughly comparable to mild mental retardation today) were seen as a threat to society because, unlike the insane, they could easily pass for normal”.

<sup>482</sup> Act 32 of 2007. See Pillay 2012 *SAJP* 313.

<sup>483</sup> Act 51 of 1977.



*Developmental disability* has already been discussed as a developmental delay or delays of permanent duration, with incapacitating effects in terms of the individual's day-to-day "personal, social, academic, or occupational functioning".<sup>485</sup> The best-known developmental disability is intellectual disability or ID, and it is synonymous with *mental disability* as referred to in the Act.<sup>486</sup> ID is classified as an impairment of the intellectual functions that belong to the global mental functions.<sup>487</sup>

Conversely, ID is not the same as mental disorder.<sup>488</sup> According to Kaliski,

"'mental disorder or illness' for the purposes of forensic and juridical contexts has conventionally come to mean a major psychiatric disorder that is known to be associated with significant cognitive and volitional impairments, that is, which significantly undermine comprehension or self-control."<sup>489</sup>

Mental illness has a causative link to the outdated term<sup>490</sup> insanity, which is defined as "a lack of responsibility for one's acts".<sup>491</sup> Serious psychiatric disorders, e.g. psychotic conditions associated with abnormalities such as delusions and/or

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<sup>484</sup> *State v Kato* 2006 (4) All SA 348 (SCA).

This differentiation also pertains to the definition of vulnerable witnesses in the UK – see P Cooke and G Davies "Achieving best evidence for witnesses with learning disabilities: new guidance" (2001) 29 *British Journal of Learning Disabilities* 84 at 84.

<sup>485</sup> APA *DSM-5* 31.

<sup>486</sup> Griessel *et al Psychological Assessment in the SA context* 122.

<sup>487</sup> WHO *ICF* 49: Intellectual functions are "[g]eneral mental functions, required to understand and constructively integrate the various mental functions, including all cognitive functions and their development over the life span".

<sup>488</sup> Mash and Wolfe *Abnormal Child Psychology* 270: "Mental retardation is not a mental disorder (in the sense of abnormal emotions, cognitions or behaviors) or a medical disorder; rather, it is a disorder pertaining to limitations in intellectual functioning (typically measured by an IQ score) and adaptive behavior (typically expressed as *conceptual, social, and practical* adaptive skills)". Also see the definition of a mental disorder in APA *DSM-5* 20.

<sup>489</sup> SZ Kaliski "The criminal defendant" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) 98. Also see APA *DSM-5* 20.

<sup>490</sup> Melton *et al Psychological Evaluations for The Courts* 711.

<sup>491</sup> Melton *et al Psychological Evaluations for The Courts* 696.

hallucinations, are regarded as mental disease in the legal sense.<sup>492</sup> According to Manson and Dickman, the distinction between ID and mental disease is clear.<sup>493</sup> As a developmental disability, ID has its onset in (early) childhood owing to atypical neurological development (table 3.1). The inception of a mental disease is usually during adolescence or young adulthood. Mental illness is associated with change;<sup>494</sup> how the person was before the illness set in differs from how the person is after it took effect.<sup>495</sup> The aim of treatment is to assist the individual to return to the level of personal functioning before the mental illness occurred,<sup>496</sup> and to limit the possibility of a relapse occurring.<sup>497</sup> The cause of the mental disorder is a neurochemical

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<sup>492</sup> R Louw "Principles of criminal law: Pathological and non-pathological criminal incapacity" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) 41:

According to APA *DSM-5* 87, a person who is delusional has fixed ideas – either bizarre or non-bizarre – and even providing him or her with evidence contrary to the belief will not change his or her mind. An example of a delusion is the belief that one's mind is controlled from outer space, and according to WHO *ICF* 56, it is classified as an impairment of the thought function which is a part of the range of specific mental functions.

According to APA *DSM-5* 87, the presence of hallucinations is related to the senses, with the individual having a sensory experience in the absence of an objective stimulus. An example of a hallucination is hearing voices while nobody is speaking, or seeing something that nobody else observes, and according to WHO *ICF* 55, it is categorised as an impairment of a specific mental function which is the perceptual function.

Furthermore, S Kaliski "Personality as a dimension of normality, and as a disorder" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) 245-246 explains that personality disorders are not considered a mental disease from a forensic point of view, as they do not meet four legal criteria. At 245, "[a] personality disorder is an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment." Although low in frequency, there are also children in middle childhood who are diagnosed with anxiety-related conditions such as obsessive-compulsive disorder (OCD).

<sup>493</sup> Manson *Sexual Abuse Victim Empowerment Programme*; Dickman *Access to Justice for People with Intellectual Disabilities* 4.

<sup>494</sup> *ibid.*

<sup>495</sup> *ibid.*

<sup>496</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 4.

<sup>497</sup> Manson *Sexual Abuse Victim Empowerment Programme*.

imbalance, and is usually treated with medication.<sup>498</sup> The rationale of professional involvement with a person with ID will be to facilitate optimal independent functioning despite cognitive limitations.<sup>499</sup>

The essence of differentiating between mental illness and (develop)mental disability in terms of competency is: When a person with a serious psychiatric illness loses contact with reality, he or she has available distorted mental faculties to process information. This individual does not share a common frame of reference with other people at that time. On the other hand, a person with a cognitive disability continuously shares the same reality and frame of reference with others in the objective world. Only his or her mental abilities are to some degree impoverished as a result of major complications during neurological development. Generally, the extent of the delay correlates with the severity of the disability: the more immature, the more disabled. Lastly, untreated mental illness is associated with fluctuations of cognition and emotion, while intellectual disability is characterised by relatively stable and predictable features.<sup>500</sup>

The fields of expertise that the courts require regarding these two kinds of witnesses differ. The professions of psychiatry and clinical psychology deal with mental disease. Educational or cognitive psychology and neuropsychology generally involve work in the field of developmental disabilities.<sup>501</sup>

#### 3.1.4 Dynamic or static assessment

“Intelligence” – which refers to an individual’s ability to learn – is a function of cognition.<sup>502</sup> The approach to the evaluation of intelligence is either static or dynamic.

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<sup>498</sup> *ibid.*

<sup>499</sup> *ibid.*

<sup>500</sup> Valenti-Hein and Schwartz 1993 *Sexuality and Disability* 291.

<sup>501</sup> Routh *Professional Practice in Mental Retardation* 85. Also see JP Das and JA Naglieri “Mental Retardation and Assessment of Cognitive Processes” in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) 115.

<sup>502</sup> Garber *Developmental Psychology for Family Law Professionals* 44.

Conventional determination of intellectual ability (IQ testing) assumes that what a child knows at the point of testing is a reliable prediction of the knowledge he or she will have some time in future.<sup>503</sup> When psychometric tests are administered to determine intellectual ability, the procedure is product-based in the sense that the highly complex and unique cognitive functioning of an individual is reduced to a fixed score, the "IQ" (intelligence quotient).<sup>504</sup> Furthermore, an obtained IQ score is limited to the learning areas included in the compilation of the test.<sup>505</sup>

Although various general intelligence tests are currently administered in South Africa,<sup>506</sup> standardised norms with a view to serving the full diversity of the post-apartheid multilingual and multi-cultural society do not exist.<sup>507</sup> This is a problem because standardised norms are a basic requirement for reliable psychometry.<sup>508</sup>

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<sup>503</sup> JG Borkowski *et al* "Intellectual Assessment and Intellectual Disability" in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 265.

<sup>504</sup> Hallahan and Kaufman *Exceptional Children* 92; G Roodt *et al* "The use of assessment measures in various applied contexts" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* (2009) 218.

<sup>505</sup> R van Eeden and M de Beer "Assessment of cognitive functioning" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* (2009) 131.

<sup>506</sup> Van Eeden and De Beer *Psychological Assessment in the SA context* 134-138:

Best known are the psychometric tests developed by the Human Sciences Research Council (HSRC), i.e., the Junior South African Individual Scale (JSAIS), the Senior South African Individual Scale (Revised) (SSAIS-R) and the Individual Scale for General Scholastic Aptitude (ISGSA). The ISGSA provides a Scholastic Aptitude (SA) score and the child's ability to learn within the scholastic environment is measured. The Wechsler Intelligence Scale for Children (WISC) is also administered locally, but with norms not standardised for any of the cultural groups of the South African population. Revisions have been made to the following developmental scales for utilisation with very young children up to eight years in South Africa: Griffiths Mental Development Scales – Extended Revised (GMDS-ER), the Grover-Counter Scale of Cognitive Development (GCS) and the McCarthy Scales.

<sup>507</sup> Van Eeden and De Beer *Psychological Assessment in the SA context* 138; C Foxcroft and G Roodt "What the future holds for psychological assessment" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* (2009) 266-267.

<sup>508</sup> APA *DSM-5* 37.

Alternatively, the process-oriented approach to intelligence<sup>509</sup> emphasises learning potential embedded in a cultural context and assessment conducted in a dynamic way.<sup>510</sup> The child's abilities and limitations are evaluated while considering the learning context.<sup>511</sup>

“**Dynamic assessment** is a specific approach to assessment which incorporates training into the assessment process in an attempt to evaluate not only the current level of cognitive ability, but also the potential future level of ability.”<sup>512</sup>

When an opportunity for learning precedes assessment, factors that can affect performance are equalised.<sup>513</sup>

Assessing learning potential is particularly useful in the general South African context to also accommodate the existence of insufficient opportunities for learning related to socioeconomic status and education.<sup>514</sup> Dynamic assessment caters for the potential effect of learning on output, by including a learning experience.<sup>515</sup> In the current context, the competence of children with developmental challenges can be

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<sup>509</sup> Roodt *et al Psychological Assessment in the SA context* 218.

<sup>510</sup> Das and Naglieri *Professional Practice in Mental Retardation* 115:

“Intelligence is composed of three components. The first is attentional processes, which provide focused cognitive activity, the second is information processes of two types (simultaneous and successive); and the third is planning processes, which provide (a) the control of attention; (b) the use of information processes, internal and external knowledge, and cognitive tools; and (c) overall self-regulation to achieve a desired goal.”

<sup>511</sup> Borkowski *et al Intellectual and Developmental Disabilities* 266.

<sup>512</sup> Van Eeden and De Beer *Psychological Assessment in the SA context* 131.

<sup>513</sup> *ibid.*

<sup>514</sup> *ibid.*

<sup>515</sup> Borkowski *et al Intellectual and Developmental Disabilities* 266-267: An evaluator gets to understand the child's capabilities for mastering a specific learning task by having him or her to engage in the task. The child is assisted with appropriate skills in relation to the child's needs and the effect of learning is assessed. Dynamic assessment answers the question, how capable is the child to change his or her behaviours related to the applicable task as a result of intervention?

underestimated<sup>516</sup> unless they are assessed only after they have had assistance and adequate support to learn what is expected of them.<sup>517</sup>

Dynamic assessment is based on the theory of the Zone of Proximal Development (ZPD).<sup>518</sup> It is defined as “the difference between the level of performance a child may achieve when working independently and the higher level of performance when working under the guidance of more skilled adults or peers”.<sup>519</sup> Such an approach leaves room for cognitive growth.

The various methods that are utilised for training and skills mastery correspond with the aim of ZPD, which is that the child’s optimal functioning is reached by providing him or her with an opportunity to learn the skills and strategies that a task requires. Feuerstein coined the term mediated learning experience (MLE) to describe this kind of learning opportunity.<sup>520</sup> In the forensic context, two obvious examples come to

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<sup>516</sup> CI Magyar *et al* “Psychoeducational Assessment” in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 337. See for example AN Asad *et al* “The use of dynamic assessment to evaluate narrative language learning in children with hearing loss: Three case studies” (2013) 29(3) *Child Language Teaching and Therapy* 319 at 319.

<sup>517</sup> Borkowski *et al* *Intellectual and Developmental Disabilities* 266.

<sup>518</sup> *ibid*; Crittenden *Raising Parents* 17; D Narvaez “Integrative Ethical Education” in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) 721; MB Tappan “Mediated Moralities: Sociocultural Approaches to Moral Development” in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) 366: The Zone of Proximal Development (ZPD) theory of Lev Vygotsky is widely accepted in developmental psychology.

<sup>519</sup> Louw and Louw *Child and Adolescent Development* 164.

<sup>520</sup> R Feuerstein *Instrumental Enrichment An Intervention Programme for Cognitive Modifiability* (1980) 15-16:

“By mediated learning experience (MLE) we refer to the way in which stimuli emitted by the environment are transformed by a ‘mediating’ agent, usually a parent, sibling or other caregiver. This mediating agent, guided by his intentions, culture and emotional investment, selects and organizes the world of stimuli for the child. The mediator selects stimuli that are most appropriate and then frames, filters, and schedules them; he determines the appearance or disappearance of certain stimuli and ignores others. Through this process of mediation, the cognitive structure of the child is affected. The child acquires behavior patterns and learning sets, which in turn become important ingredients of his capacity to become modified through

mind. The technique of scaffolding is employed to assist memory retrieval (paras 3.2.3 and 3.6.2). Furthermore, narrative event practice (paras 2.7.5 and 3.7.2) is also described as “training in episodic memory”.<sup>521</sup> A narrative model is useful as a specific memory strategy to organise, store and recall the memory of a personal event, because its recall requires reconstructive memory,<sup>522</sup> which is more developmentally advanced than simple recognition.

### **3.2 GENERAL OVERVIEW OF DEVELOPMENTAL FEATURES ASSOCIATED WITH COGNITIVE DELAYS OR DISABILITIES**

Amidst the developmental-versus-difference controversy that has not yet been resolved among theorists,<sup>523</sup> the two groups-position is taken in relation to children with intellectual delays or disabilities.<sup>524</sup> In comparison to typically developing children, the differences found in the first group of children are explained in terms of slower progress through the various developmental stages and reaching a

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direct exposure to stimuli. Since direct exposure to stimuli quantitatively constitutes the greatest source of the organism’s experience, the existence of sets of strategies and repertoires that permit the organism to efficiently use this exposure has considerable bearing upon cognitive development.”

<sup>521</sup> Kenniston *Handbook on Questioning Children* 121; APSAC *Practice Guidelines* 18. The research of C Peterson *et al* “Revisiting Narrative Elaboration Training With an Ecologically Relevant Event” (2013) 14(1) *Journal of Cognition and Development* 154 at 154 serves as a good example. Cue cards were used and, “NE [Narrative Event] -trained children not only provided more information in open-ended recall but they also provided longer, more emotionally evaluated, more descriptive and more coherent open-ended recall than did controls”. [insertion added for clarity] The participants to the study recalled an actual personal experience in an emergency room.

<sup>522</sup> Walker *Handbook on Questioning Children* 91; Anderson *et al* “RATAC” 205.

<sup>523</sup> Mash and Wolfe *Abnormal Child Psychology* 280:

“[T]he developmental-versus-difference controversy is this: Do all children – regardless of intellectual impairments – progress through the same developmental milestones in a similar sequence, but at different rates? Or does the development of children with mental retardation proceed in a different, less sequential, and less organized fashion?”

<sup>524</sup> E Zigler and D Balla “Introduction: Developmental Approach to Mental Retardation” in E Zigler and D Balla (eds) *Mental Retardation: The Developmental-difference Controversy* (1982) 6.

developmental ceiling sooner.<sup>525</sup> The atypical cognitive development of the second group is explained in terms of the effect of organic impairments (e.g. chromosomal anomalies such as Down syndrome) over and above the characteristics associated with the first group.<sup>526</sup>

### 3.2.1 Motor development

The attainment of motor developmental milestones (i.e., to sit, crawl and walk at the expected chronological age) is inversely correlated with the level of severity of the disability.<sup>527</sup> This means that the more severe the disability, the later the child usually reaches the respective developmental milestones.

Slow, uncoordinated and clumsy gross motor movement can occur.<sup>528</sup> Children with developmental disabilities need to be taught fine motor movement. It is obvious to what extent performance is challenged, when a complicated motor skill needs to be executed.<sup>529</sup> However, the correct exercises can improve many motor difficulties.<sup>530</sup>

### 3.2.2 Perceptual development

When children's cognitive disabilities are challenged, perception tends to be more cursive and superficial in comparison to those who are not challenged.<sup>531</sup> The implication is that perceptual details may be missed because the ability for visual, auditory and tactile discrimination is generally immature.<sup>532</sup> The perceptual awareness of these children is consequently frequently not on a par with unaffected

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<sup>525</sup> Mash and Wolfe *Abnormal Child Psychology* 280-281.

<sup>526</sup> Mash and Wolfe *Abnormal Child Psychology* 281.

<sup>527</sup> L du Toit "The mentally handicapped" in JA Kapp (ed) *Children with Problems: An Orthopedagogical Perspective* (1989) 359.

<sup>528</sup> *ibid.*

<sup>529</sup> *ibid.*

<sup>530</sup> *ibid.*

<sup>531</sup> Ellis in Du Toit *Children with Problems* 358.

<sup>532</sup> Du Toit *Children with Problems* 358.



children of their age. Furthermore, if neurological dysfunction is associated with the sensory areas, it will attenuate perceptual dysfunction even more.<sup>533</sup>

### 3.2.3 Cognitive development

In this section, a general discussion on the cognitive development of children who are challenged by intellectual disabilities follows on a cursory description of the developmental expectations for typically developing children in middle childhood according to the information processing theory.

Information processing theory “tries to explain how incoming information is processed in order for the person to make sense of it”.<sup>534</sup> Cognitive growth is brought about by acquiring, practising and utilising various cognitive functions and skills.<sup>535</sup> Similar to the working of a computer, thinking can be described to occur in three stages, i.e. the input → elaboration → output of data.<sup>536</sup> Development is explained in terms of sophistication: the older the child, the more advanced his or her cognitive “hardware” and “software” become.<sup>537</sup>

There are four systems related to cognitive processing:

- Attention

Attention is the ability to focus on the relevant stimuli of the mental task and resist distraction by irrelevant stimuli. Concentration is the ability to give sustained attention.<sup>538</sup> This function is very important due to its relation to other cognitive

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<sup>533</sup> *ibid.*

<sup>534</sup> Louw and Kail *Child and Adolescent Development* 25.

<sup>535</sup> According to Van Eeden and De Beer *Psychological Assessment in the SA context* 131, it is also known as the cognitive processing approach, viewing intelligence as constituting three groups of processes: attention, information processing and planning.

<sup>536</sup> R Feuerstein *The Dynamic Assessment of Retarded Performers The Learning Potential Assessment Device, Theory, Instruments, and Techniques* (1979) 58.

<sup>537</sup> Louw and Kail *Child and Adolescent Development* 25.

<sup>538</sup> Anderson *et al Developmental Neuropsychology* 77 state that with age the child’s ability to focus and give attention develops. The “typical” child in the lower range of middle childhood is able to sustain attention for 30 to 45 minutes at a time. The following general guideline in terms of attention span is given by J Anderson *et al* “The Cornerhouse Forensic Interview Protocol: RATAc” (2010) 12

functions, e.g. memory and reasoning. Inadequate sustaining of attention has a negative effect on the execution of the various cognitive functions during each of the phases of information processing.

- Processing

Information is registered in sensory memory only if it is attended to.<sup>539</sup> At first information is processed in working memory (short-term memory with limited capacity).<sup>540</sup> In order to be stored successfully (and therefore be considered as “learnt”), cognitive processes need to be performed on information. A cognitive operation is a strategy by which information is “organized, transformed, manipulated and acted upon”.<sup>541</sup> Recognition and comparison are examples of simple cognitive operations, while classification and inferential thinking are considered complex mental strategies.

- Storage

Only information that makes sense is encoded and subsequently retained.<sup>542</sup> Processed information is stored in long-term memory, which has unlimited capacity. However, memory development is correlated with capacity – memory ability thus increases with age.<sup>543</sup>

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[http://www.cornerhousemn.org/images/CornerHouse\\_RATAC\\_Protocol.pdf](http://www.cornerhousemn.org/images/CornerHouse_RATAC_Protocol.pdf) (accessed 26 July 2013):

AGE	AVERAGE ATTENTION SPAN
3 years	15 minutes
4-5 years	20 to 25 minutes
6-10 years	30 to 45 minutes
10-12 years	45 to 60 minutes

<sup>539</sup> Low and Kail *Child and Adolescent Development* 25.

<sup>540</sup> DC Miller *Essentials of School Neuropsychological Assessment* (2007) 209 defines working memory as “a limited-capacity memory system that provides temporary storage to manipulate information for complex cognitive tasks such as learning and reasoning”.

<sup>541</sup> Feuerstein *Dynamic Assessment* 124.

<sup>542</sup> Cunningham and Stevens “Helping a child to be a witness”.

<sup>543</sup> Low and Kail *Child and Adolescent Development* 25.

- Retrieval

Retrieval from memory takes two forms. Firstly, recognition memory consists of registering that a stimulus is similar or identical to a stimulus that was experienced before.<sup>544</sup> Young children (from approximately four years) usually have recognition memory comparable to older children and adults.<sup>545</sup> Secondly, for recall memory representational skills are required, because a stimulus is recollected that is no longer present.<sup>546</sup> Usually young children find the latter quite challenging, but the skill sharpens progressively with age.<sup>547</sup>

Furthermore, Louw and Louw describe six components of information processing particularly relevant during cognitive development in middle childhood.<sup>548</sup>

- (a) Processing speed refers to the tempo of information transmission during cognitive processing.<sup>549</sup>
- (b) Automatic processing or automaticity refers to a cognitive activity being carried out without (much) conscious effort.<sup>550</sup>

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<sup>544</sup> Louw and Louw *Child and Adolescent Development* 166.

<sup>545</sup> Anderson *et al Developmental Neuropsychology* 85.

<sup>546</sup> Louw and Louw *Child and Adolescent Development* 166.

<sup>547</sup> Anderson *et al Developmental Neuropsychology* 85.

<sup>548</sup> Louw and Louw *Child and Adolescent Development* 218-220.

<sup>549</sup> Louw and Louw *Child and Adolescent Development* 166, 218; LMD Archibald *et al* "Specific language or working memory impairments: A small scale observational study" (2011) 27(3) *Child Language Teaching and Therapy* 295 at 307 Walker *Handbook on Questioning Children* 47-52:

A positive correlation with age exists in terms of processing speed: the older the individual, the faster cognitive processing becomes. With age, working memory develops to the degree that an older child would be expected to significantly outperform a younger child. When working memory (which forms part of short-term memory) is taxed, processing speed slows down. This is the case when children process complex information. Furthermore, if the capacity of working memory is reached during execution, the child will fail the task, whether it is simple or complex.

<sup>550</sup> Louw and Louw *Child and Adolescent Development* 219; Miller *School Neuropsychological Assessment* 218-219:

Particularly during middle childhood, skills as well as significant volumes of information, come to be automised. Consequently more cognitive capacity is left available for application to other mental tasks. Higher-order thinking becomes accessible (see below).

(c) Executive functions, or also called higher-order thinking, enables organisation of information, planning, decision-making, abstract thinking and problem-solving.<sup>551</sup>

(d) Memory strategies are purposeful mental operations that bring about the efficient encoding of information as well as its recall later.<sup>552</sup>

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<sup>551</sup> Louw and Louw *Child and Adolescent Development* 219; Archibald *et al* 2011 *Child Language Teaching* 307; Anderson *et al* *Developmental Neuropsychology* 93-94, 96-97:

Higher-order thinking or executive cognitive processing involves cognitive skills associated with flexible thinking, concept formation and self-regulation. These skills develop to a marked degree during middle childhood in relation to the maturation of the prefrontal lobe of the brain.

<sup>552</sup> Louw and Louw *Child and Adolescent Development* 166; Anderson *et al* *Developmental Neuropsychology* 89; A Louw "Die bevoegdheid van kinders as getuies: Die rol van ouderdom en ontwikkelingsvlak in geheue" (2004) 5(2) *CARSA* 3 at 6:

Due to immaturity, preschoolers are unaware of the existence of sets of mental rules (i.e. memory strategies) to improve memory. The two most commonly employed memory strategies are rehearsal and retrieval. Rehearsal refers to the repetition of information and retrieval to deliberately bringing information into conscious awareness in order to retain it in memory. A third strategy is imagery, when information is encoded by means of creating a cognitive representation. Another strategy for aiding memory is to organise information.

According to Anderson *et al* "RATAC" 207, "young children encode a significant amount of information but find it difficult to retrieve that information. Difficulties in retrieval may be the result of idiosyncratic coding, disorganized retention or both. Difficulties may also be due to limited retrieval aids."

Crittenden *Raising Parents* 101; Tulving 2002 *Annual Review of Psychology* 7; JEB Myers *et al* "Psychological Research on Children as Witnesses: Practical Implications for Forensic Interviews and Courtroom Testimony" (1996) 28 *Pacific Law Journal* 3 at 9, 11, 13, 29:

From approximately three years of age, a preschooler usually develops the ability to recall an event as an episode, i.e., to narrate related perceptual experiences in a time sequence. And after four years of age, an operant system for episodic memory starts to develop. Preschoolers tend to rely on an adult's memory strategy when they retrieve information. For example, the adult often prompts a young child's access to his or her memory by means of questioning. Or, the child's recall is stimulated by the adult introducing contextual cues. However, by the age of eight or nine years children normally have sufficient retrieval strategies to recall events spontaneously.

Anderson *et al* "RATAC" 208, 293; SK Hewitt *Assessing Allegations of Sexual Abuse in Preschool Children. Understanding Small Voices* (1999) 227; ME Lamb and DA Brown "Conversational apprentices: Helping children become competent informants about their own experiences" 2006

(e) Knowledge base or “frame of reference” is what is known about a particular topic and the general context.<sup>553</sup>

(f) Theory of mind (or ToM) “refers to a set of ideas constructed by a child (and adult) to explain other people’s ideas, beliefs, desires and behaviour”.<sup>554</sup>

In comparison to typically developing children, the pace of cognitive development in children who are developmentally disabled tends to be markedly slower and results in “a reduced ability to learn”.<sup>555</sup> Once more, the extent of the limitation is related to the difference in lag between their chronological age (CA) and mental age (MA) (para 3.1.2).<sup>556</sup> Moreover, knowledge and cognitive skills are not only acquired more

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*British Journal of Developmental Psychology* 215 at 219; C Peterson *et al* “Revisiting Narrative Elaboration Training With and Ecologically Relevant Event” (2013) 14(1) *Journal of Cognition and Development* 154 at 155; PJ Bauer *et al* “It’s all about location, location, location: Children’s memory for the ‘where’ of personally experienced events” (2012) 113 *Journal of Experimental Child Psychology* 510 at 518; Louw and Kail *Child and Adolescent Development* 25:

Children generally remember more than what they actually report. For optimal access, they thus need assistance with memory retrieval. The strategy of scaffolding is important to guide children during recollection. Louw and Louw *Child and Adolescent Development* 164-165 describe scaffolding as the “temporary assistance provided by one person to a less-skilled person when learning a new task. Adults provide assistance just slightly beyond the child’s current competence, thus stimulating the child to reach a new level”. A basic, albeit important, retrieval strategy which an adult speaker can employ to scaffold recall is to use the child’s own spontaneous verbalisation as a prompt for further elaboration. Prop items can also be employed to stimulate memory, as it functions as an event reminder. In the middle childhood phase, the skill to recall information from long-term memory becomes easier as children progressively gain access to metacognition (thinking about their own thought processes and gaining control over it by strategies) and metamemory (thinking about remembering and obtaining knowledge about and skills for memory processes).

<sup>553</sup> Louw and Louw *Child and Adolescent Development* 219; Shanks “Evaluating Children’s Competency to Testify” 23; Das and Naglieri *Professional Practice in Mental Retardation* 124:

The child’s knowledge base is formed by direct instruction and/or personal experience. “Cognitive tools”, e.g., procedures and methods to use for thinking, are also part of knowledge of concepts. See para 2.6.2.

<sup>554</sup> Louw and Louw *Child and Adolescent Development* 161. See paras 2.7.1 and 3.4.5.

<sup>555</sup> Hallahan and Kaufman *Exceptional Children* 66.

<sup>556</sup> Du Toit *Children with Problems* 355.

slowly, but also inefficiently.<sup>557</sup> A disposition for inflexible thinking occurs, as well as a lack of originality.<sup>558</sup> These features are related to the finding that divergent thinking is usually inaccessible.<sup>559</sup> Divergent thinking is described as the mental activity required to solve an “open-system problem”, i.e., when more than one potential solution to the problem exists.<sup>560</sup> Therefore, cognitive actions are indiscriminately repeated irrespective of what the situation demands.<sup>561</sup> Inductive thinking is inaccessible as well.<sup>562</sup> This means children with significant cognitive delays usually do not generalise from one situation to another by applying knowledge or insight gained.<sup>563</sup> It can therefore be concluded that they have a marked difficulty in employing higher-order cognitive skills.<sup>564</sup>

Disrupted or complicated cognitive development is often associated with impairment of executive functions or higher-order thinking.<sup>565</sup> However, “executive dysfunction” as it is referred to by Anderson *et al*, can only be evaluated in relation to age-appropriate expectations as children and adults differ significantly in this respect.<sup>566</sup> For example, the younger group of typically developing children in middle childhood do not yet use counterfactual reasoning.<sup>567</sup> A question like “what if you told a lie?”

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<sup>557</sup> Du Toit *Children with Problems* 356.

<sup>558</sup> *ibid.*

<sup>559</sup> Du Toit *Children with Problems* 363.

<sup>560</sup> Du Toit *Children with Problems* 362-363.

<sup>561</sup> Du Toit *Children with Problems* 356.

<sup>562</sup> Du Toit *Children with Problems* 364.

<sup>563</sup> *ibid.*

<sup>564</sup> G Malherbe *Developmental Disorders: Latest Research Workshop* Somerset West 23 May 2012, claims that all neurodevelopmental disabilities are essentially frontal lobe dysfunction disorders, because all individuals affected by neurodevelopmental conditions have a degree of difficulty with higher-order thinking or executive cognitive processing.

<sup>565</sup> Louw and Louw *Child and Adolescent Development* 219.

<sup>566</sup> Anderson *et al* *Developmental Neuropsychology* 93, 98-99.

<sup>567</sup> Lyon “Child witnesses and imagination”.

might not be understood as calling for hypothetical thinking (an executive function), but rather as a challenge.<sup>568</sup>

Concerning their systems of information processing, the following differences apply to children whose cognitive development is disrupted:<sup>569</sup>

- Attention

The attentional system requires “mental flexibility” to operate adequately.<sup>570</sup> However, this is dependent on the child’s higher-order or executive functions,<sup>571</sup> which are known to be compromised in children with major developmental challenges.

Selective attention, i.e., being able to focus only on the relevant task at hand, is a general problem area.<sup>572</sup> Besides, children with cognitive disabilities frequently find it difficult to ignore irrelevant stimuli, and therefore tend to be distractible.<sup>573</sup> A short attention span is common, as well as subsequent concentration problems.<sup>574</sup> Walker-Hirsch comments that during conversation, distractibility<sup>575</sup> can be counteracted by introducing applicable visual stimuli for the child to focus on.<sup>576</sup>

- Processing

The rate of information transmission is indicative of the efficiency of the total information processing system.<sup>577</sup> A fast processing speed results in simple tasks to be completed quickly,<sup>578</sup> and is associated with two advantages. On the one hand it

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<sup>568</sup> *ibid.*

<sup>569</sup> Du Toit *Children with Problems* 362-364.

<sup>570</sup> Anderson *et al Developmental Neuropsychology* 77.

<sup>571</sup> *ibid.*

<sup>572</sup> Du Toit *Children with Problems* 362.

<sup>573</sup> *ibid.*

<sup>574</sup> *ibid.*

<sup>575</sup> MK Michel *et al* “The Abilities of Children with Mental Retardation to Remember Personal Experiences: Implications for Testimony” (2000) 29(3) *Journal of Clinical Psychology* 453 at 461.

<sup>576</sup> Walker-Hirsch *The facts of life* 61.

<sup>577</sup> Anderson *et al Developmental Neuropsychology* 90.

<sup>578</sup> *ibid.*

reduces the possibility that the child gets distracted before a task is completed.<sup>579</sup> On the other hand it supports the child's working memory which "holds" units of information for brief periods during processing.<sup>580</sup> The possibility that material gets lost during processing, is consequently reduced.<sup>581</sup>

A slow rate of information processing is associated with particular conditions.<sup>582</sup> Difficulties related to working memory are common.<sup>583</sup> Cognitive operations and skills are not spontaneously employed<sup>584</sup> because it may well be that some of these thinking tools have not been mastered. Das and Naglieri suggest that these children's limited capacity to plan and solve problems should be "exploited" through intensive strategy training.<sup>585</sup>

- Storage

Children with developmental disabilities have difficulty with their short-term memory<sup>586</sup> because they do not use memory strategies (see above),<sup>587</sup> probably as a

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<sup>579</sup> *ibid.*

<sup>580</sup> Ferretti and Cavalier in Das and Naglieri *Professional Practice in Mental Retardation* 123.

<sup>581</sup> Anderson *et al Developmental Neuropsychology* 90.

<sup>582</sup> Anderson *et al Developmental Neuropsychology* 92, 97; for example, a condition such as hydrocephalus. According to Miller *School Neuropsychological Assessment* 73:

"Hydrocephalus is a medical condition that is characterized by the ventricles of the brain overfilling with cerebrospinal fluid. Hydrocephalus is not a disease by itself, but rather a symptom of some other psychological disorder (e.g., tumors, infections, trauma to the brain). Early onset hydrocephalus occurs in children within the first year of life as a result of congenital or perinatal disorders. The increased cranial pressure in the brain can cause increased head size and lasting damage to the brain tissue as it gets compressed and squeezed against the skull. A common treatment for children with hydrocephalus is to surgically implant a shunt to drain the extra cerebrospinal fluid into the abdominal cavity."

<sup>583</sup> Brooks and McCauley in Hallahan and Kaufman *Exceptional Children* 66 give a good example: "[W]hen asked to tell an examiner in what way a grape and an apple are alike," they "may not retrieve the category information that they have available because they are expending so much of their attentional effort trying to keep the given examples in mind".

<sup>584</sup> Du Toit *Children with Problems* 362.

<sup>585</sup> Das and Naglieri *Professional Practice in Mental Retardation* 123.

<sup>586</sup> Ellis in Du Toit *Children with Problems* 363; Hallahan and Kaufman *Exceptional Children* 67.



result of a passive approach to learning tasks (para 3.2.6).<sup>588</sup> It is therefore to their benefit to teach them these learning strategies, which they do not spontaneously employ.<sup>589</sup> However, when information has been successfully stored in long-term memory, retention equals that of children who do not have cognitive disabilities.<sup>590</sup>

Likewise, Henry and Gudjonsson state that the capacity of persons with cognitive disabilities for incidental memory is similar to that of persons without such limitations.<sup>591</sup> Implicit memory is not reliant on conscious cognition (and therefore cognitive strategies), but on “automatic” encoding, storage and retrieval of information.<sup>592</sup> The specific reference of Walker-Hirsch to “flashbulb memories” among people with ID has relevance here.<sup>593</sup> A flashbulb memory is linked to the experience of either an intensely pleasurable or traumatic event. Such an event is stored immediately and remembered for a significant period of time.

- Retrieval

Children with cognitive delays generally struggle to access and retrieve information from memory.<sup>594</sup> Furthermore, if new information is introduced during recall, they become confused.<sup>595</sup> The likely cause of these difficulties is the initial poor organisation of information.<sup>596</sup> Rigid cognitive processing also seems to result in them being able to recall “old information” (long-term memory) easier than “new information” (short-term memory).<sup>597</sup>

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<sup>587</sup> *ibid.*

<sup>588</sup> Hallahan and Kaufman *Exceptional Children* 67.

<sup>589</sup> Hallahan and Kaufman *Exceptional Children* 67-68.

<sup>590</sup> Walker-Hirsch *The facts of life* 58; Valenti-Hein and Schwartz 1993 *Sexuality and Disability* 291.

<sup>591</sup> Henry and Gudjonsson 2003 *Law and Human Behavior* 482; Henry and Gudjonsson 1999 *American Journal on Mental Retardation* 491-492.

<sup>592</sup> *ibid.*

<sup>593</sup> Walker-Hirsch *The facts of life* 60.

<sup>594</sup> Du Toit *Children with Problems* 363.

<sup>595</sup> Routh in Du Toit *Children with Problems* 364.

<sup>596</sup> Du Toit *Children with Problems* 363.

<sup>597</sup> Du Toit *Children with Problems* 364.

Howe *et al* claim that in children with developmental disabilities the emergence of a cognitive self is delayed.<sup>598</sup> Due to the link between the cognitive self and developing autobiographical memory, it is expected that their episodic memory will function immaturely in comparison to peers (para 2.6.2).<sup>599</sup>

According to Anderson *et al*, memory problems are more of a general nature unless specific brain structures related to memory are damaged or have become dysfunctional as part of a particular condition.<sup>600</sup> In both cases the impairment will be specific, for example, verbal memory (to recall what was said) is often a significant challenge for children with epilepsy.

### 3.2.4 Language development

Command of language equips a child with a reasoning “tool”.<sup>601</sup> Consequently there is a significant positive correlation between language and cognitive development.<sup>602</sup> An understanding of a concept precedes the ability to label it. The relevant vocabulary enables the child to reason about the subject in question. However, semantic development, i.e., the understanding of language, is not limited to the child’s vocabulary growth *per se*, but also entails the understanding of semantic concepts, e.g. the classification of words, synonyms, antonyms etc.<sup>603</sup> A knowledge base (implicit knowledge or “internal information”)<sup>604</sup> combined with an increasing

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<sup>598</sup> Howe *et al* *Developmental Psychopathology* 643-644: “These children do acquire a cognitive self if and when they achieve a mental age comparable to that of nondelayed infants who do have a cognitive sense of self.”

<sup>599</sup> Howe *et al* *Developmental Psychopathology* 646.

<sup>600</sup> Anderson *et al* *Developmental Neuropsychology* 89.

<sup>601</sup> Owens *Language Development* 67.

<sup>602</sup> R Berman “Psycholinguistics of Text Construction” (2008) 35 *Journal of Child Language* 735 at 755, 757; Garber *Developmental Psychology for Family Law Professionals* 121.

<sup>603</sup> Owens *Language Development* 364.

<sup>604</sup> Owens *Language Development* 102: “*Inferred reality* is an inference about a physical problem based not only on perceived appearances but also on internal information.”

vocabulary to communicate about his or her internal landscape, results in a progressive ability for explicit referencing.<sup>605</sup>

As is the case with motor skills (para 3.2.1), children with significant developmental delays usually attain the milestones in language development at a slower pace than children without delays.<sup>606</sup> As will be seen below, quantitative and qualitative differences in language development frequently remain even when the difference between chronological and mental age has been accounted for.<sup>607</sup>

Language development and cognitive functioning usually run in parallel with each other: the slower the pace of language acquisition, the greater the severity of intellectual dysfunction.<sup>608</sup> Speech problems (articulation and speech errors such as omission, replacement and distortion of sounds) are common in children with severe cognitive dysfunction.<sup>609</sup> LNFS (little or no functional speech) also occurs at a higher frequency in this group.<sup>610</sup>

In the development of expressive language (vocabulary to express thoughts, feelings and experiences) marked challenges are evident.<sup>611</sup> Matched with children without developmental disability on the basis of mental age (para 3.1.2), some shortcomings still feature, for example:

- Short sentences have a simple structure with some words omitted.<sup>612</sup>
- Limited vocabulary consisting of words with a concrete meaning.<sup>613</sup>
- Significantly fewer pronouns, prepositions, conjunctions and verbs are used.<sup>614</sup>

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<sup>605</sup> Owens *Language Development* 364-365.

<sup>606</sup> Du Toit *Children with Problems* 356.

<sup>607</sup> Du Toit *Children with Problems* 358.

<sup>608</sup> Du Toit *Children with Problems* 356.

<sup>609</sup> Du Toit *Children with Problems* 357.

<sup>610</sup> Hallahan and Kaufman *Exceptional Children* 69.

<sup>611</sup> Du Toit *Children with Problems* 357.

<sup>612</sup> *ibid.*

<sup>613</sup> *ibid.*

<sup>614</sup> *ibid.*

- Stereotypical remarks are related to inflexible cognition.<sup>615</sup>

The development of receptive language (vocabulary for understanding meaning conveyed by language) is also different in comparison to that of their counterparts without developmental impairment.<sup>616</sup>

- Key words are favoured, rather than a complicated vocabulary.<sup>617</sup>
- Sentences containing negation are difficult to understand.<sup>618</sup>
- Active rather than passive voice is better understood.<sup>619</sup>
- Auditory discrimination (to distinguish between different sounds) poses difficulties and memory for sounds is poor.<sup>620</sup>

Most children who have cognitive impairments do not employ language as a mental tool, i.e., as a means of thought.<sup>621</sup> Routh claims that the child's mental age (MA) (para 3.1.2) is not a reliable reflection of the availability of language as a cognitive tool.<sup>622</sup> In a similar vein, there is also a disconnection between language and action, which means that, when he or she is expected to do so, neither an inner voice nor the verbal instruction of another, would help the child to alter an action he or she is executing.<sup>623</sup>

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<sup>615</sup> *ibid.*

<sup>616</sup> *ibid.*

<sup>617</sup> *ibid.*

<sup>618</sup> *ibid.*

<sup>619</sup> *ibid.*

<sup>620</sup> *ibid.* AE Louw "Die bevoegdheid van kinders as getuies: Die rol van taalvaardigheid" (2005) 6(2) *CARSA* 19 at 21:

At the beginning of middle childhood, typical children understand many homonyms, or identical word forms with different meanings. (An example of a homonym is, "to tell a lie" and "to lie on a bed".) Furthermore, at approximately eight years the child's ability for auditory discrimination is fully developed. This allows him or her to make a fine distinction between similar sounds and words, i.e., homophones. An example of an Afrikaans homophone is: *fout* (mistake) can sound like *phone* (phone).

<sup>621</sup> Du Toit *Children with Problems* 357.

<sup>622</sup> *ibid.*

<sup>623</sup> Luria and Zigler, and Balla in Du Toit *Children with Problems* 357-358.

### 3.2.5 Moral development

The layout of the section on moral development resembles the presentation on cognitive development. At first a concise exposition of the social-moral domain theory is given as an orientation to expected development. A discussion of the general moral development of children with cognitive limitations then follows.

Morality exists within the social context.<sup>624</sup> Moral development is linked in particular to a child's social knowledge<sup>625</sup> gained through the internalization of values.<sup>626</sup> Social and moral knowledge is constructed during interactions with his or her personal and cultural environment.<sup>627</sup> A distinction is made between social convention and morality, or moral rules.<sup>628</sup>

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<sup>624</sup> E Turiel "Thought, Emotions, and Social Interactional Processes in Moral Development" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) 30-31.

<sup>625</sup> J Smetana "Social-cognitive Domain Theory" in J Smetana and M Killen (eds) *Handbook of Moral Development* (2006) 120.

<sup>626</sup> L Kuczynski and GS Navara "Sources of Innovation and Change in Socialization, Internalization and Acculturation" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) 301: "Values are desirable, abstract, trans-situational goals that serve as guiding principles in people's lives and as criteria they use to select, justify, and evaluate actions, people, and events."

<sup>627</sup> Kuczynski and Navara *Handbook of Moral Development* 301.

<sup>628</sup> Smetana *Moral Development* 121-130, 132; D Finkelhor *Childhood Victimization Violence, Crime, and Abuse in the Lives of Young People* (2008) 75-76:

From the age of three years children are progressively able to know the difference between social convention and norms. They become more sophisticated in making this distinction due to the advantages of cognitive development: with age, children's reasoning abilities become abstract and their knowledge base broadens.

However, the more complex the situation is, the more varied individual children's responses are. Furthermore, while preschoolers focus on physical harm as a consequence, older children develop the ability to interpret a situation in terms of psychological harm. Generally three-year-olds are also increasingly able to understand the difference between a "personal issue" (as "the actor's own business") and issues that have bearing on social convention or morality (and thus have consequences for others' as well). On the other hand, at the age of three, preschoolers are still unable to comprehend that others could have different beliefs than their own and subsequently they would be intolerant of factual beliefs that differ from theirs, due to an immature ToM.

(a) Social conventions

Smetana defines social conventions as

“contextually relative, shared uniformities and norms (like etiquette or manners) that coordinate individuals’ interactions in social systems. Social conventions provide individuals with expectations regarding appropriate behavior in different social contexts and thus help facilitate the smooth and efficient functioning of the social system.”<sup>629</sup>

(b) Moral rules or norms

Conversely, morality is described as intrinsic norms that are universally applicable and obligatory, independent of authority, in order to uphold virtues of welfare within society as a social system.<sup>630</sup> Moral rules also contain psychological knowledge, described as “individuals’ attempts to understand psychological causes and to infer meaning that is not given in social interactions”.<sup>631</sup>

Turiel states, “moral development is a process of construction of judgments about what ought to exist rather than an acceptance of what exists socially or culturally.”<sup>632</sup> The choice of moral action depends on interpreting an interpersonal situation and is motivated by an experienced emotion.<sup>633</sup> It has been found that children find it easier to judge hypothetical situations in terms of appropriate moral, or socially conventional, conduct than when actual situations require discernment

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From the age of five years children are progressively able to use their ToM to make meaning of moral actions, for example when informed of the beliefs of the actor. In fact, Shaw and Wainryb have found that their research group of children in middle childhood and adolescence were able to utilise their ToM to interpret victims’ emotional experience in the absence of any cues from the victims. Furthermore, a study by Arsenio and Lover indicates that due to advanced perspective-taking and the maturing of ToM, children are progressively able to match moral evaluations with the actual consequences of behaviour that victimises others.

<sup>629</sup> Smetana *Moral Development* 121.

<sup>630</sup> Smetana *Moral Development* 121, 122.

<sup>631</sup> *ibid.*

<sup>632</sup> Turiel *Moral Development* 28.

<sup>633</sup> Smetana *Moral Development* 119-120.

and may therefore not act in accordance with normative knowledge.<sup>634</sup> For example, while an individual knows and accepts the moral obligation of speaking the truth, he or she may evaluate circumstances and realise the priority is not trustworthiness, but some other moral goal. Consequently, deceptive behaviour could be an acceptable option if the moral goal is protecting someone else's welfare.<sup>635</sup>

Gaining social knowledge during interpersonal interactions is linked to normative development. The significant role of parents goes with their "privileged position" in the parent-child relationship,<sup>636</sup> which enables them to "tailor their messages in a way that acknowledges their children's capacities to interpret parental messages".<sup>637</sup> Domain theory research claims that an inductive approach to discipline fosters the child's moral development.<sup>638</sup> This is associated with the authoritative parenting style, where parents within an environment of positive affection explain the reasons for disciplinary measures and also allow the child to reason with the parent.<sup>639</sup> Discussing transgressions and associated rules and conventions stimulates critical thinking.<sup>640</sup> Furthermore, it is claimed that adolescents and some children too do not always respect authority uncritically.<sup>641</sup> An adult's authority will be accepted if the adult presents himself or herself as knowledgeable on the topic and his or her authority is regarded as "contextually appropriate".<sup>642</sup> Generally children do not accept authority that demands immoral behaviour.<sup>643</sup>

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<sup>634</sup> Smetana *Moral Development* 126-127. Anderson *et al* "RATAC" 238 refer to how hypothetical questions are used during legal competency evaluations.

<sup>635</sup> Turiel *Moral Development* 25, 27.

<sup>636</sup> Kuczynski and Navara *Moral Development* 305.

<sup>637</sup> Kuczynski and Navara *Moral Development* 300.

<sup>638</sup> Smetana *Moral Development* 136; Louw and Louw *Child and Adolescent Development* 252.

<sup>639</sup> A Louw *et al* "Adolescence" in D Louw and A Louw (eds) *Child and Adolescent Development* (2007) 328; G Carlo "Care-based and Altruistically Based Morality" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) 560.

<sup>640</sup> Louw *et al* *Child and Adolescent Development* 328; Smetana *Moral Development* 136.

<sup>641</sup> Smetana *Moral Development* 137.

<sup>642</sup> *ibid.*

Smetana studied moral reasoning and judgment in atypical populations.<sup>644</sup> She concludes that in the event of developmental delays, the child's mental age (MA) (para 3.1.2), rather than chronological age (CA), serves as a guideline for the expected level of moral reasoning.<sup>645</sup> However, limitations in the executive functioning associated with children with cognitive disabilities can, at times, render the actual practice of moral behaviour problematic. Irrespective of whether something is right or wrong, they may just join in to please someone else.<sup>646</sup> They tend to be unable to recognise exploitation and do not anticipate consequences.<sup>647</sup> A correlation has been found between level of cognitive functioning and the frequency of lying – the higher-order mental processing required to construct a lie is not characteristic of intellectual impairment.<sup>648</sup>

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<sup>643</sup> *ibid.*

<sup>644</sup> Smetana *Moral Development* 140-143.

<sup>645</sup> Smetana *Moral Development* 141.

<sup>646</sup> Fraser and McDonald "Working with Victims with FASD" 6.

<sup>647</sup> *ibid.*

<sup>648</sup> Pillay 2012 *SAJP* 317. In summary of G Fu *et al* "Young children can tell strategic lies after committing a transgression" (2012) 113 *Journal of Experimental Child Psychology* 147 at 148, 156; Talwar and Lee 2008 *Child Development* 876; Talwar *et al* 2007 *Developmental Psychology* 804; V Talwar and K Lee "Development of lying to conceal a transgression: Children's control of expressive behavior during verbal deception" (2002) 26(5) *International Journal of Behavioral Development* 436 at 436:

A "strategic" or "planned" lie happens in two phases. Firstly, various contextual factors will determine if a lie is going to be told (first order ToM). Secondly, the initial fabrication is maintained in such a way that it remains believed by another as "truth" (second order ToM). Two regulatory processes need to be executed successfully in order to be a "good" lie-teller. "Semantic leakage control" ensures that subsequent verbalisation in association with a deceitful statement maintains the false belief. This skill improves with age. The process of "nonverbal leakage control" both suppresses nonverbal responses inconsistent with the falsity and fabricates nonverbal behaviours consistent with the untruthful statement.

According to Talwar and Lee 2002 *Journal of Behavioral Development* 436,

- "Verbal expressive behaviour' refers to the semantic content of the statements children make during deception, including both the lie and other statements made in the same context".



### 3.2.6 Emotional development

The emotional development of children with developmental disabilities is characterised by sensitivity to stress and anxiety as well as emotional fluctuations.<sup>649</sup> Because they tend to have a lower resistance to stress<sup>650</sup> they might be unsettled by or upset about trivial things. Acting-out behaviour, such as temper tantrums or aggressive outbursts, is not uncommon. On the other hand, anxiety can manifest in different ways, for example:

- an obvious change in the level of attention;
- a seeming lack of interest observed in becoming unresponsive; or
- actions of withdrawal, either by becoming quiet or by physically leaving.<sup>651</sup>

It should be realised that these children usually have some history of emotional rejection, failure and negative interpersonal experiences which affect their emotional development.<sup>652</sup> Learned helplessness frequently features, as they tend to doubt their own ability and seek help from others to execute tasks rather than trying themselves.<sup>653</sup> Consequently, an internal locus of control is precluded; these children grow dependent on others to help them, including with actions that they are able to manage without help.<sup>654</sup> This impacts, in a marked way, on their willingness to try something and/or perseverance.<sup>655</sup>

Du Toit concludes that due to emotional development dynamics, the competency of children who are developmentally challenged is often underestimated.<sup>656</sup> Due to a

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- "Nonverbal expressive behaviour" refers to the vocal prosody, facial expressions, and body language displayed in conjunction with the verbal expressive behaviour".

<sup>649</sup> Du Toit *Children with Problems* 359.

<sup>650</sup> Du Toit *Children with Problems* 360.

<sup>651</sup> Du Toit *Children with Problems* 359; Personal communication Bev Dickman clinical psychologist SAVE programme 27 November 2013.

<sup>652</sup> Du Toit *Children with Problems* 360; Hallahan and Kaufman *Exceptional Children* 69.

<sup>653</sup> Du Toit *Children with Problems* 360; Cederborg *et al* 2009 *Intellectual Disability Research* 447.

<sup>654</sup> Du Toit *Children with Problems* 360; Hallahan and Kaufman *Exceptional Children* 69.

<sup>655</sup> Weisz in Hallahan and Kaufman *Exceptional Children* 70.

<sup>656</sup> Du Toit *Children with Problems* 360.

lack of confidence in general and exposure to different settings, new situations are also emotionally threatening.<sup>657</sup>

### **3.3 INTELLECTUAL DISABILITY (ID)**

Henry *et al*/alert practitioners to possible confusion with regard to the term “learning difficulties” in international academic literature.<sup>658</sup> While this term is used in the British (educational) system to refer to a learner who is cognitively diminished and therefore with an intellectual disability,<sup>659</sup> in the United States it denotes a learner who has a specific learning disorder, i.e. scholastic problems, for example difficulty with reading, spelling or maths.<sup>660</sup> South Africa and the US share terminology. Specific learning disorder, as it is understood in the South African context, will be discussed in paragraph 3.5.1.

Intellectual disability (ID) was formerly known as “mental retardation”, but owing to the offensive connotation of the label which developed in the social context, it should no longer be used. “Imbecility” as mentioned in section 194 of the Criminal Procedure Act<sup>661</sup> is not only outdated, but also discriminatory to such an extent that this term must be avoided at all cost (para 3.1.3).<sup>662</sup> Routh describes intellectual

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<sup>657</sup> Du Toit *Children with Problems* 361; Mash and Wolfe *Abnormal Child Psychology* 281.

<sup>658</sup> Henry *et al Children’s Testimony* 2 ed 253. Also see R Zajac *et al* “Disorder in the Courtroom? Child witnesses under cross-examination” (2012) 32 *Developmental Review* 181 at 198.

<sup>659</sup> See for example, Hallahan and Kaufman *Exceptional Children* 92; Cunningham and Stevens “Helping a child to be a witness in court”.

Du Toit *Children with Problems* 344, comments that children with mild cognitive disability, due to them being “educable” (able to learn to read and write), were referred to as “*moeilijk lerende kinderen*” in the Netherlands and “*lernbehindert*” in Germany. Translated into English, learners with mild intellectual disability were thus viewed as “children who learn with difficulty” or who have a “learning handicap”. It therefore seems that the term was eventually applied to all categories of intellectual impairment, and no longer to mental disability in its mild form.

<sup>660</sup> See for example C Gillberg “The Autism Spectrum” in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 41.

<sup>661</sup> Act 51 of 1977.

<sup>662</sup> Du Toit *Children with Problems* 343. According to AL Pillay and AM Kritzinger “Psycho-legal issues surrounding the rape of children and adolescents with mental retardation” 2008 20(2) *Journal of Child*

disability “as a fundamental disturbance of the average course of intellectual development”.<sup>663</sup>

The latest Diagnostic and Statistical Manual of Mental Disorders, or the DSM-5, the international authoritative source of psychiatry and psychology, provides a useful description of cognitive disability:

“Intellectual disability (intellectual developmental disorder) is characterized by deficits in general mental abilities, such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience. The deficits result in impairment of adaptive functioning, such as that the individual fails to meet the standards of personal independence and social responsibility in one or more aspects of daily life, including communication, social participation, academic and occupational functioning, and personal independence at home or in community settings.”<sup>664</sup>

Whereas the cause of ID cannot be explained in approximately 50% of cases,<sup>665</sup> researchers have developed a model to describe its aetiology in terms of two broad categories<sup>666</sup> (table 3.1). Louw and Louw comment on the relevancy of this model for the South African context, as it recognises the real effects of poverty and inadequate education on cognitive development.<sup>667</sup>

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& *Adolescent Health* 123 at 124, at the time of their writing the article, they still received referrals from prosecutors that contained such discriminatory terminology.

<sup>663</sup> Routh *Professional Practice in Mental Retardation* 85.

<sup>664</sup> APA *DSM-5* 31.

<sup>665</sup> McDermott *et al Intellectual and Developmental Disabilities* 9.

<sup>666</sup> Hodapp and Dykens in Mash and Wolfe *Abnormal Child Psychology* 285; Louw and Louw *Child and Adolescent Development* 231-232.

<sup>667</sup> Louw and Louw *Child and Adolescent Development* 231-232. Also see Garber *Developmental Psychology for Family Law Professionals* 114-116 on environment and SES as influential factors.

Table 3.1 Causes and associated features of intellectual disability (ID)

Obviously Organic	<b>CAUSE</b>	Suspected to be Cultural-Familial
<u>Prenatal</u> , e.g. genetic disorders <u>Perinatal</u> , e.g. premature birth <sup>668</sup> or birth complications like anoxia <sup>669</sup> <u>Postnatal</u> , e.g. meningitis <sup>670</sup> or traumatic brain injury (para 3.4.6)		Familial cognitive disability  Environmental deprivation
Moderate, severe or profound ID	<b>ASSOCIATED FEATURES</b>	Mild ID
Prevalence approximately equal across population groups and SES Often also other physical disabilities		Prevalence higher in minority groups, and with low socio-economic status (SES)

Intellectual disability (or ID) is categorised as a neurodevelopmental disorder and is diagnosed by means of three criteria:<sup>671</sup>

- Psychometric testing and clinical assessment indicate that the individual’s general cognitive functioning is substantially impaired.
- His or her daily living is significantly affected by limited adaptive skills.
- The onset of these accompanying challenges is during the associated phase of development.

Intellectual disability is also categorised according to severity. The individual’s ability for adaptive functioning<sup>672</sup> (rather than intellectual functioning) determines the

<sup>668</sup> MA Woythaler *et al* “Late Preterm Infants Have Worse 24-Month Neurodevelopmental Outcomes Than Term Infants” (2011) 127(3) *Pediatrics* e622 at e626 [www.pediatrics.aappublications.org](http://www.pediatrics.aappublications.org) (accessed 02 October 2013); C Arpino *et al* “Preterm birth and neurodevelopmental outcome: a review” (2010) 26 *Child’s Nervous System* 1139 at 1143.

<sup>669</sup> Miller *School Neuropsychological Assessment* 65: Anoxia is a lack of oxygen supply to organs like the brain.

<sup>670</sup> Anderson *et al Developmental Neuropsychology* 222: Meningitis is neurodevelopmental condition caused by inflammation of the membranes that encapsulate the brain.

<sup>671</sup> APA *DSM-5* 33.

degree of cognitive impairment.<sup>673</sup> Adaptive behaviour is defined as “the performance of daily activities required for personal and social sufficiency”.<sup>674</sup> In fact, if a discrepancy is found between an IQ score (para 3.1.4) and some measure of adaptive functioning, the latter will guide the decision on the range of disability.<sup>675</sup>

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<sup>672</sup> Mash and Wolfe *Abnormal Child Psychology* 276: Adaptive functioning is related to ability, experience and opportunity.

<sup>673</sup> APA *DSM-5* 33. Sparrow *et al Vineland-II* 139 state, “The concept of social incompetence as the most important criterion of mental deficiency was formulated in 1935 by Edgar A. Doll, the original author of the family of Vineland assessment instruments, the *Vineland Social Maturity Scale* (VSMS; 1935, 1965), and the president, in 1936, of the American Association on Mental Retardation”.

Also see RMJ Todd *Sexual Abuse Victim Empowerment Programme: An archival study assessing the relationship between demographics and level of intellectual functioning* (MA Psychology, US, 2005) 72.

<sup>674</sup> Sparrow *et al Vineland-II* 6: This definition is based on four principles:

- Adaptive functioning is relative to chronological age.
- It depends on societal expectations and standards.
- Adaptive behaviour can change as a result of various factors.
- The emphasis is not on having an ability, but rather on using it adaptively.

Also see KW Widaman and KS McGrew “The Structure of Adaptive Behavior” in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) 97-98; Das and Naglieri *Professional Practice in Mental Retardation* 124.

<sup>675</sup> Editorial Board *Professional Practice in Mental Retardation* 15. Das and Naglieri *Professional Practice of Mental Retardation* 125 comment on the limited value of administering traditional psychometric tests to ascertain the level of intellectual functioning of a person with ID. For example, these tests do not assess the facets of information processing that are very challenging for persons with ID, e.g. attention and planning.

Furthermore, the limited usefulness of an IQ score becomes clear from GH Gudjonsson and L Henry “Child and adult witnesses with intellectual disability: The importance of suggestibility” (2003) 8 *Legal and Criminological Psychology* 241 at 246, the researchers, discussing the outcome of their study:

“The present study highlights important differences in memory and suggestibility between children and adults with learning disability [ID]. In spite of the fact that the IQ scores of the two intellectual disability groups were very similar, the children’s memory scores were superior to those of the adults with intellectual disability. The adults with moderate intellectual disability remembered very little of the story, the range of scores of immediate recall being 0-4 and with a mean of 1.6 (4% of the maximum). In contrast, the children with moderate intellectual disability had immediate recall scores that were over three times greater (13% of the

This classification system is useful, because it has predictive value<sup>676</sup> and allows for guidelines in terms of the person's need for support.<sup>677</sup> From a psycho-legal point of view, its advantage also lies in providing some standard to apply regarding witness competency.<sup>678</sup>

Table 3.2 lists the features associated with the respective categories of cognitive disability during childhood.<sup>679</sup> The categories correspond with the levels of intellectual disability:

- Mild
- Moderate
- Severe
- Profound

In literature, the features are described according to four domains:<sup>680</sup>

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maximum), with the range of scores being 0-12. A similar finding was evident with regard to those with mild intellectual disability. The mildly learning disabled (LD) [mild ID] children had 22.5% recall compared with 17% of the adults with similar IQ scores. One possible explanation is that children are in an educational setting and are therefore better able to retain new learning material. The other explanation is that adults' intellectual abilities (and this is adjusted for in the IQ scores) deteriorate with age, and this may explain the differences found in the present study between the children and adults." [insertion added for clarity]

<sup>676</sup> Editorial Board *Professional Practice in Mental Retardation* 15-16.

<sup>677</sup> *ibid*; Mash and Wolfe *Child Abnormal Psychology* 277.

<sup>678</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 7-10, 22-23.

<sup>679</sup> Ainsworth and Baker *Understanding Mental Retardation* 68-71; Allan *Psycholegal Assessment in SA* 289-290; APA *DSM-5* 34-36; Dickman *Access to Justice for People with Intellectual Disabilities* 7-10; Du Toit *Children with Problems* 342-370; Editorial Board *Professional Practice in Mental Retardation* 14-20, 39-53; M Goldman "Forensic and Psychosexual Assessment" in JW Jacobson *et al Handbook of Intellectual and Developmental Disabilities* (2009) 373-387; Louw and Louw *Child and Adolescent Development* 231-232; Manson *Sexual Abuse Victim Empowerment Programme*; Sparrow *et al Vineland-II* 139-147; Mash and Wolfe *Abnormal Child Psychology* 273, 277-278.

<sup>680</sup> The DSM-5 serves as a template for three of the four domains. The fourth domain has been added in the light of the current field of study.

- The conceptual domain informs about expectations related to the development of cognitive and scholastic skills, and acquisition of knowledge.<sup>681</sup>
- The social domain is about interpersonal relationship skills, theory of mind (ToM) (paras 3.2.3 and 3.4.5) and pro-social emotions.<sup>682</sup>
- The practical domain covers practical skills related to day-to-day functioning in different life settings.<sup>683</sup>
- The psycho-legal domain involves skills and competencies related to being a witness in a court of law.

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<sup>681</sup> APA *DSM-5* 37; Sparrow *et al Vineland-II* 3, Communication domain; Ainsworth and Baker *Understanding Mental Retardation* 62.

<sup>682</sup> APA *DSM-5* 37; Sparrow *et al Vineland-II* 3, Socialization domain; Ainsworth and Baker *Understanding Mental Retardation* 63.

<sup>683</sup> APA *DSM-5* 37; Sparrow *et al Vineland-II* 3, Daily Living Skills domain; Ainsworth and Baker *Understanding Mental Retardation* 62.

Table 3.2 Domain characteristics associated with level of ID of children with chronological age (CA) of 18 and younger

<b>INTELLECTUAL DISABILITY: MILD</b> <b>IQ score between 50/55 and 70</b>			
CONCEPTUAL DOMAIN	SOCIAL DOMAIN	PRACTICAL DOMAIN	PSYCHOLEGAL DOMAIN
Language acquisition delayed. Difference to peers not obvious in preschool. "Educable", <sup>684</sup> but major difficulties with scholastic skills <sup>685</sup> and understanding of time and money concepts. Possible to obtain Grade 6 or 7 when given intensive academic	Socially immature. <sup>686</sup> Difficulty with emotion regulation. Concrete communication. Recognising and understanding some double meanings remain challenging for adolescents. <sup>687</sup>	Independent personal care. Support needed for complex routines related to functioning in community. <sup>688</sup>	MA useful guideline to predict level of performance during examination in court. <sup>689</sup> Question type order: open ended / free recall → general → specific questions. <sup>690</sup> Expect less information during free recall. <sup>691</sup> Able to resist misleading

<sup>684</sup> Ainsworth and Baker *Understanding Mental Retardation* 70: "Children who were *educable* could learn simple academic skills".

<sup>685</sup> Sparrow *et al Vineland-II* 143: Research shows that in relation to other communication skills, "school-related behaviors" show the greatest deviation from the norm.

<sup>686</sup> Sparrow *et al Vineland-II* 143: "Within Socialization, this group shows the greatest deficits in behaviors used in play and leisure activities".

<sup>687</sup> Walker *Handbook on Questioning Children* 48.

<sup>688</sup> Sparrow *et al Vineland-II* 143: "In the Daily Living Skills Domain, the lowest mean score occurs in community functioning, where the individuals have deficits in handling money, managing time, and moving throughout the community".

<sup>689</sup> Henry *et al Children's Testimony* 2 ed 258-260.

<sup>690</sup> Henry *et al Children's Testimony* 2 ed 261.

<sup>691</sup> A-C Cederborg *et al* "Repetition of contaminating question types when children and youths with intellectual disabilities are interviewed" (2009) 53(5) *Journal of Intellectual Disability Research* 440 at 441.



support. However, usually placed in special education system.			questions. <sup>692</sup> Avoid (identical or similar) repetition of option-posing question. <sup>693</sup>
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<b>INTELLECTUAL DISABILITY: MODERATE</b> <b>IQ score between 35/40 and 50/55</b>			
CONCEPTUAL DOMAIN	SOCIAL DOMAIN	PRACTICAL DOMAIN	PSYCHOLEGAL DOMAIN
<p>Preschoolers' development of language and conceptual skills shows marked delay.</p> <p>At school, slow progress in mastering scholastic skills, and understanding of time and money concepts.</p> <p>Expressive language limited.</p> <p>Often transferred to LSEN<sup>694</sup> class or school.</p> <p>"Trainable".<sup>695</sup> Emphasis on practical (vocational) skills.</p>	<p>Verbal communication concrete.</p> <p>Difficulty to pick up social conventions of peer group for adolescents.</p>	<p>Play activities immature since preschool.</p> <p>Dependent.</p>	<p>MA useful guideline to predict level of performance as witness in court.<sup>696</sup></p> <p>Little information provided during free recall, but accurate.<sup>697</sup></p> <p>Can be suggestible.<sup>698</sup></p> <p>Avoid (identical or similar) repetition of option-posing question.<sup>699</sup></p>

<sup>692</sup> *ibid.*

<sup>693</sup> Cederborg *et al* 2009 *Intellectual Disability Research* 446.

<sup>694</sup> LSEN refers to "Learners with Special Educational Needs".

<sup>695</sup> Ainsworth and Baker *Understanding Mental Retardation* 71: "Children who were *trainable* could learn to care for their daily needs but not many academic skills."

INTELLECTUAL DISABILITY: SEVERE IQ score between 20/25 and 35/40			
CONCEPTUAL DOMAIN	SOCIAL DOMAIN	PRACTICAL DOMAIN	PSYCHOLEGAL DOMAIN
Arrested language development obvious - very limited vocabulary and command of grammar. Do not master scholastic skills of reading, writing and counting.	Prefer to use words and phrases to communicate. Often need AAC devices. <sup>700</sup>	Parallel play; during adolescence interactive play. "Untrainable": <sup>701</sup> Dependent.	

<sup>696</sup> Henry *et al Children's Testimony* 2 ed 258-260.

<sup>697</sup> Cederborg *et al* 2009 *Intellectual Disability Research* 441.

<sup>698</sup> *ibid.*

<sup>699</sup> Cederborg *et al* 2009 *Intellectual Disability Research* 446.

<sup>700</sup> AAC refers to "augmentative and alternative communication" (para 4.5.4). AC Repp *et al* "Cognitive and Vocational Interventions for School-Age Children and Adolescents with Mental Retardation" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) 267; J Murray and J Goldbart "Cognitive and language acquisition in typical and aided language learning: A review of recent evidence from an aided communication perspective" (2009) 25(1) *Child Language Teaching and Therapy* 31 at 32.

<sup>701</sup> Ainsworth and Baker *Understanding Mental Retardation* 71: "Children who were *untrainable* or totally dependent were in need of long term care, possibly in a residential setting."

INTELLECTUAL DISABILITY: PROFOUND <sup>702</sup> IQ score below 20/25 <sup>703</sup>			
CONCEPTUAL DOMAIN	SOCIAL DOMAIN	PRACTICAL DOMAIN	PSYCHOLEGAL DOMAIN
Do not attend school or training centre.		"Untrainable": <sup>704</sup> Dependent.	

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<sup>702</sup> According to *DSM-5* 36 and Dickman *Access to Justice for People with Intellectual Disabilities* 10, a significant correlation exists between profound intellectual disability and motor and/or sensory disabilities. Therefore these individuals are often multi-disabled.

<sup>703</sup> The *Vineland-II* system puts severe and profound severity of intellectual disability in one category.

<sup>704</sup> Ainsworth and Baker *Understanding Mental Retardation* 71.

### 3.4 SPECIFIC CONDITIONS OF DEVELOPMENTAL DISABILITY ASSOCIATED WITH COGNITIVE IMPAIRMENT

Mash and Wolfe comment,

“Children with intellectual disability have a greater chance of having other physical and developmental disabilities, such as sensory impairments, cerebral palsy, and epilepsy, that can affect their health and development in pervasive ways.”<sup>705</sup>

#### 3.4.1 Epilepsy

The incidence of epilepsy, a medical disorder,<sup>706</sup> is much higher in the population of people with ID than in the non-disabled population.<sup>707</sup> “Epilepsy is the tendency of occurrence of transient recurrent abnormal electrical discharges in the brain affecting one or more or the following brain functions: motor, sensory, cognitive, speech, behavioral, emotional, and psychological.”<sup>708</sup>

According to Deb, the prevalence of epilepsy has a positive correlation with the severity of the cognitive disability.<sup>709</sup> Therefore, among children with ID in the mild and moderate forms, its occurrence is significantly less than in the severe and profound groups of ID (table 3.2).<sup>710</sup> The incidence of epilepsy is also associated with the cause of ID; genetic conditions such as Down syndrome have a higher percentage of epilepsy in comparison to non-organic causes.<sup>711</sup> Its prevalence also correlates with the presence of other neurological conditions, e.g., cerebral palsy, besides ID.<sup>712</sup>

Memory impairment is associated with epilepsy (para 3.2.3).<sup>713</sup>

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<sup>705</sup> Mash and Wolfe *Abnormal Child Psychology* 285.

<sup>706</sup> APA *DSM-5* 53.

<sup>707</sup> S Deb “Epilepsy in People With Mental Retardation” in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 81.

<sup>708</sup> *ibid.*

<sup>709</sup> *ibid.*

<sup>710</sup> Deb *Intellectual and Developmental Disabilities* 82.

<sup>711</sup> *ibid.*

<sup>712</sup> *ibid.*

<sup>713</sup> Anderson *et al Developmental Neuropsychology* 89.

### 3.4.2 Cerebral palsy (CP)

Cerebral palsy (CP) is defined as a neurodevelopmental disability that manifests itself primarily through different forms and degrees of motor impairment.<sup>714</sup> Winter points out that CP is nonprogressive – in fact, there are children whose functionality improve as a result of neurological maturation.<sup>715</sup> CP is usually congenital, which means the time of causation is prenatal (before birth) or perinatal (since labour until 30 days after birth), but can be acquired as well.<sup>716</sup> Acquired CP can result from trauma, abuse or postnatal infections.<sup>717</sup> Cerebral palsy is classified in terms of the locality of brain damage (extrapyramidal CP)<sup>718</sup> or location of the body area that is affected due to damage in the pyramidal tract in the brain (spastic CP).<sup>719</sup> A combination of types also occurs.<sup>720</sup>

While there is a substantial positive correlation between cerebral palsy and ID and/or specific learning disabilities, it cannot be said that every child with CP has a cognitive impairment or a learning disorder.<sup>721</sup> However, delayed language

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<sup>714</sup> Winter *Intellectual and Developmental Disabilities* 61:

“Cerebral palsy (CP) ... is often described as a group of nonprogressive, but often changing, motor impairment syndromes secondary to lesions or anomalies of the brain arising at any time during early brain development. The tone abnormalities of CP can range from spasticity to hypotonicity, can be mixed and can vary in one child during the day. An important component of the definition of CP is that it is nonprogressive. In fact, many children improve functionally over time consistent with the nature of pediatric neurologic maturation. Central to the definition of CP is the concept that it is a disorder of the brain and not of the musculoskeletal system. Understanding that CP is a neurodevelopmental disability with its primary impact on the motor system will assist ... in understanding the impact of CP on a child’s or adult’s functional skills.”

<sup>715</sup> *ibid.*

<sup>716</sup> Winter *Intellectual and Developmental Disabilities* 63.

<sup>717</sup> *ibid.*

<sup>718</sup> *ibid.*

<sup>719</sup> Winter *Intellectual and Developmental Disabilities* 64.

<sup>720</sup> *ibid.*

<sup>721</sup> Winter *Intellectual and Developmental Disabilities* 69.

development occurs frequently.<sup>722</sup> The language disorder that is associated with CP is dysarthria, “a motor speech disorder resulting from disturbed neuromuscular control or the speech mechanism itself”.<sup>723</sup> The disorder manifests in different degrees and forms in correspondence to the kind of CP the child has.<sup>724</sup>

According to Kent *et al*, the severity of the dysarthria will determine how to manage communication with a child who has CP.<sup>725</sup> Listener preparation and training is important with a view to facilitating optimal communication.<sup>726</sup> The child can use visual cues to support his or her verbal communication with the listener.<sup>727</sup> The listener should look at the child’s mouth and become used to the way the child speaks.<sup>728</sup> The environment chosen in which to have conversations should favour communication.<sup>729</sup>

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<sup>722</sup> J Gerenser and B Forman “Speech and Language Deficits in Children with Developmental Disabilities” in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 568, 569.

<sup>723</sup> Gerenser and Forman *Intellectual and Developmental Disabilities* 568.

<sup>724</sup> *ibid.*

<sup>725</sup> *ibid.*: There are four groups:

- Group 1: Speech is very severely compromised and augmentative / alternative communication (AAC) (para 3.5.4) is necessary for all communication of this group of children.
- Group 2: Speech is somewhat less affected and therefore these children are able to communicate about their basic needs. However, they need AAC support for communication.
- Group 3: This group of children have adequate functional speech for basic communication. AAC is only employed to aid learning of language.
- Group 4: AAC is only considered as a “backup”, because the speech problems of children of this group are trivial. Their verbal communication is functional in all respects.

<sup>726</sup> Gerenser and Forman *Intellectual and Developmental Disabilities* 569.

<sup>727</sup> *ibid.*

<sup>728</sup> *ibid.*

<sup>729</sup> *ibid.*

Spasticity is the most common form of CP.<sup>730</sup> Anxiety makes the motor symptoms of spasticity more pronounced.<sup>731</sup> Experiencing excitement also intensifies tremors, if the latter are symptomatic of the kind of CP of a particular child.<sup>732</sup> Children with CP can also be sensitive to sensory overload.<sup>733</sup>

### 3.4.3 Down syndrome (DS)

Down syndrome is a common genetic condition<sup>734</sup> resulting from chromosomal abnormalities and its association with intellectual impairment is pronounced.<sup>735</sup> According to Mash and Wolfe, the adaptive functioning of children with Down syndrome generally reaches a plateau during middle childhood, and may show a steady decline, particularly in the social domain thereafter.<sup>736</sup>

Most children with DS develop speech, although some remain unintelligible.<sup>737</sup> Otherwise, in spite of delayed acquisition, vocabulary is often a relative strength.<sup>738</sup> However, this advantage during communication remains limited because of the challenges language structure (semantics and syntax) present.<sup>739</sup> Furthermore, the

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<sup>730</sup> Winter *Intellectual and Developmental Disabilities* 63. Also see Winter *Intellectual and Developmental Disabilities* 63-64 for the classification system of CP.

<sup>731</sup> Winter *Intellectual and Developmental Disabilities* 66.

<sup>732</sup> PN Botha "Cerebral palsy" in JA Kapp (ed) *Children with Problems An Orthopedagogical Perspective* (1989) 325.

<sup>733</sup> Botha *Children with Problems* 333.

<sup>734</sup> Mash and Wolfe *Child Abnormal Psychology* 288: This genetic syndrome is distinguished by a range of physical characteristics. The DS features are "a small skull; a large tongue protruding from a small mouth; almond-shaped eyes with sloping eyebrows; a flat nasal bridge; a short, crooked fifth finger; and broad square hands with a simian (monkey-like) crease across the palm". The associated oral structure includes a high vaulted palate that is narrow and the muscle tone of the mouth area is low (oral hypotonia). These features are unremarkable at times, or their appearance variable in degree.

<sup>735</sup> Gerenser and Forman *Intellectual and Developmental Disabilities* 564; McDermott *et al Intellectual and Developmental Disabilities* 11; Mash and Wolfe *Child Abnormal Psychology* 280, 287.

<sup>736</sup> Mash and Wolfe *Child Abnormal Psychology* 282.

<sup>737</sup> Gerenser and Forman *Intellectual and Developmental Disabilities* 565.

<sup>738</sup> *ibid.*

<sup>739</sup> *ibid.*

inadequate functioning of short-term memory is linked to the occurrence of a phonological (sound production) disorder.<sup>740</sup> Conversely, children with DS have an ability for visual spatial processing as a relative strength.<sup>741</sup> Providing visual information complementary to spoken language thus supports communication.<sup>742</sup>

Research on behavioural phenotypes<sup>743</sup> reveals the following relative strengths and weaknesses associated with Down syndrome:

- Expressive language is markedly weaker in comparison to receptive language.<sup>744</sup>
- The child's receptive vocabulary (understanding meaning of words) is greater than his or her verbal short-term memory (recollecting what was recently said).<sup>745</sup>
- Visual short-term memory (recollecting what was recently seen) is stronger than verbal short-term memory.<sup>746</sup>
- Episodic memory is a weakness.<sup>747</sup>

According to Das and Naglieri, persons with DS tend to have major difficulties with successive processing,<sup>748</sup> which means they are significantly challenged by cognitive tasks that require elements to be executed step by step in a specific order.<sup>749</sup>

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<sup>740</sup> Gerenser and Forman *Intellectual and Developmental Disabilities* 565-566.

<sup>741</sup> Gerenser and Forman *Intellectual and Developmental Disabilities* 566.

<sup>742</sup> *ibid.*

<sup>743</sup> Hodapp and Dykens *Intellectual and Developmental Disabilities* 116: A behavioural phenotype is defined as "the heightened probability or likelihood that people with a given syndrome will exhibit certain behavioral and developmental sequelae relative to those without the syndrome".

<sup>744</sup> Henry *et al Children's Testimony* 2 ed 265; Mash and Wolfe *Child Abnormal Psychology* 282; Hodapp and Dykens *Intellectual and Developmental Disabilities* 119.

<sup>745</sup> Hodapp and Dykens *Intellectual and Developmental Disabilities* 119.

<sup>746</sup> *ibid.*

<sup>747</sup> Hodapp and Dykens *Intellectual and Developmental Disabilities* 119, 123-124: The research of Pennington *et al* indicates that children with DS (in comparison to children with a similar MA) have difficulty with tasks involving the hippocampus of the brain, more so than with tasks involving the prefrontal cortex of the brain. Episodic memory, i.e. storing information of an event in the long-term memory, is a hippocampal activity.



#### 3.4.4 Foetal Alcohol Spectrum Disorder (FASD)

FASD conditions are of major importance in the social context of South Africa and the current study.<sup>750</sup> Foetal alcohol spectrum disorder, or FASD, is the only preventable developmental disability. A child develops FASD when he or she is exposed to alcohol during the prenatal period of development as a result of the mother's intake of alcohol.<sup>751</sup> Structural changes to the foetal brain occur.<sup>752</sup> A distinction is made between, on the one hand conditions related to heavy alcohol use or binge drinking: FAS (foetal alcohol syndrome) with a profile fulfilling all diagnostic criteria; and on the other hand, those related to a lower alcohol intake with subsequent milder symptomology:<sup>753</sup> partial FAS, foetal alcohol effects (FAE),

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<sup>748</sup> Das and Naglieri *Professional Practice in Mental Retardation* 123.

<sup>749</sup> Das and Naglieri *Professional Practice in Mental Retardation* 121-122: "Successive processes provide the integration of stimuli into a serial order in which the elements form a chainlike progression. The distinguishing quality of successive processing is that each stimulus is related only to the one it follows. ... For example, to answer the question, 'The girl hit the boy, who got hurt?' the ordering of the words within the sentence must be appreciated."

<sup>750</sup> D Viljoen *et al* "Fetal Alcohol Syndrome Epidemiology in a South African Community: A Second Study of a Very High Prevalence Area" (2005) 66 *Journal of Studies on Alcohol* 593 at 593, 600: The prevalence of FASD among first graders in the Western Cape – the province in which the population of the present study live – was found to be more than 40 per 1000 in 2000, and in 2005 more than 60 per 1000. At 593-594, in comparison to the FASD statistics of various other countries in the world, the incidence is alarmingly high in the Western Cape. In fact, according to PA May *et al* "The epidemiology of fetal alcohol syndrome and partial FAS in a South African community" (2007) 88 *Drug and Alcohol Dependence* 259 at 260, it is the highest ever reported anywhere. Furthermore, at 267, when the research was repeated during 2006, an incidence above 60 per 1000 first graders was confirmed with a conservative interpretation of statistics (otherwise the distribution rose to above 80 per 1000 first graders).

<sup>751</sup> VH Wacha and JE Obrzut "Effects of Fetal Alcohol Syndrome on Neuropsychological Function" (2007) 19 *Journal of Developmental and Physical Disabilities* 217 at 218: The first trimester and the last two months of foetal development are the most vulnerable periods in terms of neurological damage, although the worst effect comes from alcohol consumption during the entire pregnancy.

<sup>752</sup> Wacha and Obrzut 2007 *Developmental and Physical Disabilities* 219.

<sup>753</sup> McDermott *Intellectual and Developmental Disabilities* 24; S Mattson *et al* "Fetal Alcohol Spectrum Disorders: Neuropsychological and Behavioral Features" (2011) 21 *Neuropsychological Review* 81 at 81.

alcohol-related neurodevelopmental disorder (ARND) and alcohol-related birth defects (ARBD).<sup>754</sup>

There are two reasons why FASD is not always recognised. Not every person on the spectrum shows the physical features associated with the syndrome.<sup>755</sup> Or, individuals on the spectrum are not necessarily formally diagnosed with FASD.<sup>756</sup>

During the foetal stage, alcohol damages the developing central nervous system (CNS).<sup>757</sup> Distinct facial features are associated with FASD<sup>758</sup> and are most prominent during middle childhood.<sup>759</sup> Children can also have retarded growth.<sup>760</sup> Symptoms that usually accompany the disorder are: sight and hearing impairment,<sup>761</sup> problematic motor coordination skills,<sup>762</sup> limited visual-spatial abilities,<sup>763</sup> scholastic difficulties,<sup>764</sup> proneness to become overstimulated<sup>765</sup> and aggressive behaviour.<sup>766</sup>

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<sup>754</sup> DK Fast and J Conry "Fetal Alcohol Spectrum Disorders and the Criminal Justice System" (2009) 15 *Developmental Disabilities Research Reviews* 250 at 250.

<sup>755</sup> Fraser and McDonald "Working with Victims with FASD" 7, 15.

<sup>756</sup> Fraser and McDonald "Working with Victims with FASD" v.

<sup>757</sup> Mash and Wolfe *Child Abnormal Psychology* 291.

<sup>758</sup> Miller *School Neuropsychological Assessment* 75: The FASD features are "a small head (microcephaly), small eyes with skin folds at the corners (microphthalmia), poorly developed ventricular ridge between the mouth and nose (philtrum), thin upper lip, and flattening of the midfacial jawbone".

<sup>759</sup> Fast and Conry 2009 *Developmental Disabilities Research Reviews* 251.

<sup>760</sup> Mash and Wolfe *Child Abnormal Psychology* 291.

<sup>761</sup> Garber *Developmental Psychology for Family Law Professionals* 64.

<sup>762</sup> Miller *School Neuropsychological Assessment* 75-76.

<sup>763</sup> *ibid.*

<sup>764</sup> *ibid.*

<sup>765</sup> Fraser and McDonald "Working with Victims with FASD" 8.

<sup>766</sup> *ibid.*

Irrespective of the characteristic dysmorphic features, FASD is associated with neurodevelopmental deficits.<sup>767</sup> The relationship between foetal alcohol syndrome and intellectual impairment is distinct,<sup>768</sup> although many individuals with FASD do not have IQ scores indicative of intellectual disability.<sup>769</sup> Fast and Conry suggest the acronym **ALARM** to remember the neurocognitive deficits associated with FASD.<sup>770</sup>

- Adaptive functioning

"Adaptive behavior refers to the effectiveness with which a person meets the standards of personal independence and social responsibility expected of an individual of the same age and cultural group."<sup>771</sup> Research shows the correlation between the IQ scores of children with FASD and their level of functioning is weak.<sup>772</sup> They often appear more "adjusted" than they actually are.<sup>773</sup>

There is also a positive correlation between FASD and delinquent behaviour.<sup>774</sup> This is attributed to, in general, a lower level of moral maturity,<sup>775</sup> difficulties with social

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<sup>767</sup> PW Kodituwakku "Neurocognitive Profile in Children with Fetal Alcohol Spectrum Disorders" (2009) 15 *Developmental Disabilities Research Reviews* 218 at 218.

<sup>768</sup> Mash and Wolfe *Child Abnormal Psychology* 290.

<sup>769</sup> Mattson *et al* 2011 *Neuropsychological Review* 82; Fast and Conry 2009 *Developmental Disabilities Research Reviews* 255; Kodituwakku 2009 *Developmental Disabilities Research Reviews* 219; Wacha and Obrzut 2007 *Developmental and Physical Disabilities* 221.

<sup>770</sup> Fast and Conry 2009 *Developmental Disabilities Research Reviews* 252-253.

<sup>771</sup> Fast and Conry 2009 *Developmental Disabilities Research Reviews* 252.

<sup>772</sup> *ibid.*

<sup>773</sup> *ibid.*; JR Pei *et al* "Memory Patterns of Acquisition and Retention of Verbal and Nonverbal Information in Children with Fetal Alcohol Spectrum Disorders" (2008) 15(1) *Canadian Journal of Clinical Pharmacology* e44 at e53

[http://www.researchgate.net/publication/5658270\\_Memory\\_patterns\\_of\\_acquisition\\_and\\_retention\\_of\\_verbal\\_and\\_nonverbal\\_information\\_in\\_children\\_with\\_fetal\\_alcohol\\_spectrum\\_disorders/file/32bfe5126418c2b6de.pdf](http://www.researchgate.net/publication/5658270_Memory_patterns_of_acquisition_and_retention_of_verbal_and_nonverbal_information_in_children_with_fetal_alcohol_spectrum_disorders/file/32bfe5126418c2b6de.pdf) (accessed 01 November 2008); LV Cox *et al* "Knowledge and Attitudes of Criminal Justice Professionals in Relation to Fetal Alcohol Spectrum Disorder" (2008) *Canadian Journal of Clinical Pharmacology* e306 at e306 <http://fascets.org/justice%20and%20FASD%20cdn%202008.pdf> (accessed 01 November 2008).

<sup>774</sup> C Rasmussen *et al* "Brief Report: Lie-telling in Children with Fetal Alcohol Spectrum Disorder" (2008) 33(2) *Journal of Pediatric Psychology* 220 at 220.

relationships,<sup>776</sup> and cognitive deficits. A research study by Rasmussen *et al* investigating lie-telling behaviour in a group of children aged four to eight years old “suggests that FASD children may be skilled lie-tellers at an earlier age”.<sup>777</sup> The researchers’ explanation of this finding brings to mind the saying “practice makes perfect”.<sup>778</sup>

- Language

“Superficial talkativeness” is a feature of individuals with FASD which can give rise to an overestimation of their verbal abilities.<sup>779</sup> Both expressive and receptive language abilities pose challenges during communication.<sup>780</sup> Generally, they find complex language difficult to understand due to impaired comprehension of syntax (structure of language) and semantics (meaning of words).<sup>781</sup>

In the conversational context, while these children do take the perspective of their listeners into account, they tend to communicate vaguely and ambiguously.<sup>782</sup> Children on the FASD spectrum also display an impaired ability to process the facial

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<sup>775</sup> Schonfeld *et al* in Rasmussen *et al* 2008 *Pediatric Psychology* 220.

<sup>776</sup> Whaley *et al* in Rasmussen *et al* 2008 *Pediatric Psychology* 220.

<sup>777</sup> Rasmussen *et al* 2008 *Pediatric Psychology* 223.

<sup>778</sup> *ibid*:

“Taken together, the findings that children with FASD have a higher rate of lying and are better at concealing their lies, suggest that children with FASD may learn to use lying as a strategy to conceal their transgressions at a young age. These lying behaviors may be related to later secondary disabilities such as trouble with the law and delinquency.”

<sup>779</sup> Fast and Conry 2009 *Developmental Disabilities Research Reviews* 252. Fraser and McDonald “Working with Victims with FASD” 15: “[T]he individual often appears to understand what is being said to them and verbal skills appear ‘normal’, despite low comprehension.”

<sup>780</sup> Mattson *et al* 2011 *Neuropsychological Review* 85-86; Fast and Conry 2009 *Developmental Disabilities Research Reviews* 252.

<sup>781</sup> Mattson *et al* 2011 *Neuropsychological Review* 85-86; Kodituwakku 2009 *Developmental Disabilities Research Reviews* 220.

<sup>782</sup> Mattson *et al* 2011 *Neuropsychological Review* 86.

expression of emotion (in comparison to children with Attention-deficit / hyperactivity disorder (ADHD) (para 3.5.2)).<sup>783</sup>

- **Attention problems**

According to research, the comorbidity of FASD and ADHD (para 3.5.2) is significant.<sup>784</sup> Symptoms of inattention, impulsivity and hyperactivity are thus prevalent. Children on the FASD spectrum are regarded as overactive and disruptive. According to Mattson *et al*, the focus of children with FASD tends to get stuck on a stimulus, they have difficulty registering data and do not use all the available sources of information during problem solving.<sup>785</sup> Children with FASD typically also have major difficulty in resisting executing actions (impulse control).<sup>786</sup>

- **Reasoning**

Mastering an unfamiliar environment requires higher-order thinking.<sup>787</sup> But in children with FASD this is hampered by impairment of executive functioning, for example, in verbal fluency, abstract reasoning, working memory,<sup>788</sup> planning,

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<sup>783</sup> Mattson *et al* 2011 *Neuropsychological Review* 94.

<sup>784</sup> PW Kodituwakku and EL Kodituwakku "From Research to Practice: An Integrative Framework for the Development of Interventions for Children with Fetal Alcohol Spectrum Disorders" (2011) 21 *Neuropsychological Review* 204 at 212; Mattson *et al* 2011 *Neuropsychological Review* 89; Fast and Conry 2009 *Developmental Disabilities Research Reviews* 252.

<sup>785</sup> Mattson *et al* 2011 *Neuropsychological Review* 93: The attention deficit behaviour of FASD consists of "deficits in shifting attention, encoding of information, and flexibility in problem solving" as well as "inhibitory control".

<sup>786</sup> *ibid.*

<sup>787</sup> Kodituwakku 2009 *Developmental Disabilities Research Reviews* 219. CM Adnams *et al* "Patterns of Cognitive-Motor Development in Children with Fetal Alcohol Syndrome From a Community in South Africa" (2001) 25(4) *Alcoholism: Clinical and Experimental Research* 557 at 560 confirm that children with FAS that form part of the population of the current study have a significant fall-out in terms of higher-order cognitive skills (para 3.2.3).

<sup>788</sup> Kodituwakku 2009 *Developmental Disabilities Research Reviews* 219. Also see PW Kodituwakku *et al* "Letter and Category Fluency in Children with Fetal Alcohol Syndrome From a Community in South Africa" (2006) 67 *Journal on Studies on Alcohol* 502 at 504, in which the sample of this research study in the Winelands of the Western Cape is of the same age group as those in the current study, and which confirms problems with working memory (para 3.2.3).

problem-solving and self-regulation, as well as cognitive flexibility<sup>789</sup> by means of set shifting. The latter is described as “the ability to shift attention from one stimulus dimension to another in a flexible manner”.<sup>790</sup>

Numerical reasoning or the “mental manipulation of numerical information” is also included here.<sup>791</sup> According to Mattson *et al*, “children with FASD display a specific impairment in basic numerical processing abilities, such as the ability to mentally represent and manipulate numbers and quantities”.<sup>792</sup>

- **Memory**

Research confirms the common pattern of learning found in children with cognitive delays and disabilities: although encoding of learning material in memory is difficult, it is retained just as well after storage as in children who do not have these developmental challenges (para 3.2.3).<sup>793</sup> Despite a superior ability to recall stories from memory,<sup>794</sup> it is common for persons with FASD to confabulate, i.e., to fill gaps in their memory of events with distorted or fabricated pieces of information.<sup>795</sup>

### 3.4.5 Autism Spectrum Disorder (ASD)

Autism is “a biologically based lifelong developmental disability that is present in the first few years of life”.<sup>796</sup> Over the years this condition has been described by various diagnostic labels, of which perhaps the best known is pervasive developmental

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<sup>789</sup> Mattson *et al* 2011 *Neuropsychological Review* 83-84; Fast and Conry 2009 *Developmental Disabilities Research Reviews* 253.

<sup>790</sup> Kodituwakku 2009 *Developmental Disabilities Research Reviews* 219.

<sup>791</sup> Kodituwakku 2009 *Developmental Disabilities Research Reviews* 221. Also see Mattson *et al* 2011 *Neuropsychological Review* 88.

<sup>792</sup> Mattson *et al* 2011 *Neuropsychological Review* 93.

<sup>793</sup> Mattson *et al* 2011 *Neuropsychological Review* 84.

<sup>794</sup> *ibid.*

<sup>795</sup> Fast and Conry 2009 *Developmental Disabilities Research Reviews* 253: Deficits in memory of children with FASD result in confabulation; “they may reconstruct events with ‘grains of truth’ combined with inaccurate recollections based on unrelated past and fictional events”.

<sup>796</sup> Mash and Wolfe *Child Abnormal Psychology* 301.

disorder (PDD).<sup>797</sup> According to the DSM-5, a diagnosis of autism spectrum disorder (or ASD), is made on the basis of four criteria:<sup>798</sup>

- The individual presents with marked symptoms of dysfunction in areas of social communication and interpersonal interaction, in more than one context.
- Behaviour patterns and personal interests or activities are limited and stereotypical in nature.
- Although perhaps only later recognised as such, symptoms are already present during the applicable stage of development.
- Significant impairment is associated with domains of adaptive functioning, e.g. educational or social.

ASD has multiple causes.<sup>799</sup> In children within the autistic spectrum, there is also a significant incidence of ID and/or epilepsy.<sup>800</sup> As a spectrum neurodevelopmental disorder, the characteristic features presents in many different combinations and degrees of severity.<sup>801</sup> According to Malherbe, the level of adjustment features on a continuum (figure 3.1).<sup>802</sup> Three factors are of critical importance in terms of adjustment to his or her community of living:<sup>803</sup> the level of intellectual functioning,<sup>804</sup> the extent of language problems,<sup>805</sup> and the potential to develop

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<sup>797</sup> APA *DSM-5* 52, 53: Other synonymous terminologies are childhood disintegrative disorder, early infantile autism, Kanner's autism, atypical autism, and also high-functioning autism and Asperger's syndrome. The latest DSM-5 classification system does not list these separately, but grouped in the spectrum of different autism conditions.

<sup>798</sup> APA *DSM-5* 50.

<sup>799</sup> Mash and Wolfe *Abnormal Child Psychology* 317.

<sup>800</sup> Mash and Wolfe *Child Abnormal Psychology* 302.

<sup>801</sup> *ibid.*

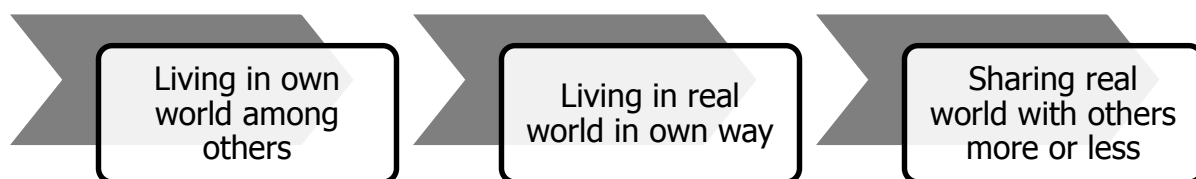
<sup>802</sup> G Malherbe *Autistic Spectrum Disorders Workshop* Somerset West 24 April 2013.

<sup>803</sup> Mash and Wolfe *Child Abnormal Psychology* 304.

<sup>804</sup> Mash and Wolfe *Child Abnormal Psychology* 309-310: Children with ASD vary in terms of cognitive functioning. These range from an above-average intellectual performance on the one end of the spectrum to severe ID on the other. Seventy percent (70%) of children with ASD have a cognitive disability as well. In terms of degree of severity in this group (para 4.3), the ratio between mild-moderate and severe-profound is 4:6.

adaptive behaviour.<sup>806</sup> Children with ASD have not “lost touch” with objective reality; it is the degree of neurodevelopmental impairment that determines to what extent they are able to participate in social reality.<sup>807</sup>

Figure 3.1 ASD continuum of adaptive functioning



The essential deficits of ASD are social and communication impairments, and repetitive behaviours and interests.<sup>808</sup>

### 1 Social inadequacies

Whether they are intellectually challenged or not, children with autism have major difficulties in terms of general psychosocial functioning, i.e., interpersonal relationships.<sup>809</sup> They have limited abilities to process information required for

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<sup>805</sup> Children with ASD can range from having no expressive language to having adequate language to communicate with.

<sup>806</sup> Children with ASD differ in terms of developing adaptive behaviour. Significant gains in adjustment are associated with cognitive functioning on at least an average level.

<sup>807</sup> J Forrester *Working with Children on the Autism Spectrum: Challenges Facing Professionals* Knysna 10 October 2009.

<sup>808</sup> Mash and Wolfe *Child Abnormal Psychology* 304-309.

<sup>809</sup> Mash and Wolfe *Child Abnormal Psychology* 304. According to WHO *ICF* 49, global psychosocial functions are described as “general mental functions, as they develop over the life span, required to understand and constructively integrate the mental functions that lead to the formation of the interpersonal skills needed to establish reciprocal social interactions, in terms of both meaning and purpose”.



relating with others.<sup>810</sup> For example, children with ASD have great difficulty recognising faces and facial expressions.<sup>811</sup> They find it hard to interpret a person's emotional expression and have particular difficulty perceiving fear.<sup>812</sup>

Some children are purely disinterested in socialising with others,<sup>813</sup> while others may even start feeling "threatened" during relational interaction due to, *inter alia*, a limited ability to interpret social cues<sup>814</sup> and their incomprehension of the essential qualities of social relations, e.g. reciprocity, sharing behaviour and enjoyment,<sup>815</sup> and other social conventions.<sup>816</sup> Impairment in joint attention, or "the ability to coordinate attention to a social partner and an object or event of mutual interest",<sup>817</sup> also explains observable differences in socialising.<sup>818</sup> In comparison to typical development, children with autism usually do not spontaneously exhibit nonverbal expression of affect and emotion.<sup>819</sup> However, when emotional expression does occur, it often happens in peculiar ways.<sup>820</sup> For example, expression of anxiety is frequently interpreted by the uninformed as aggressive behaviour.<sup>821</sup>

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<sup>810</sup> Mash and Wolfe *Child Abnormal Psychology* 305, 306.

<sup>811</sup> Mash and Wolfe *Child Abnormal Psychology* 308; Miller *School Neuropsychological Assessment* 388.

<sup>812</sup> Mash and Wolfe *Child Abnormal Psychology* 308: When looking at a person, they tend to focus on another facial feature rather than the eyes.

<sup>813</sup> Mash and Wolfe *Child Abnormal Psychology* 304.

<sup>814</sup> *ibid.*

<sup>815</sup> *ibid.*

<sup>816</sup> Mash and Wolfe *Child Abnormal Psychology* 308; Miller *School Neuropsychological Assessment* 388.

<sup>817</sup> Mash and Wolfe *Child Abnormal Psychology* 304.

<sup>818</sup> Mash and Wolfe *Child Abnormal Psychology* 305: "Although children with autism may bring an object to a person, or point to an object when they want something done for them, they show little desire to share interest and attention with another person for the sheer pleasure of interaction."

<sup>819</sup> Mash and Wolfe *Child Abnormal Psychology* 306.

<sup>820</sup> *ibid.*

<sup>821</sup> Archer and Hurley 2013 *Intellectual Disabilities and Offending Behaviour* 55.

## 2 Communication deficiencies

A telling characteristic of children with ASD is atypical language development.<sup>822</sup> Approximately 50% of children with autism do not develop speech and remain nonverbal.<sup>823</sup>

Concerning the verbal ASD group, receptive language is usually less developed in comparison to expressive language.<sup>824</sup> A particular area of difficulty is understanding time concepts.<sup>825</sup> Even if the child has a sufficient command of formal language (semantics and syntax), they tend to lack spontaneity. Uncommon intonation and rhythm are used,<sup>826</sup> as well as pronoun reversals,<sup>827</sup> echolalia<sup>828</sup> and perseverative

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<sup>822</sup> Mash and Wolfe *Child Abnormal Psychology* 306: It is in the command of preverbal communication, i.e., nonverbal communication preceding the stage in which actual words are employed to communicate, that children with autism can already be distinguished from children without autism. Although some children initially develop language according to developmental expectations, they then "lose" the ability to speak. Children with ASD who are verbal usually develop language before the age of five years.

<sup>823</sup> Mash and Wolfe *Child Abnormal Psychology* 306; M Manolitsi and N Botting "Language abilities in children with autism and language impairment: using narrative as a (sic) additional source of clinical information" (2011) 27(1) *Child Language Teaching and Therapy* 39 at 40.

<sup>824</sup> APA *DSM-5* 53.

<sup>825</sup> Gillberg *Intellectual and Developmental Disabilities* 53.

<sup>826</sup> Mash and Wolfe *Child Abnormal Psychology* 306.

<sup>827</sup> Hale and Fiorello *School Neuropsychology* 253.

According to Mash and Wolfe *Child Abnormal Psychology* 307: "**Pronoun reversals** occur when the child repeats personal pronouns exactly as heard, without changing them to suit the situation. For example, a child named Tim when asked, 'What's your name?' answered, 'Your name is Tim,' rather than 'My name is Tim.'"

Gerenser and Forman *Intellectual and Developmental Disabilities* 571 explain that pronoun reversals indicate a problem with deixis, which is the language code "shifting reference between the speaker and the listener". To become confused with "this" and "that" is also part of deictic difficulties.

<sup>828</sup> Hale and Fiorello *School Neuropsychology* 253. According to Mash and Wolfe *Child Abnormal Psychology* 307, "**Echolalia** can either be immediate or delayed and is the child's parrot-like repetition of words or word combinations that she or he has heard".

speech.<sup>829</sup>

Children with ASD communicate through their behaviour.<sup>830</sup> Language is frequently not employed for social communication.<sup>831</sup> Therefore some verbalisation by children with ASD do not make sense in its social context.<sup>832</sup> The major verbal difficulty children with ASD have, is the pragmatic use of language<sup>833</sup> due to an inability to decode the social context in which communication takes place.<sup>834</sup> Consequently they usually do not understand humour, sarcasm, irony and nonliteral references<sup>835</sup> such as figures of speech,<sup>836</sup> or the gist of a conversation.<sup>837</sup>

A child with ASD can display striking discrepancies.<sup>838</sup> For example, even if he or she possesses above-average language skills, he or she may be unable to ask for assistance if needed.<sup>839</sup>

The verbosity of some children with ASD conceals verbal difficulties, which means their communicative capabilities are overestimated.<sup>840</sup> Furthermore, high-functioning children – those who have adapted relatively well to their social environment despite

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<sup>829</sup> Mash and Wolfe *Child Abnormal Psychology* 307: Perseverative speech is “incessant talking about one topic and incessant questioning”.

<sup>830</sup> N Nel *How to empower children with disabilities to safeguard themselves and to set boundaries* SAPSAC 15<sup>th</sup> Annual Conference Pretoria 11 November 2014.

<sup>831</sup> APA *DSM-5* 53; Miller *School Neuropsychological Assessment* 385; Tager-Flusberg *et al* in Mash and Wolfe *Child Abnormal Psychology* 308.

<sup>832</sup> Mash and Wolfe *Child Abnormal Psychology* 306.

<sup>833</sup> Manolitsi and Botting 2011 *Child Language Teaching* 40.

<sup>834</sup> Mash and Wolfe *Child Abnormal Psychology* 308.

<sup>835</sup> Mash and Wolfe *Child Abnormal Psychology* 308; E McCrory *et al* “Eye-witness memory and suggestibility in children with Asperger syndrome” (2007) 48(5) *Journal of Child Psychology and Psychiatry* 482 at 486.

<sup>836</sup> Miller *School Neuropsychological Assessment* 388.

<sup>837</sup> Miller *School Neuropsychological Assessment* 385.

<sup>838</sup> Malherbe *Autistic Spectrum Disorders Workshop*.

<sup>839</sup> *ibid.*

<sup>840</sup> Hale and Fiorello *School Neuropsychology* 255.

autism – still have problems with language although it is not obvious.<sup>841</sup> The challenge to effectively assist children with ASD who have an array of speech and language problems,<sup>842</sup> is addressed with augmentative and alternative communication (AAC) (para 3.5.4).<sup>843</sup>

### 3 Repetitive behaviours and narrow interests

Children with autism usually dislike the disruption of routine and have a need for environmental consistency.<sup>844</sup> Self-stimulatory behaviour is sensory, repetitive and carried out in a stereotypical way.<sup>845</sup> It is theorised that self-stimulation is used to cope with sensory overload in an over-stimulating environment.<sup>846</sup> Making stereotypical body movements can also reveal uncertainty about expectations within a situation.<sup>847</sup>

Children with autism often have narrow interests. For example, they will become preoccupied with a specific topic. And frequently the single interest of the child is overtly more advanced than developmental expectations.<sup>848</sup>

In the following paragraphs, information processing challenges faced by children with ASD are discussed. Dysfunctional sensory and cognitive processing, in addition

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<sup>841</sup> Mash and Wolfe *Child Abnormal Psychology* 308:

“High-functioning children with autism who have mastered word order and have large vocabularies may continue to display impairments in pragmatics. ... At a verbal level, they display problems with narrative discourse, including impoverished stories and difficulty providing sufficient information to others.”

<sup>842</sup> Gerenser and Forman *Intellectual and Developmental Disabilities* 572.

<sup>843</sup> *ibid.*

<sup>844</sup> Hale and Fiorello *School Neuropsychology* 253.

<sup>845</sup> Mash and Wolfe *Child Abnormal Psychology* 309: Other children with developmental disabilities also engage in self-stimulatory behaviours, e.g., rocking, flapping, staring at lights or propelling objects, or smelling things, but this is found more frequently in children and adults with ASD.

<sup>846</sup> *ibid.*

<sup>847</sup> Mash and Wolfe *Child Abnormal Psychology* 309.

<sup>848</sup> Examples: A preschooler uses a fineliner to make detailed drawings of small figures or constructs “cities” with small and irregular Lego blocks (not yet suitable for his age).

to deficits in theory of mind (ToM) that impacts on social cognition, form part of the ASD neurodevelopmental profile.

- Impaired sensory processing

Children with autism have “tunnel vision” and “tunnel hearing” due to the challenges created by dysfunctional sensory processing.<sup>849</sup> “*Sensory dominance* is the tendency to focus on certain types of sensory input over others – for example, a preference for sight over sound. *Stimulus overselectivity* is the tendency to focus on one feature of an object or event while ignoring other equally important features.”<sup>850</sup>

- Dysfunctional cognitive processing

A range of neurocognitive deficiencies is associated with ASD<sup>851</sup> that results in “uneven” cognitive profiles of individuals.<sup>852</sup> Individual children differ in terms of their relative strengths and weaknesses.<sup>853</sup> In fact, it is said, “if you have assessed one child with ASD, you have assessed one child”.<sup>854</sup>

Children with ASD can experience major attentional difficulties.<sup>855</sup> Moreover, a significant challenge during information processing relates to *central incoherence*. Information is processed in a fragmented way, without taking the relationship of the parts to the whole (“the bigger picture”) into account.<sup>856</sup> “Context blindness” means interconnecting variables are not considered throughout the thinking process.<sup>857</sup>

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<sup>849</sup> Mash and Wolfe *Child Abnormal Psychology* 311.

<sup>850</sup> *ibid.*

<sup>851</sup> Mash and Wolfe *Abnormal Child Psychology* 318.

<sup>852</sup> APA *DSM-5* 51.

<sup>853</sup> Mash and Wolfe *Abnormal Child Psychology* 312.

<sup>854</sup> Nel *How to empower children with disabilities*.

<sup>855</sup> Gillberg *Intellectual and Developmental Disabilities* 47; Anderson *et al* *Developmental Neuropsychology* 81.

<sup>856</sup> Mash and Wolfe *Abnormal Child Psychology* 313, 467: Central coherence is “[t]he strong tendency of humans to interpret stimuli in a relatively global way that takes the broader context into account”.

<sup>857</sup> Forrester *Working with children on the autism spectrum*.

Children with ASD often have deficits regarding higher-order processing or executive functions (para 3.2.3),<sup>858</sup> resulting in cognitive inflexibility.<sup>859</sup> Consequently rules are rigidly obeyed.<sup>860</sup> The challenges high-functioning children face relate particularly to working memory and the encoding of verbal material that is complex, as it involves executive functioning.<sup>861</sup> Low-functioning children tend to have problems with the basic memory function of visual recognition memory.<sup>862</sup> Gillberg claims that some children with autism do not develop memory until they reach the age of approximately eight years, or, alternatively, they may have very sharp episodic memory abilities.<sup>863</sup> In fact, many children on the autism spectrum are able to recall specific "facts"<sup>864</sup> or detailed information<sup>865</sup> if related to their field of interest.

- ToM deficit

As a result of the research interest in the deviations of ToM found among persons with ASD, the development of ToM has become a well-researched topic.<sup>866</sup> The

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<sup>858</sup> M Schachter and R Demerath "Neuropsychology and Mental Retardation" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) 167-168; Sanders *et al* in Mash and Wolfe *Abnormal Child Psychology* 312.

<sup>859</sup> Hale and Fiorello *School Neuropsychology* 253, 254; Miller *School Neuropsychological Assessment* 384.

<sup>860</sup> Archer and Hurley 2013 *Intellectual Disabilities and Offending Behaviour* 55.

<sup>861</sup> Hale and Fiorello *School Neuropsychology* 254; Manolitsi and Botting 2011 *Child Language Teaching* 52: The researchers explain that, while it may not be that difficult for a child with ASD to give a relatively orderly narration of events due to the procedural skill that he or she developed, to produce the story line itself, including appropriate references, requires working memory, an executive function that is problematic.

<sup>862</sup> Hale and Fiorello *School Neuropsychology* 254.

<sup>863</sup> Gillberg *Intellectual and Developmental Disabilities* 47.

<sup>864</sup> Henry *et al Children's Testimony* 2 ed 269.

<sup>865</sup> Henry *et al Children's Testimony* 2 ed 270.

<sup>866</sup> J Perner and H Wimmer "'John Thinks That Mary Thinks That ...' Attribution of Second Order Beliefs by 5- to 10-Year-Old Children" (1985) 39 *Journal of Experimental Child Psychology* 437 at 438-439, 449 and 452; A Gopnik and JW Astington "Children's Understanding of Representational Change and Its Relation to the Understanding of False Belief and the Appearance-Reality Distinction" (1988) 59 *Child Development* 26 at 35; RA Thompson *et al* "Understanding Values in Relationships: The Development of Conscience" in J Smetana and M Killen (eds) *Handbook of Moral Development* (2006)

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271-272; Louw and Louw *Child and Adolescent Development* 162; L Flobbe *et al* "Children's Application of Theory of Mind in Reasoning and Language" (2008) 17 *Journal of Logic, Language and Information* 417 at 418, 440; Bright-Paul *et al* 2008 *Developmental Psychology* 1055; V Talwar *et al* "Lying in the Elementary School Years: Verbal Deception and Its Relation to Second-Order Belief Understanding" (2007) 43(3) *Developmental Psychology* 804 at 805; R Smith and PJ LaFreniere "Development of Children's Ability to Infer Intentions from Nonverbal Cues" (2009) 3(4) *Journal of Social, Evolutionary, and Cultural Psychology* 315 at 316-317, 323; M Sprung "Clinically Relevant Measures of Children's Theory of Mind and Knowledge about Thinking: Non-Standard and Advanced Measures" (2010) 15(4) *Child and Adolescent Mental Health* 204 at 207; SB Lovett and BH Pillow "Age-related Changes in Children's and Adults' Explanations of Interpersonal Actions" (2010) 171(2) *The Journal of Genetic Psychology* 139 at 143, 160; FS Ahmed and LS Miller "Executive Function Mechanisms of Theory of Mind" (2011) 41 *Journal of Autism and Developmental Disorders* 667 at 668, 677; RT Devine and C Hughes "Silent Films and Strange Stories: Theory of Mind, Gender, and Social Experiences in Middle Childhood" (2013) 84(3) *Child Development* 989 at 999:

A basic distinction is made between first-order ToM which develops first, and second-order ToM which develops later, approximately two years after the "simple" ToM attributions. First-order attributions are limited to the child's mental state. Second-order attributions include the mental state of another person. And then there are attributions based on higher-order beliefs – a person's reflection on another's thinking about his or her mental state, and subsequently "mutual knowledge". Examples of the attributions are:

First-order ToM: "Mary believes that the ball is in the bag."

Second-order ToM: "Mary believes that John believes that the ball is in the closet."

Higher order ToM: "Johnny is thinking of Daddy thinking of mummy."

A typical three-year-old is still unable to pass the classical "test" for first-order ToM, which is the false belief task, but this is no longer the case for ordinary four-year-olds. At four years a shift takes place in terms of representational understanding. A representation is dependent on the perspective of the observer (appearance-reality distinction) and it also depends on the function of representation (pretend-real distinction).

At the age of approximately four or five years, children develop a realisation that someone can act on an incorrect belief and that emotional misrepresentation and social deception are possible. Around the age of six or seven years, children gain the understanding that expectations and biases have a direct effect on knowledge and comprehension. Children also develop some understanding of how mental states are affected by psychological characteristics associated with individual experiences. Performance continues to improve with age.

Second-order ToM reasoning is not restricted to a single skill, but is domain-specific and requires different cognitive processes. Initially, however, children do not necessarily recognise when this kind

struggle of children with ASD to interpret social situations,<sup>867</sup> is the result of “mindblindness”,<sup>868</sup> caused by a deficient ToM.<sup>869</sup> For example, Yirmiya *et al* found children with ASD (in comparison to a control group with ID) have a markedly limited ability to deceive due to a lack of comprehension of the manipulation of beliefs.<sup>870</sup> Furthermore, despite their proficiency in using mental state vocabulary

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of information processing applies. It starts to emerge around six years of age and around 10 years of age, children generally understand mental states based on second-order thinking.

Lovett and Pillow provide evidence that during middle childhood children progressively gain astuteness linking social behaviour with goal fulfilment. The nine-year-olds of the research study were better able to conceptualise interpersonal relationships in terms of less obvious and transparent motives (social goals) in comparison to the five-year-olds (who favoured instrumental goals). The group of adult research participants generally offered psychological goals – the kind of motive that is most obscure – as an explanation for actions. The researchers conclude that the ability for second-order mental state reasoning is the issue here. Due to the complexity of second-order reasoning as opposed to first-order reasoning, children in middle childhood may not yet be that adept in utilising psychological goals. The three types of goals are defined as:

- An instrumental goal is set to have some or other effect on objective reality and therefore the external world.
- A social goal aims at affecting interpersonal actions or relationships.
- A psychological goal intends to influence the mental state of the actor or someone else.

Smith and LaFreniere examined children’s ToM and the ability to detect deception. This ability is associated with “the understanding that the partner is observing one’s behavior in an attempt to gain insight into one’s intentions and that one can observe the partner’s behavior to gain similar insight” and requires higher-order reasoning. For the preschooler this skill is not yet functional. The eight-year-olds in the research study were best able to adjust their behaviour to the nonverbal cues they were given when compared to the age groups of respectively four years and six years. It is therefore concluded that the ability to detect deception only starts to develop during middle childhood.

<sup>867</sup> Hale and Fiorello *School Neuropsychology* 253; Mash and Wolfe *Child Abnormal Psychology* 311.

<sup>868</sup> Mash and Wolfe *Child Abnormal Psychology* 311.

<sup>869</sup> Mash and Wolfe *Abnormal Child Psychology* 311, 313; Hale and Fiorello *School Neuropsychology* 253: This ToM deficit appears to be very specific to ASD, in comparison to other conditions such as ID and language disorders.

<sup>870</sup> N Yirmiya *et al* “The Ability to Manipulate Behavior and to Understand Manipulation of Beliefs: A Comparison of Individuals with Autism, Mental Retardation, and Normal Development” (1996) 32(1) *Developmental Psychology* 62 at 68.



during conversation, this is not a reliable indication that these children understand related meanings.<sup>871</sup>

There is a group of children who do possess enhanced ToM and who also show a relative strength in terms of socialisation and verbal communication.<sup>872</sup> But the ToM processing that children with autism employ to come to a conclusion requires effort and differ from that of children without autism.<sup>873</sup>

By means of a functional ToM and good central coherence, “mental scripts” of a broad array of situations of everyday living<sup>874</sup> are added to the typical child’s knowledge base (paras 2.6.2 and 3.2.4). However, the knowledge base of children with autism does not serve as a structure to gather social experiences.<sup>875</sup> Such an inadequate knowledge base subsequently does not allow for efficient cognitive and emotional perspective taking.<sup>876</sup> Children with ASD thus have major difficulties in deceiving others and therefore with lie-telling behaviour.<sup>877</sup>

#### 3.4.6 Paediatric brain injury

An injury to the brain after birth, resulting in limited or full-scale functional disability and/or impairment of psychosocial functioning with a negative impact on

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<sup>871</sup> FGE Happé “An Advanced Test of Theory of Mind: Understanding of Story Characters’ Thoughts and Feelings by Autistic, Mentally Handicapped, and Normal Children and Adults” (1994) 24(2) *Journal of Autism and Developmental Disorders* 129 at 145; B Sodian and U Frith “Deception and Sabotage in Autistic, Retarded and Normal Children” (1992) 33(3) *Journal of Child Psychology and Psychiatry* 591 at 600-601.

<sup>872</sup> Mash and Wolfe *Abnormal Child Psychology* 312.

According to TL Hutchins *et al* “Beyond False Beliefs: the Development and Psychometric Evaluation of the Perceptions of Children’s Theory of Mind Measure – Experimental Version (PCToMM-E)” (2008) 38 *Journal of Autism and Developmental Disorders* 143 at 150, a positive correlation exists between verbal mental age and functionality of ToM.

<sup>873</sup> Mash and Wolfe *Abnormal Child Psychology* 312; Sprung 2010 *Child and Adolescent Mental Health* 205.

<sup>874</sup> Mash and Wolfe *Abnormal Child Psychology* 313.

<sup>875</sup> Mash and Wolfe *Abnormal Child Psychology* 313.

<sup>876</sup> Gillberg *Intellectual and Developmental Disabilities* 53.

<sup>877</sup> Henry *et al Children’s Testimony* 2 ed 270.

performance, is referred to as an acquired brain injury (ABI).<sup>878</sup> It is a very common cause of acquired childhood disability.<sup>879</sup>

A distinction is made between a traumatic brain injury (TBI) and a non-traumatic brain injury (non-TBI).<sup>880</sup> "A TBI is defined as an ABI caused by an external force such as motor vehicular accidents, falls, physical assaults, or sports accidents."<sup>881</sup> A further division is made (figure 3.2). The open type TBI is characterised by a confined injury resulting from penetration of the brain through the skull.<sup>882</sup> The outcome of such an injury, e.g. a gunshot wound, is relatively predictable because the impact is confined to specific areas of the brain and their associated functions are known.<sup>883</sup> The closed type TBI is associated with a head injury as a result of some impact, most frequently during a vehicle accident.<sup>884</sup> The effect of the injury is not predictable because damage occurs not only at the point of impact, but also in other parts, owing to movement of the brain inside the skull as a result of the blow to the head.<sup>885</sup> Secondary injuries to the brain will consequently also have a detrimental effect.<sup>886</sup>

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<sup>878</sup> DC Russo *et al* "Pediatric Brain Injury" in JW Jacobson *et al* (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) 98. Anderson *et al* *Developmental Neuropsychology* 129:

"TBI refers to a traumatic insult to the brain, capable of producing brain damage and associated with functional impairment. These traumatic insults are usually caused by a physical blow or wound to the head that is sufficient to result in altered consciousness and may lead to neurological or neurobehavioural sequelae."

<sup>879</sup> Anderson *et al* *Developmental Neuropsychology* 125.

<sup>880</sup> Russo *Intellectual and Developmental Disabilities* 98.

<sup>881</sup> *ibid.*

<sup>882</sup> *ibid.*

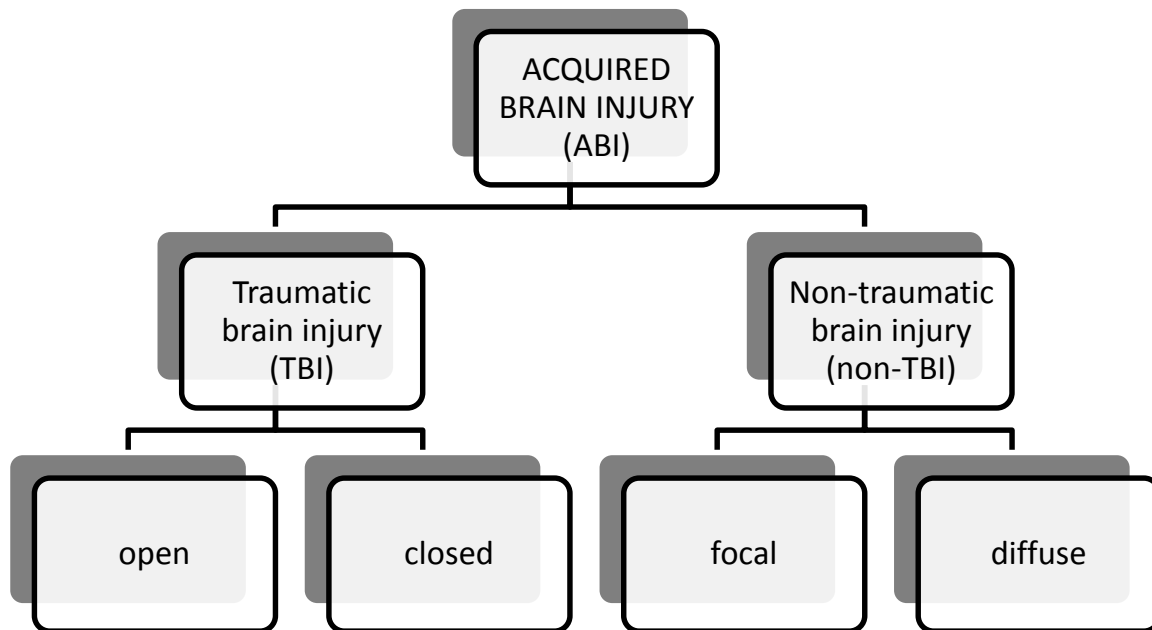
<sup>883</sup> *ibid.*

<sup>884</sup> *ibid.*; Anderson *et al* *Developmental Neuropsychology* 132.

<sup>885</sup> Russo *et al* *Intellectual and Developmental Disabilities* 98.

<sup>886</sup> Anderson *et al* *Developmental Neuropsychology* 134-135.

Figure 3.2 Classification of paediatric brain injuries



“A non-TBI is defined as an ABI resulting from non-traumatic factors such as malignancy, infections, degenerative processes, or stroke”.<sup>887</sup> The neurological impact can either be specific or pervasive. Some conditions are associated with injuries at a specific location, and therefore by focal damage,<sup>888</sup> and localised consequences. An example of such a condition is a stroke.<sup>889</sup> Conversely, diffuse damage and therefore pervasive neurological consequences can also be brought about by a non-TBI. The medical complications of anoxia serve as an example.<sup>890</sup>

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<sup>887</sup> Russo *et al Intellectual and Developmental Disabilities* 98.

<sup>888</sup> *ibid.*

<sup>889</sup> *ibid.*

<sup>890</sup> *ibid.*

Table 3.3 Dysfunction associated with moderate to severe brain injury

<b>DYSFUNCTION</b>		
<b>Physical</b>	<b>Cognitive</b>	<b>Behavioural</b>
<ul style="list-style-type: none"> <li>• Altered vision and/or hearing</li> <li>• Spatial orientation difficulties</li> <li>• Reduced speed</li> <li>• Weakened balance</li> <li>• Diminished strength and endurance</li> <li>• Change in speech</li> <li>• Difficulty with eye-hand coordination</li> <li>• Different muscle tone</li> </ul>	<ul style="list-style-type: none"> <li>• Changed perception</li> <li>• Disturbed attention and concentration</li> <li>• Reduced information processing</li> <li>• Thinking and reasoning requiring effort</li> <li>• Diminished memory</li> <li>• Compromised decision-making and judgment</li> <li>• Impaired planning and organisation skills</li> <li>• Difficulties with speech, language<sup>891</sup> and communication<sup>892</sup></li> <li>• Resistant to change</li> <li>• Oblivious to strengths and weaknesses</li> </ul>	<ul style="list-style-type: none"> <li>• Emotional outbursts</li> <li>• Physical aggression</li> <li>• Defiance</li> <li>• Lethargy</li> <li>• Reduced social skills</li> <li>• Impoverished adaptive functioning</li> </ul>

Although the impact of brain injury is frequently underestimated,<sup>893</sup> the positive correlation between injury severity and cognitive deficiencies remains clear.<sup>894</sup> An

<sup>891</sup> According to Anderson *et al Developmental Neuropsychology* 160, verbal skills such as vocabulary and general knowledge (reflected on the verbal scale of the IQ test) remain more intact than nonverbal skills (nonverbal scale on IQ test). (This is also indicative of semantic memory ability as a possible strength.)

<sup>892</sup> According to Anderson *et al Developmental Neuropsychology* 161-162, severe TBI generally results in general difficulties in linguistics. These children show impairment regarding verbal fluency, narrative ability, verbal comprehension, receptive vocabulary, written language, and impoverished spoken language output, e.g. content and sophistication of communication.

<sup>893</sup> Russo *et al Intellectual and Developmental Disabilities* 100.

insult to the developing brain can disrupt learning processes in various ways. To determine the neurological impact, the age at which the injury happened needs to be considered, as well as the sleeper effect,<sup>895</sup> which refers to cognitive dysfunction manifesting only a significant time after the injury occurred.<sup>896</sup> There are general enduring dysfunctions that are concomitant with moderate to severe brain injury, according to Russo *et al* (table 3.3).<sup>897</sup>

However, every child remains unique, despite a diagnosis shared with other children. Each child with an ABI will have an individual profile of strengths and weaknesses that is determined by means of a formal neuropsychological assessment.

### **3.5 SPECIFIC CONDITIONS OF DEVELOPMENTAL DISABILITY NOT TYPICALLY ASSOCIATED WITH COGNITIVE DYSFUNCTION**

#### 3.5.1 Specific learning disorder (SLD)

Usually the intellectual development of children with learning difficulties corresponds with age expectations; in fact, some of these children have above-average intellectual functioning.<sup>898</sup> Yet their academic performance does not match their cognitive ability. This is due to neurological processing of learning material being compromised in various ways and at different stages of information processing,<sup>899</sup> resulting in different kinds of learning disorders.<sup>900</sup> But, as Louw and Louw comment, the learning disability diagnosis is not “a waste-paper basket” for every

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<sup>894</sup> Anderson *et al* *Developmental Neuropsychology* 174.

<sup>895</sup> Russo *et al* *Intellectual and Developmental Disabilities* 100; PM Richards and JW Kirk “Traumatic Brain Injury Across the Lifespan: A Neuropsychological Tutorial for Attorneys” (2010) 3 *Psychological Injury and Law* 2 at 17.

<sup>896</sup> Russo *et al* *Intellectual and Developmental Disabilities* 101.

<sup>897</sup> Russo *et al* *Intellectual and Developmental Disabilities* 102.

<sup>898</sup> Louw and Louw *Child and Adolescent Development* 232.

<sup>899</sup> *ibid.*

<sup>900</sup> *ibid.*

underachiever at school.<sup>901</sup> The learner has to fulfil the diagnostic requirements for a diagnosis of specific learning disorder.<sup>902</sup>

Although communication disorders are treated by the DSM-5 classification system as a separate group of neurodevelopmental disorders,<sup>903</sup> in the educational setting they form part of the group of learning disabilities for practical purposes.<sup>904</sup> Of particular relevance to the current exposition is social communication disorder (SCD). There are specific features<sup>905</sup> to verbal communication difficulties in children with SCD that

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<sup>901</sup> *ibid.*

<sup>902</sup> APA *DSM-5* 66-67.

<sup>903</sup> APA *DSM-5* 31:

“The communication disorders include language disorder, speech sound disorder, social (pragmatic) communication disorder, and childhood-onset fluency disorder (stuttering). The first three disorders are characterized by deficits in the development and use of language, speech, and social communication, respectively. Childhood-onset fluency disorder is characterized by disturbances of the normal fluency and motor production of speech, including repetitive sounds or syllables, prolongation of consonants or vowel sounds, broken words, blocking or words produced with an excess of physical tension. Like other neurodevelopmental disorders, communication disorders begin early in life and may produce lifelong functional impairments.”

<sup>904</sup> Louw and Louw *Child and Adolescent Development* 232.

<sup>905</sup> DVM Bishop and CF Norbury “Executive functions in children with communication impairments, in relation to autistic symptomology: I: Generativity” (2005) 9 *Autism* 7 at 11:

- When responding to a question, the child gets too detailed.
- However, the child does not provide sufficient details to make sense of the topic he or she is communicating about.
- The conversation is dominated by the child as a result of his or her verbosity.
- The child does not keep the context of the conversation in mind when he or she answers the most recent question.
- The child’s understanding of language is concrete.
- The child tends to respond to the alternative meaning of a homonym (a word that has more than one meaning).
- Topic drift occurs, i.e., the child uses a peripheral piece of information to shift conversation to what he or she would like to talk about.

are also found in high-functioning children with ASD (para 3.4.5).<sup>906</sup>

### 3.5.2 Attention-deficit / hyperactivity disorder (ADHD)

Attention-deficit / hyperactivity disorder (ADHD) is a neurodevelopmental condition diagnosed when a behaviour pattern has formed as a result of a combination of indicators of inattentiveness, hyperactivity and impulsivity over a period of more than six months.<sup>907</sup>

- Inattention: The child has major difficulty sustaining focus on the task at hand and as a result of getting distracted, fails to complete it purposefully.<sup>908</sup>
- Hyperactivity: The child displays inopportune behaviours of motor over-activity, for example, talkativeness, continuous movement of a body part, or fiddling.<sup>909</sup>
- Impulsivity: The child tends to act in an overhasty way without considering potential consequences, which also holds a marked risk for personal harm.<sup>910</sup>

In comparison to age mates, children with ADHD show clear deviations pertaining to the development of the prefrontal cortex, an area of the brain responsible for executive functioning such as regulatory processes (para 3.2.3).<sup>911</sup> This dysfunctional ability for self-regulation has a negative impact on the child's functioning in various contexts.<sup>912</sup> Due to the inverse relation between ToM and inattention and impulsivity, it is claimed that children with ADHD seem to be less adept at "mind-reading" (para 3.4.5).<sup>913</sup> Their social clumsiness is thus related to their limited ability "to read between the lines".

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<sup>906</sup> Bishop and Norbury 2005 *Autism* 10.

<sup>907</sup> APA *DSM-5* 60-61.

<sup>908</sup> APA *DSM-5* 61.

<sup>909</sup> *ibid.*

<sup>910</sup> *ibid.*

<sup>911</sup> Malherbe *Developmental Disorders*; Anderson *et al Developmental Neuropsychology* 433.

<sup>912</sup> APA *DSM-5* 61.

<sup>913</sup> CM Fahie and DK Symons "Executive functioning and theory of mind in children clinically referred for attention and behavior problems" (2003) 24 *Applied Developmental Psychology* 51 at 67.

### 3.5.3 Visual impairment (VI)

Various conditions can cause visual impairment. A distinction is made between purely ocular causation and an aetiology with neurological links.<sup>914</sup> Examples of eye diseases that cause marked visual problems during the developmental years are glaucoma<sup>915</sup> and cataracts.<sup>916</sup> Retinal detachment leads to “blind spots” in the field of vision due to particular areas of the retina failing to register light stimuli.<sup>917</sup> Diabetes can also cause an inadequate blood supply to the retina, resulting in retinopathy.<sup>918</sup> Eye muscle dysfunction is associated with conditions such as nystagmus<sup>919</sup> or strabismus.<sup>920</sup> In the prenatal period, infectious diseases contracted by the mother (e.g. rubella) can affect the development of the foetus.<sup>921</sup> Premature birth or birth trauma can also result in neurological complications causing visual impairment or loss.<sup>922</sup> Finally, brain trauma associated with accidents and injuries may result in visual disability.<sup>923</sup>

The extent of visual impairment is determined by means of an ophthalmologic assessment of visual acuity and field of vision and the diagnosis will either be legal blindness or low vision.<sup>924</sup> Some people who are legally blind may still have limited functional vision, but they use Braille as a communication system.<sup>925</sup> In the

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<sup>914</sup> SA Goodman *et al* “Position Paper: Intelligence Testing of Individuals Who Are Blind or Visually Impaired” <http://www.aph.org/tests/intelligencetesting.html> (accessed 15 November 2013).

<sup>915</sup> Hallahan and Kaufman *Exceptional Children* 314: Glaucoma is diagnosed when there is too much pressure in the eyeball.

<sup>916</sup> *ibid.*: Cataracts cloud the lens, causing blurred vision.

<sup>917</sup> T Pauw “The visually handicapped” in JA Kapp (ed) *Children with Problems An Orthopedagogical Perspective* (1989) 425.

<sup>918</sup> Hallahan and Kaufman *Exceptional Children* 314.

<sup>919</sup> *ibid.*: Nystagmus is diagnosed when there are rapid involuntary movements.

<sup>920</sup> *ibid.*: Strabismus indicates the eye(s) to be directed either inward or outward.

<sup>921</sup> Hallahan and Kaufman *Exceptional Children* 314.

<sup>922</sup> Goodman *et al* “Position paper”.

<sup>923</sup> *ibid.*

<sup>924</sup> Personal communication Marietha Meiring educational psychologist of Pioneer School for the Blind Worcester 12 June 2014.

<sup>925</sup> *ibid.*



educational setting it is important to monitor children with low vision: some diagnoses are associated with progressive deterioration (e.g. retinitis pigmentosa).<sup>926</sup>

The age of onset and degree of impairment are significant factors in terms of the development of conceptual thinking.<sup>927</sup> A child who is born blind is at a clear disadvantage in comparison to a child who lost his or her vision after a period of uncompromised visual perceptual development.<sup>928</sup>

Sight and hearing are the two senses that do not require volition to be used for the purpose of cognition. As Lowenfeld puts it, "vision is active as long as the eyes are open and hearing functions continually unless its organ is obstructed".<sup>929</sup> On the basis of this argument, visually impaired children have available only their sense of hearing for cognition. Additionally, they develop sharpened auditory perception as compensation for the diminished input through the visual sense.<sup>930</sup> This may explain why the language development of these children is usually not significantly affected by their disability.<sup>931</sup> Furthermore, if children with visual impairments are given adapted intelligence tests, their scores are generally comparable to those of their peers without visual problems.<sup>932</sup>

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<sup>926</sup> *ibid.*

<sup>927</sup> Hallahan and Kaufman *Exceptional Children* 319.

<sup>928</sup> *ibid.* According to Scott in Hallahan and Kaufman *Exceptional Children* 318-319,

"For the sighted child, the world meets him halfway. What he sees encourages him to move further out into his environment and to explore it. He learns literally hundreds of thousands of things from observation, imitation, and identification, without any effort on his part or on the part of his parents or teachers. The visually impaired child is dependent on others to organize, explain, and interpret the strange and confusing world around him."

<sup>929</sup> Hallahan and Kaufman *Exceptional Children* 318.

<sup>930</sup> Sparrow *et al Vineland-II* 155.

<sup>931</sup> Hallahan and Kaufman *Exceptional Children* 315.

<sup>932</sup> Hallahan and Kaufman *Exceptional Children* 317. Pauw *Children with Problems* 427 states,

"The cognitive development of the blind and the partially sighted child goes through the same phases as that of other children, but the progress from one phase to the next may be slower and will vary from child to child. This results largely from the limited or missing visual

Conversely, research indicates that in some abilities they do not share their peers' proficiency. Due to limited learning experiences they tend to have difficulty with abstract conceptualisation and rather approach tasks concretely<sup>933</sup> by means of their sense of touch.<sup>934</sup> They also lack visual information to integrate with other sensory information.<sup>935</sup> Object perception by means of sight happens simultaneously, while it is a successive process by way of touch.<sup>936</sup> Children who are visually impaired utilise two kinds of touch for tactile perception:<sup>937</sup>

- **"Synthetic touch** refers to a person's tactual exploration of objects small enough to be enclosed by one or both hands."<sup>938</sup>
- **"Analytic touch** involves the touching of various parts of an object and mentally constructing these separate parts."<sup>939</sup>

Understanding spatial concepts is a major challenge,<sup>940</sup> especially when the tactile sense cannot be employed in combination with kinaesthesia for conceptualisation.<sup>941</sup> The understanding of number and time concepts is delayed, at least initially.<sup>942</sup>

Adequate functioning of children with visual impairments is promoted by specific adaptations to their learning environment.<sup>943</sup>

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observation, which causes perception and conceptualization to be slowed down and lose quality."

<sup>933</sup> *ibid.*

<sup>934</sup> Pauw *Children with Problems* 433.

<sup>935</sup> Hallahan and Kaufman *Exceptional Children* 318.

<sup>936</sup> *ibid.*

<sup>937</sup> *ibid.*

<sup>938</sup> *ibid.*

<sup>939</sup> *ibid.*

<sup>940</sup> Hallahan and Kaufman *Exceptional Children* 317-318.

<sup>941</sup> Hallahan and Kaufman *Exceptional Children* 318.

<sup>942</sup> Pauw *Children with Problems* 428.

<sup>943</sup> Hallahan and Kaufman *Exceptional Children* 345, 348; Pauw *Children with Problems* 426, 428, 431, 440; Documentation provided by Pioneer School for the Blind, Worcester.

### 3.5.4 Hearing impairment (HI)

Individuals with hearing loss form a very diverse population.<sup>944</sup> The degree of hearing impairment is classified as either total hearing loss or is qualified as mild, moderate or severe, and the diagnosis is determined by means of audiometry.<sup>945</sup> Children with total sensory neural hearing loss are suitable candidates for cochlear implants,<sup>946</sup> while other children with hearing impairments utilise a range of hearing aids made possible by specialised technology.

“Early hearing loss can be the result of genetic anomalies, prenatal drug exposure, perinatal trauma, disease (e.g. meningitis), and/or exposure to extremely loud noises.”<sup>947</sup> Hearing impairment is accompanied by various speech and language problems. The window period for optimal language development of children who are hearing impaired is between the ages of one and four years.<sup>948</sup> Early detection is thus required for best intervention.

The earlier the hearing loss, the greater its impact on the child’s language development.<sup>949</sup> The child does not benefit from incidental learning of language within the social setting the way a child without a hearing disability does.<sup>950</sup> Although children with hearing impairments find acquisition of language a major challenge and it is claimed that there is a positive relation between the development

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<sup>944</sup> JA Kapp “The aurally handicapped” in JA Kapp (ed) *Children with Problems An Orthopedagogical Perspective* (1989) 377.

<sup>945</sup> Hallahan and Kaufman *Exceptional Children* 260.

<sup>946</sup> Hallahan and Kaufman *Exceptional Children* 270: A cochlear implant refers to when

“an internal electromagnetic coil, with an electrode that runs into the cochlea of the inner ear, is placed in the mastoid bone behind the ear. An external coil is fitted on the skin right over the internal coil. Sounds are picked up by a microphone worn on the clothing and are sent on to the cochlear nerve in the inner ear by way of the external coil, internal coil, and the electrode in the inner ear.”

<sup>947</sup> Garber *Developmental Psychology for Family Law Professionals* 65.

<sup>948</sup> *ibid.*

<sup>949</sup> Hallahan and Kaufman *Exceptional Children* 260, 272; Kapp *Children with Problems* 381-382.

<sup>950</sup> Asad *et al* 2013 *Child Language Teaching and Therapy* 320.

of language and cognition, research shows that most children with hearing impairments have average nonverbal intellectual functioning.<sup>951</sup>

Nonetheless, academic progress strongly relies on a learner's command of language. Since language acquisition forms the basis of reading and writing,<sup>952</sup> children with hearing impairments usually struggle with these scholastic skills.<sup>953</sup> Learners with hearing impairments can consequently fall behind, not because of differences in cognitive functioning, but because of language-related challenges. For example, auditory discrimination could be a difficulty<sup>954</sup> and auditory memory less functional.<sup>955</sup> Adequate language skills for narration are usually not developed:<sup>956</sup> These learners do not only omit facts, but also confabulate (make their own additions to fill gaps in memory) and/or confuse details.<sup>957</sup>

In an educational setting, learners are taught South African Sign Language (SASL) as a second language and it is primarily utilised as the language of teaching.<sup>958</sup> Persons with hearing impairment depend on AAC – augmentative and alternative communication – for communication in their wider social environment.<sup>959</sup> AAC is categorised as unaided and aided, on the basis of the presence or absence of technology during communication.<sup>960</sup> Sign language is most frequently used as unaided AAC,<sup>961</sup> and aided AAC ranges "from low-tech communication books to high-

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<sup>951</sup> Hallahan and Kaufman *Exceptional Children* 274-275. Nonverbal cognition refers to reasoning that does not require receptive or expressive language as cognitive tools.

<sup>952</sup> Personal communication Lize van Niekerk speech and language therapist George 30 July 2014.

<sup>953</sup> Hallahan and Kaufman *Exceptional Children* 275.

<sup>954</sup> Kapp *Children with Problems* 407.

<sup>955</sup> *ibid.*

<sup>956</sup> Asad *et al* 2013 *Child Language Teaching* 320.

<sup>957</sup> Kapp *Children with Problems* 407.

<sup>958</sup> Personal communication Norma Karriem Principal of Dominican School for the Deaf Wittebome 16 September 2013.

<sup>959</sup> WHO *ICF* 135.

<sup>960</sup> Personal communication Lize van Niekerk.

<sup>961</sup> *ibid.*

tech aids and as such these systems can be tailored to the specific needs of the individual".<sup>962</sup>

Hearing impairment usually poses a significant challenge to a child's adaptive functioning.<sup>963</sup> When no concerted effort is made to include and involve these children in the events of daily living in the hearing world, they do not add these experiences and accompanying procedures and routines to their knowledge base (paras 3.2.3 and 3.2.4).<sup>964</sup> This is to the detriment of concept development.<sup>965</sup>

Furthermore, limited access to language resulting from hearing loss has negative implications for his or her emotional life.<sup>966</sup> For example, without sufficient affective vocabulary, the child is at a loss to understand his or her own emotional world, or to communicate about it (para 3.2.4).<sup>967</sup> Subsequently language does not offer a regulatory function.<sup>968</sup>

The moral development of a child who is hearing impaired is to a certain degree also affected by the lack of socialisation in the context of natural and spontaneous verbal communication.<sup>969</sup> Often these children do not pair tone of voice or intonation with verbal content, and the meaning of communication remains literal and concrete.<sup>970</sup> Consequently interpersonal relationships are not enriched by pro-social moral reasoning (para 3.2.5).<sup>971</sup> ToM development is also delayed (para 3.4.5).<sup>972</sup>

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<sup>962</sup> Murray and Goldbart 2009 *Child Language Teaching and Therapy* 32.

<sup>963</sup> Hallahan and Kaufman *Exceptional Children* 276, 289.

<sup>964</sup> *ibid.*

<sup>965</sup> Kapp *Children with Problems* 392-393.

<sup>966</sup> Kapp *Children with Problems* 395.

<sup>967</sup> *ibid.*

<sup>968</sup> *ibid.*

<sup>969</sup> Kapp *Children with Problems* 396.

<sup>970</sup> *ibid.*

<sup>971</sup> *ibid.*

<sup>972</sup> Sprung 2010 *Child and Adolescent Mental Health* 207.

### 3.6 PARTICIPATION RESTRICTIONS RELATED TO TESTIMONIAL COMPETENCY

According to the World Health Organisation, “[a] person’s functioning and disability is conceived as a dynamic interaction between health conditions (diseases, disorders, injuries, traumas, etc.) and contextual factors”.<sup>973</sup> A subset of contextual factors comprises the environmental aspects that can either facilitate or hinder the person’s optimal participation in situations of living.<sup>974</sup> The policies of the South African legal system pertaining to child witnesses with developmental disabilities constitute the environmental factor that is specifically in focus for this research.<sup>975</sup>

A witness is considered competent when his or her level of cognitive, language and moral development allows for adequate participation in the truth-seeking process (para 2.4.2). However, according to literature on testimonial competency, the capacity<sup>976</sup> of a child with a neurodevelopmental condition imposes particular limitations<sup>977</sup> when that child has to appear as a witness in a court of law.<sup>978</sup>

On the basis of empirical research, the anticipated limitations associated with giving evidence are discussed according to the four aspects of testimonial competency (para 2.6), i.e., perceptual abilities, memory, communication and moral capacity.

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<sup>973</sup> WHO *ICF* 8.

<sup>974</sup> WHO *ICF* 8, 10.

<sup>975</sup> WHO *ICF* 198.

<sup>976</sup> WHO *ICF* 15: Capacity is “an individual’s ability to execute a task or an action. This construct aims to indicate the highest probable level of functioning a person may reach in a given domain at a given moment”. Capacity is assessed in a formal way, e.g. by means of an assessment under test conditions.

<sup>977</sup> WHO *ICF* 15-16:

“*Limitations* or *restrictions* are assessed against a generally accepted population standard. The standard or norm against which an individual’s capacity and performance is compared is that of an individual without a similar health condition (disease, disorder or injury, etc.). The limitation or restriction records the discordance between the observed and the expected performance. The expected performance is the population norm, which represents the experience of people without the specific health condition.”

<sup>978</sup> WHO *ICF* 170.

Ways to foster the performance of a child witness during testimony are suggested,<sup>979</sup> besides capitalising on the personal strengths of an individual witness.

### 3.6.1 Perceptual abilities

The evidence of witnesses is based on their sensory experiences during the course of the incidents in question. Sensory experiences are registered through visual, auditory, gustatory, olfactory and/or tactile perception (para 2.6.1). The restrictions imposed on perceptual competencies by the disabilities of some witnesses are listed in table 3.4. Actions to facilitate these limitations are also suggested.

Table 3.4 Perceptual competency limitations and facilitation

<b>PERCEPTUAL ABILITIES</b>	
<b>Limitation</b> <sup>980</sup>	<b>Facilitator</b> <sup>981</sup>
Impairments of vision VI (para 4.5.3)	Involve visual impairment expert: adapted or alternative modalities
Impairments of hearing HI (para 4.5.4)	Involve hearing impairment expert: AAC <sup>982</sup>
Difficulties with visual-spatial perception	Avoid detailed questions requiring visual-

<sup>979</sup> WHO *ICF* 16.

<sup>980</sup> WHO *ICF* 10: "**Activity limitations** are difficulties an individual may have in executing activities."

<sup>981</sup> WHO *ICF* 214:

"**Facilitators** are factors in a person's environment that, through their absence or presence, improve functioning and reduce disability. These include aspects such as a physical environment that is accessible, the availability of relevant assistive technology, and positive attitudes of people towards disability, as well as services, systems and policies that aim to increase the involvement of all people with a health condition in all areas of life. Absence of a factor can also be facilitating, for example the absence of stigma or negative attitudes. Facilitators can prevent an impairment or activity limitation from becoming a participation restriction, since the actual performance of an action is enhanced, despite the person's problem with capacity."

<sup>982</sup> J Bornman "Join the fight – as we pave the new way Forward: A view from South Africa" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

FASD <sup>983</sup>	spatial abilities (e.g. location)
Sensory overload CP (para 3.4.2), ASD <sup>984</sup>	Stimulate preferred sense only <sup>985</sup>

### 3.6.2 Memory

The child witness has to remember what he or she perceived at the time of the event in question (para 2.6.2). The limitations imposed on memory competencies by the disabilities of some witnesses are listed in table 3.5. Recommendations are also made as to how to accommodate these limitations.

Table 3.5 Memory competency limitations and facilitation

<b>MEMORY</b>	
<b>Limitation</b>	<b>Facilitator</b>
Difficulty to encode events LD <sup>986</sup>	Do not expect age appropriate narrative <sup>987</sup>
Deficient verbal short-term memory ID, <sup>988</sup> DS <sup>989</sup>	Ask simple, short questions on only one topic at a time <sup>990</sup> Provide visual rather than verbal information <sup>991</sup>
Problem with working memory ADHD, <sup>992</sup> SLD, <sup>993</sup> DS, <sup>994</sup> FASD, <sup>995</sup> ASD, <sup>996</sup> mild ID <sup>997</sup>	Present information at slower pace <sup>998</sup> Break information up into parts <sup>999</sup>

<sup>983</sup> Mattson *et al* 2011 *Neuropsychological Review* 86-87.

<sup>984</sup> Malherbe *Autistic Spectrum Disorder Workshop*.

<sup>985</sup> *ibid.*

<sup>986</sup> DVM Bishop and C Donlan "The role of syntax in encoding and recall of pictorial narratives: Evidence from specific language impairment" (2005) 23 *British Journal of Developmental Psychology* 25 at 40.

<sup>987</sup> Bishop and Donlan 2005 *British Journal* 39.

<sup>988</sup> Henry and Winfield in Henry *et al Children's Testimony* 2 ed 261.

<sup>989</sup> Henry *et al Children's Testimony* 2 ed 265, 266.

<sup>990</sup> Henry *et al Children's Testimony* 2 ed 261.

<sup>991</sup> MJ van der Molen *et al* "Verbal working memory in children with mild intellectual disabilities" (2007) 51(2) *Journal of Intellectual Disabilities Research* 162 at 168.



Concreteness ID <sup>1000</sup>	Avoid jargon, abstract questions, double negatives and enquire about one issue per question <sup>1001</sup>
Limitations of episodic memory ID, <sup>1002</sup> ASD, <sup>1003</sup> ID with epilepsy, <sup>1004</sup> DS <sup>1005</sup>	Scaffold with semantic cues <sup>1006</sup>
Difficulty recalling "gist" of events ASD <sup>1007</sup>	Pose specific non-leading questions <sup>1008</sup>
Inadequate ability to remember faces and voices ASD <sup>1009</sup>	Avoid such identification questions
Sparse ("errors of omission") <sup>1010</sup> and inaccurate recall due to delay between event	Make video recording of initial statement <sup>1012</sup> Minimise period between event and trial <sup>1013</sup>

<sup>992</sup> Archibald *et al* 2011 *Child Language Teaching and Therapy* 297; Malherbe *Developmental Disorders*.

<sup>993</sup> *ibid.*

<sup>994</sup> *ibid.*

<sup>995</sup> Kodituwakku and Kodituwakku 2011 *Neuropsychological Review* 218; Pei *et al* "Memory Patterns of Children with FASD"; Wacha and Obrzut 2007 *Developmental and Physical Disabilities* 223.

<sup>996</sup> Malherbe *Autistic Spectrum Disorders Workshop*.

<sup>997</sup> Van der Molen *et al* 2007 *Intellectual Disabilities Research* 167.

<sup>998</sup> Malherbe *Autistic Spectrum Disorders Workshop*.

<sup>999</sup> *ibid.*

<sup>1000</sup> Henry *et al Children's Testimony* 2 ed 261.

<sup>1001</sup> Cooke and Davies 2001 *British Journal of Learning Disabilities* 86.

<sup>1002</sup> *ibid.*

<sup>1003</sup> McCrory *et al* 2007 *Journal of Child Psychology* 482.

<sup>1004</sup> A-C Cederborg and M Lamb "Interviewing alleged victims with intellectual disabilities" (2008) 52(1) *Journal of Intellectual Disability Research* 49 at 50.

<sup>1005</sup> *ibid.*

<sup>1006</sup> Tager-Flusberg in McCrory *et al* 2007 *Journal of Child Psychology* 482. Also see Schacter *Seven Sins of Memory* 32-33.

<sup>1007</sup> Jordan in Henry *et al Children's Testimony* 269, 270; McCrory *et al* 2007 *Journal of Child Psychology* 486.

<sup>1008</sup> McCrory *et al* 2007 *Journal of Child Psychology* 486.

<sup>1009</sup> Henry *et al Children's Testimony* 2 ed 269.

and questioning ID <sup>1011</sup>	Competent adult interviewer employs structure and scaffolding, <sup>1014</sup> "cues and prompts" <sup>1015</sup>
Inaccurate statements due to idiosyncratic understanding of events FASD <sup>1016</sup>	Verify information <sup>1017</sup>
Confabulation / intrusion errors (spontaneous provision of incorrect information) in: <ul style="list-style-type: none"> <li>• content during free recall</li> <li>• details during elaboration on content<sup>1018</sup></li> </ul> ID, <sup>1019</sup> FASD <sup>1020</sup>	Use correct order of questioning <sup>1021</sup> Check for plausibility <sup>1022</sup>
Difficulty with free recall of information	Follow-up interview <sup>1024</sup>

<sup>1010</sup> Milne and Bull 2001 *British Journal of Learning Disabilities* 94.

<sup>1013</sup> Lamb and Brown 2006 *British Journal of Developmental Psychology* 226.

<sup>1012</sup> Cooke and Davies 2001 *British Journal of Learning Disabilities* 87.

<sup>1013</sup> Cederborg and Lamb 2008 *Intellectual Disability Research* 55; N BenZeev *et al* "A View for Israel" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

<sup>1014</sup> Lamb and Brown 2006 *British Journal of Developmental Psychology* 225.

<sup>1015</sup> Milne and Bull 2001 *British Journal of Learning Disabilities* 94.

<sup>1016</sup> Fast and Conry 2009 *Developmental Disabilities Research Reviews* 254.

<sup>1017</sup> *ibid.*

<sup>1018</sup> Michel *et al* 2000 *Journal of Clinical Psychology* 457.

<sup>1019</sup> SE Agnew and MB Powell "The Effect of Intellectual Disability on Children's Recall of an Event Across Different Question Types" (2004) 28(3) *Law and Human Behavior* 271 at 286-287. However, according to the study of Michel *et al* 2000 *Journal of Clinical Psychology* 458, the difference in performance between children with ID and without ID was statistically insignificant.

<sup>1020</sup> Pei *et al* "Memory Patterns of Children with FASD" e53; Fast and Conry 2009 *Developmental Disabilities Research Reviews* 253-254.

<sup>1021</sup> Bull 2010 *Legal and Criminological Psychology* 11; Michel *et al* 2000 *Journal of Clinical Psychology* 461: Start with open-ended questions and then proceed with focused questions. If necessary, yes/no questions are eventually asked in a non-suggestive manner.

<sup>1022</sup> Michel *et al* 2000 *Journal of Clinical Psychology* 461.

FASD <sup>1023</sup>	Rather tap recognition memory <sup>1025</sup>
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### 3.6.3 Communication

Child witnesses have to understand “court language” and be able to communicate their perceptions, feelings and thoughts in relation to the court’s questions. To give a narrative account of the events in question requires basic communication skills (para 2.6.3). The limitations imposed on competencies of language and communication by disabilities of some witnesses are listed in table 3.6. Suggestions are made regarding accommodating these limitations.

Table 3.6 Communication competency limitations and facilitation

<b>COMMUNICATION</b>	
<b>Limitation</b>	<b>Facilitator</b>
Limited or no functional speech (LNFS) ASD, <sup>1026</sup> ID <sup>1027</sup>	Adapt courtroom procedures <sup>1028</sup> Involve speech and language therapist and/or utilise aided or unaided AAC (para 3.5.4) <sup>1029</sup>

<sup>1024</sup> Henry and Godjonsson 2003 *Law and Human Behavior* 483-484: Children usually benefit from a follow-up interview after an initial free recall interview. Long-term memory is consolidated by using rehearsal as a strategy and forgetting is thereby also counteracted. Repeated non-suggestive interviews can facilitate retrieval of new information that is relevant to the case. (This is confirmed by the researcher’s experience when the SAVE model (para 3.7.3) was applied in the case of a majority of persons with ID.)

<sup>1023</sup> Kodituwakku 2009 *Developmental Disabilities Research Reviews* 221.

<sup>1025</sup> Kodituwakku 2009 *Developmental Disabilities Research Reviews* 221.

<sup>1026</sup> C Rainville “Best Practices for Interviewing Children with Disabilities” [www.americanbar.org/child](http://www.americanbar.org/child) (accessed 15 August 2013).

<sup>1027</sup> DN Bryen and DH Wickman “Ending the Silence of People with Little or No Functional Speech: Testifying in Court” (2011) *Disability Studies Quarterly* <http://dsq-sds.org/article/view/1711/1759> (accessed 14 June 2014).

<sup>1028</sup> IL Ochs “Securing Freedom from Fear and Injustice within the Justice System” in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

<sup>1029</sup> Rainville “Interviewing Children with Disabilities”; Bryen and Wickman “Ending the Silence of People with LNFS”; Cooke and Davies 2001 *British Journal of Learning Disabilities* 85.

	Use intermediary trained in SASL <sup>1030</sup> Allow leading questions <sup>1031</sup>
Speech problems DS, <sup>1032</sup> ID <sup>1033</sup>	Involve person familiar with child to clarify unintelligible responses <sup>1034</sup> Use "speech-to-speech transmission" <sup>1035</sup> or communicative device <sup>1036</sup> Employ specialised intermediary <sup>1037</sup>
Limited expressive language abilities	Include visual and spatial material <sup>1041</sup>

<sup>1030</sup> DN Bryen "Ending the Silence of Violence: A View from the United States and Canada" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

<sup>1031</sup> Bryen and Wickman "Ending the Silence of People with LNFS":

"Leading the witness is defined as asking a question during a trial or deposition that allegedly puts words in the mouth of the witness or suggests the answer. Leading questions may often be answerable with a *yes* or *no*. ... [W]here a witness is experiencing difficulty in answering questions as in the case of a victim who has limited or no functional speech, it is not an abuse of the discretion of the court to permit leading questions. Leading questions can also be used when it takes a long time to spell out a long sentence, noting that the court has the discretion to permit counsel to use leading questions requiring only short answers in the interest of time and to avoid confusion."

<sup>1032</sup> Henry *et al Children's Testimony* 2 ed 266.

<sup>1033</sup> NM Aarons and MB Powell "Issues related to interviewer's ability to elicit reports of abuse from children with an intellectual disability: A review" (2003) 14(3) *Current Issues in Criminal Justice* 257 at 259.

<sup>1034</sup> Henry *et al Children's Testimony* 2 ed 266.

<sup>1035</sup> Bryen *Stop Violence against People with Disabilities*.

<sup>1036</sup> Aarons and Powell 2003 *Current Issues in Criminal Justice* 259.

<sup>1037</sup> *ibid*; Rainville 2012 *Child Law Practice* 150; Cooke and Davies 2001 *British Journal of Learning Disabilities* 85.

<sup>1041</sup> Henry *et al Children's Testimony* 2 ed 266; Cunningham and Stevens "Helping a child to be a witness"; Fraser and McDonald "Working with Victims with FASD" 20.

ID, <sup>1038</sup> DS, <sup>1039</sup> FASD <sup>1040</sup>	Allow nonverbal communication, e.g. demonstration <sup>1042</sup>
Limited receptive language abilities ID, <sup>1043</sup> DS, <sup>1044</sup> FASD <sup>1045</sup>	Refer for hearing evaluation <sup>1046</sup> Follow structured approach to questioning (para 4.5) <sup>1047</sup> Ask simple and short questions <sup>1048</sup> Repeat information <sup>1049</sup> Avoid leading questions <sup>1050</sup> Get to know and use child's vocabulary <sup>1051</sup> Involve intermediary <sup>1052</sup>
Literal interpretation of language ASD <sup>1053</sup>	Involve speech and language therapist <sup>1054</sup> Avoid metaphoric language, hints and

<sup>1038</sup> Rainville 2012 *Child Law Practice* 146.

<sup>1039</sup> Henry *et al Children's Testimony* 2 ed 265.

<sup>1040</sup> Cunningham and Stevens "Helping a child to be a witness"; Fast and Conry 2009 *Developmental Disabilities Research Reviews* 252.

<sup>1042</sup> Henry *et al Children's Testimony* 2 ed 266; Fraser and McDonald "Working with Victims with FASD" 20; CB Hortons and KA Kochurka "The Assessment of Children with Disabilities Who Report Sexual Abuse: A Special Look at Those Most Vulnerable" in T Ney (ed) *True and false allegations of child sexual abuse: assessment and case management* (1995) 287.

<sup>1043</sup> Rainville 2012 *Child Law Practice* 146.

<sup>1044</sup> Henry *et al Children's Testimony* 2 ed 266.

<sup>1045</sup> Cunningham and Stevens "Helping a child to be a witness"; Fraser and McDonald "Working with Victims with FASD" 15.

<sup>1046</sup> Henry *et al Children's Testimony* 273.

<sup>1047</sup> Advocacy Training Council of the Bar of England & Wales "Task Report on Vulnerable Witnesses".

<sup>1048</sup> Henry *et al Children's Testimony* 2 ed 266; Fraser and McDonald "Working with Victims with FASD" 19.

<sup>1049</sup> Cunningham and Stevens "Helping a child to be a witness"; Fraser and McDonald "Working with Victims with FASD" 20.

<sup>1050</sup> Rainville 2012 *Child Law Practice* 151.

<sup>1051</sup> Advocacy Training Council of the Bar of England & Wales "Task Report on Vulnerable Witnesses" 58.

<sup>1052</sup> Fraser and McDonald "Working with Victims with FASD" 20.

	jokes <sup>1055</sup>
Lack of communicative confidence DS, <sup>1056</sup> HI <sup>1057</sup>	Involve professionals known to child during proceedings <sup>1058</sup> Provide opportunities for nonverbal communication <sup>1059</sup> Take slower pace <sup>1060</sup> Rephrase questions <sup>1061</sup> Give reassurances <sup>1062</sup>
Poor ability to give narrative account ASD, <sup>1063</sup> language-related SLD, <sup>1064</sup> FASD, <sup>1065</sup> ADHD <sup>1066</sup>	Foster self-confidence <sup>1067</sup> Give opportunity to write answers <sup>1068</sup> Teach and practise narrative <sup>1069</sup>

<sup>1053</sup> Henry *et al Children's Testimony 2* ed 270; Advocacy Training Council of the Bar of England & Wales "Task Report on Vulnerable Witnesses" para 14.4; Archer and Hurley 2013 *Intellectual Disabilities and Offending Behaviour* 55.

<sup>1054</sup> Henry *et al Children's Testimony 2* ed 271.

<sup>1055</sup> Rainville "Interviewing Children with Disabilities".

<sup>1056</sup> Henry *et al Children's Testimony 2* ed 271.

<sup>1057</sup> Personal communication Norma Karriem.

<sup>1058</sup> *ibid.*

<sup>1059</sup> *ibid.*

<sup>1060</sup> Henry *et al Children's Testimony 2* ed 266.

<sup>1061</sup> *ibid.*

<sup>1062</sup> *ibid.*

<sup>1063</sup> Rainville "Interviewing Children with Disabilities"; Manolitsi and Botting 2011 *Child Language Teaching* 48-49, 51; McCrory *et al* 2007 *Journal of Child Psychology* 483.

<sup>1064</sup> LB Green and JS Klecan-Aker "Teaching story grammar components to increase oral narrative ability: A group intervention study" (2011) 28(3) *Child Language Teaching and Therapy* 263 at 264.

<sup>1065</sup> Coggins *et al* 2001 *Language, Speech and Hearing* 119, 124.

<sup>1066</sup> Malherbe *Developmental Disorders*.

<sup>1067</sup> R Murfett *et al* "The effect of intellectual disability on the adherence of child witnesses to a 'story grammar' framework" (2008) 33(1) *Journal of Intellectual and Developmental Disability* 2 at 9.

<sup>1068</sup> Rainville "Interviewing Children with Disabilities".

<sup>1069</sup> Green and Klecan-Aker 2011 *Child Language Teaching* 271; Murfett *et al* 2008 *Journal of Intellectual and Developmental Disability* 8; Aarons and Powell 2003 *Current Issues in Criminal Justice* 260.

	Ask questions in correct order. <sup>1070</sup> Pose leading questions as last resort, only if child is not that suggestible. <sup>1071</sup>
Difficulty generating information ASD <sup>1072</sup>	Pose questions containing options to choose from
Difficulty taking personal point of view ASD <sup>1073</sup>	Involve speech and language therapist <sup>1074</sup>
Mistakes with orientation markers of space and time ID, <sup>1075</sup> ASD <sup>1076</sup>	Involve speech and language therapist <sup>1077</sup> Expert should explain features of disability to court <sup>1078</sup>
Child's responses indicate confusion ID <sup>1079</sup>	Structure questioning <sup>1080</sup> Prepare child for questions about next topic

<sup>1070</sup> Bull 2010 *Criminological Psychology* 9.

<sup>1071</sup> Rainville "Interviewing Children with Disabilities":

"Try, of course, to avoid leading questions. Sometimes, however, an autistic child may require a leading question in order to respond. If that is the case, ask some leading questions you know are wrong. This establishes that the child disagrees with you when the leading question is wrong. For example, if you know a child was assaulted at home, you might ask, 'Did this happen at school?' If the child answers positively, then your interview is not reliable. But if the child disagrees with you and says no, it will help later to show the child gave reliable answers in response to leading questions."

This "test" is also suggested by Hortons and Kochurka *True and false allegations of child sexual abuse* 285-286.

<sup>1072</sup> Forrester *Working with children on the autistic spectrum*.

<sup>1073</sup> Henry *et al Children's Testimony* 2 ed 269.

<sup>1074</sup> Henry *et al Children's Testimony* 2 ed 271.

<sup>1075</sup> Rainville 2012 *Child Law Practice* 148, 149.

<sup>1076</sup> Henry *et al Children's Testimony* 2 ed 268.

<sup>1077</sup> Henry *et al Children's Testimony* 2 ed 271.

<sup>1078</sup> Rainville 2012 *Child Law Practice* 148:

"We find these kinds of errors are the norm for children with intellectual disabilities. Some facts in their report simply cannot be true, but there is usually an explanation for why they could not get their stories 'right.' The key is to analyze the facts carefully to figure out whether the child's story is false or whether the child's disability created false facts in an otherwise true story."

	each time <sup>1081</sup>
Echolalia (para 3.4.5) ASD <sup>1082</sup>	Involve speech and language therapist <sup>1083</sup>
Changing answers during cross-examination ID <sup>1084</sup>	Recognise tendency associated with cognitive impairment, especially when stressed <sup>1085</sup> and alert court Avoid repeating questions <sup>1086</sup>
Agreeing with misleading suggestions ADHD, <sup>1087</sup> ID, <sup>1088</sup> FASD <sup>1089</sup>	"Practise" cross-examination with staged incident <sup>1090</sup> Change method of cross-examination <sup>1091</sup> Ensure court monitors appropriate questioning <sup>1092</sup>

### 3.6.4 Moral capacity

The child's cognitive development will allow him or her to distinguish between truth and falsehood, and his or her moral development will determine whether he or she understands that deception is morally wrong (para 2.6.4). The limitations imposed on the moral competency by disabilities of some witnesses are listed in table 3.7. Actions to facilitate these limitations are also recommended.

<sup>1079</sup> Advocacy Training Council of the Bar of England & Wales "Task Report on Vulnerable Witnesses" 62.

<sup>1080</sup> *ibid.*

<sup>1081</sup> *ibid.*

<sup>1082</sup> Henry *et al Children's Testimony* 2 ed 270.

<sup>1083</sup> Henry *et al Children's Testimony* 2 ed 271.

<sup>1084</sup> Henry *et al Children's Testimony* 2 ed 263.

<sup>1085</sup> Henry *et al Children's Testimony* 2 ed 262-263.

<sup>1086</sup> Henry *et al Children's Testimony* 2 ed 264.

<sup>1087</sup> Zajac *et al* 2012 *Developmental Review* 187.

<sup>1088</sup> Zajac *et al* 2012 *Developmental Review* 198.

<sup>1089</sup> Fast and Conry 2009 *Developmental Disabilities Research Reviews* 254.

<sup>1090</sup> Zajac *et al* 2012 *Developmental Review* 196-197.

<sup>1091</sup> Zajac *et al* 2012 *Developmental Review* 198.

<sup>1092</sup> *ibid.*



Table 3.7 Moral competency limitations and facilitation

<b>WILLINGNESS TO TELL THE TRUTH</b>	
<b>Limitation</b>	<b>Facilitator</b>
Limited or inability to explain difference between truth and lie and/or define moral concepts ID <sup>1093</sup>	Alert the court <sup>1094</sup> Adjust procedure for competency examination <sup>1095</sup>
Impaired moral decision making and heightened lie-telling behaviour FASD <sup>1096</sup>	Emphasise consequences of lying <sup>1097</sup>

Henry *et al*/emphasise that every prospective witness has his or her personal profile of strengths and weaknesses.<sup>1098</sup> Even if the features associated with ID and/or a specific developmental disorder serve as a useful guide regarding components of competency, the child should still be regarded as a unique individual. An individualised profile needs to be compiled.<sup>1099</sup>

### **3.7 FORMAL COMPETENCY ASSESSMENT**

The equality rights of persons with disabilities are acknowledged when structures for the assessment of capacity are established:

“Every person with a disability must be ensured full legal capacity at every stage of the criminal process and must not be inherently or automatically rendered incompetent to testify. It should be assumed that if a person with an intellectual, psychosocial or communication disability is in fact provided with the required assistance,

<sup>1093</sup> Dickman *et al Disability and Social Change* 126.

<sup>1094</sup> *ibid.*

<sup>1095</sup> *ibid.*

<sup>1096</sup> Rasmussen *et al* 2008 *Pediatric Psychology* 223.

<sup>1097</sup> Rasmussen *et al* 2008 *Pediatric Psychology* 224.

<sup>1098</sup> Henry *et al Children’s Testimony* 2 ed 255.

<sup>1099</sup> Henry *et al Children’s Testimony* 2 ed 255, 257, 272. According to Henry *et al Children’s Testimony* 2 ed 270, a personalised profile is absolutely crucial for children on the autism spectrum.

accommodations, translation or language facilitation, there is no objective reason to render him or her incompetent or lacking the capacity to give testimony, give a deposition or be questioned and cross-examined and take an oath. Furthermore, placing structured limitations on one's capacity to participate in a trial or allowing claims to this effect is not only unnecessary but legitimizes stigma and misconceptions about persons with disabilities. Therefore the law must avoid structures that limit capacity on the basis of disability. ... The object of making proceedings accessible is not to ease the process for the person with disabilities nor improve his or her wellbeing during the police inquiry or trial. Rather, it is to enable him or her to participate fully in these processes without having restrictions or limitations placed due to the disability."<sup>1100</sup>

### 3.7.1 Assessment of competency

A formal competency assessment will ensure that every witness with a disability who has testimonial competence proceeds to eventually giving evidence, if or when required. Moreover, such an evaluation will reveal an individualised profile of relevant strengths and weaknesses and which witness accommodations are requisite.

It is opined that if a child with a developmental disability is a prospective witness, a multidisciplinary team should be convened as soon as possible.<sup>1101</sup> An assessment of competency issues should be conducted in accordance with the child's "developmental age"<sup>1102</sup> and/or special needs,<sup>1103</sup> preceding any forensic interview<sup>1104</sup> and/or the trial.<sup>1105</sup> It is recommended that the child's individual

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<sup>1100</sup> BenZeev *et al Violence against People with Disabilities*.

<sup>1101</sup> Cunningham and Stevens "Helping a child to be a witness"; APSAC *Practice Guidelines* 7. Related to the South African context: Nel *How to empower children*; M van der Westhuizen *et al A Multi-disciplinary case presentation of a speech impaired victim of child abuse* 15<sup>th</sup> Annual SAPSAC conference Pretoria 10 November 2014.

<sup>1102</sup> Cunningham and Stevens "Helping a child to be a witness"; APSAC *Practice Guidelines* 7.

<sup>1103</sup> Kenniston *Handbook on Questioning Children* 125; Henry *et al Children's Testimony* 261- 262.

<sup>1104</sup> Rainville "Interviewing Children with Disabilities"; Cederborg and Lamb 2008 *Intellectual Disability Research* 55.

education plan or information on his or her most recent educational assessment should be perused, as well as background information on the child's challenges.<sup>1106</sup>

An individualised approach should be taken to each witness who enters the legal environment.<sup>1107</sup> Kruger opines that formal testing bolsters the validity of recommendations to the court.<sup>1108</sup> On the other hand, Dickman points out that in court actual witness competency rather relies on social interaction dynamics (e.g. supportive environment) than on intrapersonal traits (e.g. cognitive ability).<sup>1109</sup>

According to literature, the following aspects are relevant to address during the evaluation of a potential witness:

- narrative ability,<sup>1110</sup>
- memory capacity,<sup>1111</sup>
- if applicable, effect of trauma on narrative ability and memory,<sup>1112</sup> and
- once again if necessary, which adaptations<sup>1113</sup> and/or alternative communication aids<sup>1114</sup> are required during forensic interviews and/or giving evidence.

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<sup>1105</sup> J Larcher "Crime against Persons with Little or No Functional Speech: A UK Perspective" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

<sup>1106</sup> Rainville "Interviewing Children with Disabilities"; Cederborg and Lamb 2008 *Intellectual Disability Research* 55.

<sup>1107</sup> MR Kebbell *et al* "People with learning disabilities as witnesses in court: What questions should lawyers ask?" (2001) 29 *British Journal of Learning Disabilities* 98 at 99.

<sup>1108</sup> Kruger *Competency testing for children*.

<sup>1109</sup> Personal communication Bev Dickman.

<sup>1110</sup> Kenniston *Handbook on Questioning Children* 129; J Dion and M Cyr "The Use of the NICHHD Protocol to Enhance the Quantity of Details Obtained from Children with Low Verbal Abilities in Investigative Interviews: A Pilot Study" (2008) 17(2) *Journal of Sexual Abuse* 144 at 156-158; Zajac *et al* *Developmental Review* 181 at 196-197; Murfett *et al* 2008 *Journal of Intellectual and Developmental Disability* 4, 6.

<sup>1111</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 15, 17.

<sup>1112</sup> M Wilkinson *Changing Minds in Therapy Emotion, Attachment, Trauma & Neurobiology* (2010) 132.

In the UK legal system a professional person is formally appointed as an “intermediary”.<sup>1115</sup> He or she serves as the link between the multi-disciplinary team working with the witness with special needs and the forensic structures (police, prosecution and the court) before and during the court case.<sup>1116</sup> The intermediary assists the investigating police officer to take a statement from a child with a developmental disability, by giving consideration to the relevant participation restrictions.<sup>1117</sup> The intermediary also compiles a report after the competency assessment with a view to the prosecutor formulating a “trial plan”.<sup>1118</sup> If adaptations are required for optimal witness participation during testimony, arrangements can be made timeously.<sup>1119</sup> In the Israeli legal context, expert witness testimony on the actual competency issues of the witness is also deposited at an appropriate stage during the trial.<sup>1120</sup>

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<sup>1113</sup> Goodman *et al* “Position Paper”.

<sup>1114</sup> United Nations *Convention on the Rights of Persons with Disabilities and Optional Protocol* art 21(b).

<sup>1115</sup> DN Bryen, S Reiter and J Bornman “Using Lessons Learned to Inform the Future” in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) Recommendation 3; BM O’Mahony “The emerging role of the Registered Intermediary with the vulnerable witness and offender: facilitating communication with the police and members of the judiciary” (2010) 38 *British Journal of Learning Disabilities* 232 at 234.

<sup>1116</sup> O’Mahony 2010 *British Journal of Learning Disabilities* 234.

<sup>1117</sup> J Keilty and G Connelly “Making a Statement: An exploratory study of barriers facing women with an intellectual disability when making a statement about sexual assault to police” (2001) 16(2) *Disability and Society* 273 at 282-284; Advocacy Training Council of the Bar of England & Wales “Task Report on Vulnerable Witnesses” paras 4.5; 7.15; 11.3; 12.5; 15.2-15.4; 16.1; 19.1; 20.6.

It makes good sense that an intermediary (or rather perhaps a “facilitator” in the South African context) assists, because the validity of the statement of the child witness with special needs would then not complicate testimony as much as in *The State v Denga and Other* case number 43.411.12.

<sup>1118</sup> Advocacy Training Council of the Bar of England & Wales “Task Report on Vulnerable Witnesses” 62.

<sup>1119</sup> Larcher *Stop Violence against People with Disabilities*; Charles “Special Measures for vulnerable and intimidated witnesses”; Cunningham and Stevens “Helping a child to be a witness”.

<sup>1120</sup> BenZeev *et al Stop Violence against People with Disabilities*.

### 3.7.2 Narrative event practice

Kenniston utilises the narrative event practice with a neutral event as an opportunity to establish two baselines for the child with ID: the ability to give a detailed account of events and capacity to relate in chronological order.<sup>1121</sup>

### 3.7.3 SAVE programme of Cape Mental Health<sup>1122</sup>

Aspects of the testimonial competency of complainants with intellectual disabilities are assessed by means of the SAVE programme and subsequently reported on.<sup>1123</sup> The assessment process consists of three phases: establishing rapport,<sup>1124</sup> obtaining a narrative account of the events in question<sup>1125</sup> and closure.<sup>1126</sup> It is during the introductory phase that the subject of truthfulness is broached. The importance of telling the truth is emphasised and Dickman suggests, “[i]t is useful to say that *everybody* who speaks to the police, or speaks in court has to promise to tell the truth”.<sup>1127</sup> And the potential witness should also be taught to say “I don’t know” when he or she does not know an answer to a question, instead of trying to come up with “the ‘right answer’”.<sup>1128</sup>

Visual aids are employed during an interview to evaluate the following aspects:<sup>1129</sup>

1. Ability to give a narrative account of the event in question
  - Ability to tell about the complaint brought before the court
  - Whether the use of anatomically-correct dolls will aid the witness in terms of presenting evidence
  - Ability to respond to descriptive questions

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<sup>1121</sup> J Kenniston “Interviewing Persons with Disabilities” in AG Walker *Handbook on Questioning Children A Linguistic Perspective* 3 ed (2013) 129.

<sup>1122</sup> Sexual Abuse Victim Empowerment (SAVE) programme. For an overview, see Dickman *et al Disability and Social Change* 118.

<sup>1123</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 22-23.

<sup>1124</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 13-14.

<sup>1125</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 14-16.

<sup>1126</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 16.

<sup>1127</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 14.

<sup>1128</sup> *ibid.*

<sup>1129</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 22.

- Whether the witness tends to be submissive, i.e., if he or she tends to please the interviewer by fulfilling expectations
2. Ability to understand the legal procedure in terms of responsibilities and rights
- Whether the witness understands the purpose of the court case and the procedure that is followed
  - Ability to distinguish truth from lies
  - Whether he or she comprehends the moral obligation of telling the truth and the negative consequences of lying
  - If he or she is aware of the rights of a witness, e.g., to ask for an explanation if he or she does not understand a question

Dickman regards this section of the assessment as very important, because “if the court understands what is required, even a very low-functioning complainant may be able to give evidence”.<sup>1130</sup> Although the cognitive functioning of the witness is relevant for the courts, an IQ score as such should not be seen as a reliable measure of competency.<sup>1131</sup> She states,

“[m]ethods have been documented for taking potential witnesses with ID through the elements of the formal oath, so that they can be sworn in, but an alternative is to alter the expectations of the court in this regard. Many local magistrates have found it adequate to confirm the complainant’s understanding of truth-telling, using simple language, as well as concrete examples, when the psychologist’s report indicates that this is required. Many of the complainants in this study had an appreciation of the difference between ‘truth’ and ‘falsehood’, although they could not provide a conceptual definition.”<sup>1132</sup>

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<sup>1130</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 23.

<sup>1131</sup> Dickman *et al Disability and Social Change* 123:

“SAVE provides information in terms of level of functioning, while alerting the courts that intellectual functioning, and specifically IQ, cannot be seen as the sole benchmark for competence as a witness. ... A functional assessment is required which takes account of the specific skills required in the legal context.”

<sup>1132</sup> Dickman *et al Disability and Social Change* 126.

Furthermore, the forensic report offers an opportunity to draw a distinction between competency as a witness with ID, and reliability as a witness (para 2.4.2).<sup>1133</sup> The court will be guided in terms of which legal competency procedure to follow with the particular witness.<sup>1134</sup> Moreover, competency to testify will be fostered when the witness with ID gives evidence through an intermediary,<sup>1135</sup> and more than one session of court preparation beforehand is advised.<sup>1136</sup>

#### 3.7.4 Psycho-legal assessment at Fort Napier Hospital<sup>1137</sup>

A referral question on competency is usually posed by a prosecutor referring a victim with ID for a psycho-legal assessment: whether he or she is able to “(a) understand and participate in court proceedings, (b) give an account of the alleged assault, and (c) answer questions put to her/him regarding the alleged assault”.<sup>1138</sup>

Firstly, an assessment of both cognitive functioning and adaptive functioning related to the social context, is done.<sup>1139</sup> Secondly, the child’s narrative ability is evaluated.<sup>1140</sup> And thirdly, it is assessed whether he or she has the

“competency to handle questioning. Forensic mental health interviewing must therefore: (a) attempt to seek clarity from the child on issues that she/he has not answered clearly, and (b) let the child know when her/his answers are lacking the necessary clarity”.<sup>1141</sup>

The outcome of the assessment is reflected in a psycho-legal report and recommendations pertain to the court accommodating the child with ID as a

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<sup>1133</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 23.

<sup>1134</sup> Dickman *Access to Justice for People with Intellectual Disabilities* 23.

<sup>1135</sup> *ibid.*

<sup>1136</sup> C Bosch *SAVE Access to justice for people with intellectual disability who have been sexually abused* SAPSAC 15<sup>th</sup> Annual Conference Pretoria 12 November 2014.

<sup>1137</sup> Pillay and Kritzinger 2008 *Child & Adolescent Mental Health* 125: Pillay and Kritzinger report on their work in a mental health setting linked to the Fort Napier Hospital in Pietermaritzburg.

<sup>1138</sup> *ibid.*

<sup>1139</sup> Pillay and Kritzinger 2008 *Child & Adolescent Mental Health* 126.

<sup>1140</sup> Pillay and Kritzinger 2008 *Child & Adolescent Mental Health* 127.

<sup>1141</sup> *ibid.*

“vulnerable witness”.<sup>1142</sup> Pillay suggests that an alternative procedure for swearing in be adopted: If a witness does not have an understanding of “truth”, an admonishment that does not refer to this concept should be employed when the witness is qualified for testimony.<sup>1143</sup> It is also advised that the witness will perform optimally in the absence of antagonism and that evidence should be given through an intermediary.<sup>1144</sup> This will also facilitate an opportunity for the witness to demonstrate testimonial competency.<sup>1145</sup> The practitioners stress the importance that the assessment is conducted by an interviewer with the necessary professional competency, also with a view to appearing in court as an expert witness.<sup>1146</sup>

The research chapters of the study are to follow. Chapter 4 gives an outlay of the research study. Chapter 5 contains the quantitative results and chapter 6 the qualitative findings.

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<sup>1142</sup> *ibid.*

<sup>1143</sup> Pillay 2012 *SAJP* 318.

<sup>1144</sup> Pillay and Kritzinger 2008 *Child & Adolescent Mental Health* 127.

<sup>1145</sup> Pillay and Kritzinger 2008 *Child & Adolescent Mental Health* 129.

<sup>1146</sup> Pillay and Kritzinger 2008 *Child & Adolescent Mental Health* 126, 128-129.



# CHAPTER 4

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## EMPIRICAL RESEARCH

This chapter serves as an introduction to the next two chapters in which the results of the research study will be reported and discussed. Chapter 5 deals with the quantitative results of the research, and chapter 6 with the qualitative findings. Section one of the current chapter gives an overview of the research project. In the second section, the research paradigms relevant to the study are clarified. The empirical research design is explained in the third section. The actual sampling, data collection and data analysis are described in the fourth section. The chapter concludes with the fifth section, in which the limitations of the research project are discussed.

### **4.1 OVERVIEW**

The aim of the current research was to compile guidelines for determining the testimonial competency of children with developmental delays or disabilities. Children with developmental disabilities, who are found to be competent, should be assisted with the necessary accommodations in order to give evidence effectively. Conversely, those children who do not have the ability to testify should not be unnecessarily exposed to the stress associated with appearing as a witness in court.

Testimonial competency relates to four capacities – perception, memory, communication and morality. In the research sample, two of these components were examined in children with a variety of developmental disabilities. During individual interviews the Lyon and Saywitz oath-taking competency test was administered (paras 2.6.4 and 2.7.1) and the participants' narrative ability evaluated (para 2.6.3). Participants' understanding of moral concepts was also explored (para 2.6.4).

A parent or caregiver<sup>1147</sup> and a teacher of each child were involved in the research study. The adults completed a questionnaire on aspects of the participant's

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<sup>1147</sup> For the sake of brevity, the terms "parent" and "caregiver" are used interchangeably in this chapter.

functioning related to the competency capacities as described above. The immature child has limited self-knowledge and understanding; and this is even more so when his or her functioning is in some way compromised by neurodevelopmental factors (para 3.1.1). Hence the consideration of the informed opinion of the parent and the teacher.<sup>1148</sup>

## **4.2 RESEARCH PARADIGM**

Assessment research was considered to be the appropriate method to examine the present research question (para 4.1). Assessment research refers to the utilisation of quantitative research activities with a view to problem-solving and eventual decision-making.<sup>1149</sup> The choice of this method was motivated by its two characteristics:

- In order to make best practice decisions on the basis of research, additional information is required – i.e., more than the straightforward results obtained by way of measurement as answers to research questions.
- Data collection entails both the testing of group performance and conducting interviews. It could also include the completion of (semi)structured questionnaires in/on contexts relevant to the research topic.<sup>1150</sup>

Method triangulation refers to analysing data both quantitatively and qualitatively.<sup>1151</sup> In this study, quantitative methods are primarily employed for data analysis and interpretation, but statistical results are enriched by means of descriptions and explanations emerging from the qualitative analysis of questionnaire contents.

Quantitative research can be explained as methods employed by the researcher to test a selection of calculated guesses to find the answer to a research question.<sup>1152</sup>

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<sup>1148</sup> Cunningham and Stevens “Helping a child to be a witness in court”; Advocacy Training Council of the Bar of England & Wales “Task Group Report on Vulnerable Witnesses” para 3.12.

<sup>1149</sup> Kanjee *Research in Practice* 477.

<sup>1150</sup> Kanjee *Research in Practice* 477-478.

<sup>1151</sup> Kelly *Research in Practice* 287; Kelly *Research in Practice* 380.

<sup>1152</sup> Durrheim *Research in Practice* 47:

Data are expressed in numbers and analysed by means of statistical formulae.<sup>1153</sup> The rationale for selecting a quantitative research design is an endeavour to obtain objective data by measuring variation in specific characteristics in a large number of selected individuals and to generalise these findings to the population of which the tested group forms a part.<sup>1154</sup> Variance is examined by performing statistical tests on data, and the subsequent conclusions made from these quantitative results pertain to the population of the study.<sup>1155</sup> For this research, the focus was the spectrum of children with developmental disabilities in middle childhood; and how they varied in terms of testimonial competency.

Qualitative research can be described as the researcher taking an open stance towards all perspectives shared during the enquiry.<sup>1156</sup> With data being expressed in words, the language is analysed in terms of thematic categories, from which an understanding of the research topic is gradually developed.<sup>1157</sup> The second characteristic of assessment research lent itself well to including a qualitative component to the study. Thematic descriptions were identified by means of content analysis of the responses provided by participants, their caregivers and teachers.

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"The distinction between quantitative and qualitative research marks a series of differences in approaches to research. At the most surface level, quantitative and qualitative researchers base their conclusions on different kinds of information and employ different techniques of data analysis. Quantitative researchers collect data in the form of numbers and use statistical types of data analysis. Qualitative researchers collect data in the form of written or spoken language, or in the form of observations that are recorded in language, and analyse data by identifying and categorising themes. These surface differences in method mark deeper differences in orientation. Qualitative methods allow the researcher to study selected issues in the categories of information that emerge from the data. Quantitative methods, in contrast, begin with a series of predetermined categories, usually embodied in standardised quantitative measures, and use this data to make broad and generalisable comparisons."

<sup>1153</sup> *ibid.*

<sup>1154</sup> Durrheim and Painter *Research in Practice* 132; Durrheim *Research in Practice* 47.

<sup>1155</sup> K Durrheim "Basic quantitative analysis" in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 209.

<sup>1156</sup> Vaismoradi *et al* 2013 *Nursing & Health Sciences* 398.

<sup>1157</sup> Durrheim *Research in Practice* 47.

Consequently, these details deepened understanding of the developmental challenges of participants related to the components of competency.

### **4.3 EMPIRICAL RESEARCH DESIGN**

#### 4.3.1 Ethics approval

The research study was approved by the Ethical Standards Committee of Rhodes University in 2010.

#### 4.3.2 Planned sample

Children in middle childhood with developmental delays mostly share their world with those without delays. Enduring developmental delays result in developmental disabilities. Special needs schools cater for children who require a specialised learning environment as a consequence of the effect of developmental disabilities. Accordingly, it made sense to approach these educational institutions to identify participants to form part of the study that investigates the research topic.

Nevertheless, special schools catering specifically for learners with hearing impairments did not form a part of the sampling frame of the present research.<sup>1158</sup> The reasons for their exclusion were:<sup>1159</sup>

- The incidence of young children with hearing impairments of school-going age that do not attend school is relatively high. Often, they have not yet been referred by a developmental clinic to a school specialising in hearing impairments.
- Minimal developmental screening or psychometric data are available for learners at schools for the hearing impaired. Placement is based on a primary diagnosis of hearing loss and the specialised education provided at these schools are tailored for the specific learning requirements associated with auditory impairment.

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<sup>1158</sup> Durrheim and Painter *Research in Practice* 133: "Because the sample is drawn not directly from the population but from the sampling frame, it is vital that the sampling frame is as close an approximation of the population as possible."

<sup>1159</sup> Personal communication Norma Karriem.

- Most learners have little or no functional speech (LNFS). Testing would require not only trained interpreters, but also the means to transcribe the different modes of AAC in order to capture data.

Therefore, learners with developmental disabilities in the six to nine years age group attending special schools (except for the hearing impaired) were used as the sampling frame, i.e., an accessible population for the aims of this study. Originally one school in the Eastern Cape and six schools in the Western Cape were identified.

Statistical generalisability requires adequate representation of examined characteristics in robust numbers. The purposive sample was thus planned to consist of 360 learners,<sup>1160</sup> with the size of the sample being as calculated in anticipation of attrition. Attrition, or participant drop-out, refers to the loss of participants during the course of a study, leading to a reduced sample size.<sup>1161</sup> Moreover, mindful of representativeness, the sample was planned according to different strata, reflected in table 4.1.<sup>1162</sup>

Table 4.1 Strata represented in the planned sample

	<b>LEARNERS WITH DEVELOPMENTAL DISABILITIES</b> (N=360)		
<b>POPULATION GROUP</b>	Black n=120	Coloured n=120	White n=120
<b>AGE</b>			
06 years (n=90)	n=30	n=30	n=30
07 years (n=90)	n=30	n=30	n=30
08 years (n=90)	n=30	n=30	n=30
09 years (n=90)	n=30	n=30	n=30

<sup>1160</sup> Durrheim and Painter *Research in Practice* 139: The children available for participation at the schools also share characteristics with the population that is studied.

<sup>1161</sup> C Tredoux and M Smith "Evaluating research design" in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 177.

<sup>1162</sup> Durrheim and Painter *Research in Practice* 136: "Stratified sampling is used to establish a greater degree of representativeness in situations where populations consist of subgroups or strata".

It was furthermore planned to stratify the sample drawn at each school again, on two variables, i.e. language of instruction (Afrikaans / English) and gender (male / female). The variables for language of instruction were restricted to Afrikaans or English. The inclusion of Xhosa (the other dominant indigenous language of the province) was not considered, because it would have doubled financial cost and time required in the preparation of the research instruments which would have had to be provided in the Xhosa language.<sup>1163</sup>

At each sample school the criteria for inclusion were that:

- At the time of sampling, the child's age fell in the range of 6 years 0 months to 9 years 11 months.
- The child attended the special school due to a neurodevelopmental condition.
- Psychometric results on his or her cognitive functioning were available.<sup>1164</sup>

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<sup>1163</sup> The implications of including Xhosa as a language of instruction for the research would have been:

- G Roodt "Reliability: Basic concepts and measures" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) 51; C Foxcroft "Developing a psychological measure" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) 69; A Kanjee and C Foxcroft "Cross-cultural test adaptation, translation and tests in multiple languages" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) 78: Preparations would entail careful translation of all research materials of the child interview into the vernacular (as opposed to the standard language) of Xhosa-speaking six- to nine-year-olds. To maintain a basic scientific standard of research, this would have required expertise in translation etc., and the employed expert(s) to be remunerated accordingly.
- A tester would have had to be trained to conduct child interviews in Xhosa.
- The parent and teacher questionnaires also would have had to be translated in Xhosa and computerised. A fieldworker conversant in Xhosa would have had to be appointed and remunerated to visit caregivers unable to complete the questionnaire online.
- The responses to all open-ended questions (child interview, teacher and parent questionnaire) would have needed to be translated in either Afrikaans or English in order to perform qualitative analysis.

<sup>1164</sup> In the Western Cape Education Department (WCED), a learner is usually assessed before a formal application is made for transfer to special education. The form [Application for assessment for](#)

### 4.3.3 Research protocol

The research project was structured by the following procedure:

- The researcher appointed a research assistant.
- Professor Greg Foster of the Department of Information Systems and Professor Sarah Radloff of the Department of Statistics at Rhodes University gave technical advice during the initial planning.
- The Lyon and Saywitz test was translated into Afrikaans.<sup>1165</sup> The data collection materials – the child interview, teacher and parent questionnaire – were compiled and computerised by means of *Google forms* on *Google Drive*.<sup>1166</sup>
- The Western Cape Education Department (WCED) authorised the empirical research to be conducted at special schools in the province.
- The district directors of the schools were informed of the intention to conduct research at the relevant schools.
- A pilot run of the fieldwork was done at the first school.
- A special school was identified and formal enquiries on prospective participation were made through communication with its psychologist or occupational therapist. A meeting with the principal of the school and/or designated members of staff followed.
- After a school agreed to participation, all its learners in the age group six to nine years were identified.

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admission to a unit / special school (/ school for learners with special educational needs) contains psychometric and scholastic test results. The general psychometric tests administered for intellectual proficiency assessment are the ISGSA, the JSAIS and SSAIS-R, and abbreviated forms of the latter two tests. See para 3.1.4.

<sup>1165</sup> Kanjee and Foxcroft *Psychological Assessment in the SA context* 78.

<sup>1166</sup> The compilation of the three questionnaires took advantage of using computer technology to tailor the line of questioning. With particular questions, the response chosen by the test-taker determined which question appeared next on the screen. For example, in the parent questionnaire, only if the parent answered "yes" to the question, "Does your child participate in religious activities?" were two more questions put on religion. A "no" answer to this question took the caregiver straight to the screen with a question on discipline.

- A learner became a participant in the study when the parent or caregiver gave written informed consent. He or she was allocated a unique research participant number.
- Biographical and psychometric details of each participant were encoded on the data set (research participant details).
- A participant was randomly allocated to either the narrative condition (NC) or the non-narrative condition group (NNC).
- Small groups were formed to participate in a group activity that served a dual purpose. It provided an opportunity to do narrative training with approximately half of the sample. Every group member assented to participation.<sup>1167</sup>
- After the group activity, each participant was interviewed individually. Data were submitted electronically to the child interview data set.
- The teacher questionnaire data set was created by each participant's teacher responding to a semi-structured questionnaire.
- Fieldworkers were trained to interview the caregiver, and to complete the parent questionnaire.
- The parent completed a semi-structured questionnaire, either by submitting responses online or by way of an interview conducted by a fieldworker. These responses were contained in the parent interview data set.
- The research assistant computerised written responses and submitted them to the two data sets.
- All test material was held in safe-keeping and the computer data sets were password protected.
- An inter-tester reliability test was conducted on the responses of 18 child interviews.
- The four data sets – biographical data, child interview, teacher questionnaire and parent questionnaire – for Afrikaans and English participants respectively, were cleaned up.

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<sup>1167</sup> This is prescribed by the Ethical guidelines concerning "captive populations" such as learners enrolled at a school (para 3.6), besides their parent's or caregiver's written informed consent (paras 1.5 and 3.1).



- A qualitative analysis was conducted on applicable open-ended question responses of the three questionnaires.
- The eight data sets were converted to Excel spreadsheets and merged as one data set on the basis of the participant's unique research number.
- Quantitative data analysis was conducted by Prof Sarah Radloff at the Department of Statistics of Rhodes University.
- The researcher was assisted with the interpretation of statistical results.
- The guidelines for competency testing were compiled on the basis of the quantitative and qualitative results.

#### 4.3.4 Research participant details

The identifying particulars of each participant were recorded in a file created with *Google Forms* in *Google Drive*. Biographical information variables were recorded with a view to descriptive and inferential statistics. Besides the population group, age, gender, mother tongue, language of instruction and place of residence during the school term of participants, two other variables were regarded as particularly important in the present study. Developmental conditions that posed a significant challenge to the adaptive functioning of a child were carefully noted.<sup>1168</sup> The result of the most recent cognitive psychometry, expressed as IQ score, mental or test age, or category of intellectual functioning, was also documented (paras 3.1.2 and 3.1.4).

#### 4.3.5 Group activity

A group session for the purpose of obtaining the sample member's assent to participate in the research was considered to be the most economical in terms of time. In view of the age range, as well as the spectrum of disabilities represented, the purpose of the research had to be explained in a way that was both simple and informative. For this reason, it was decided to use a story as a vehicle to convey this information.

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<sup>1168</sup> The following neurodevelopmental conditions were specified: ADHD, CP, ID, communication delays, DS, Epilepsy, FASD, SPD and ASD. See ch 3.

Every research participant took part in a structured group activity which lasted between 20 and 40 minutes. A group consisted of four children on average, usually grouped per class or purposefully combined with other participants on the advice of assisting staff, e.g. to limit the number of distractible children in a group. A classroom or therapy room was used for the activity. Furniture was arranged so that each group member sat facing a screen or wall used for data projection. The environment was disability friendly, e.g. with tables high enough for wheel chairs to fit under, etc. The researcher and her research assistant presented the group activity together.<sup>1169</sup> A multi-sensory approach to the activity was followed with a view to creating interest and maintaining participants' attention.

### Story:

The structured group activity started with the participants listening to the story "Take Care" written by Jessie Wee.<sup>1170</sup> The researcher adapted the story for the

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<sup>1169</sup> The researcher presented the material for Afrikaans groups, while the research assistant was responsible for technical assistance. When the group was English-speaking, the researcher operated the computer and the research assistant presented the material. This arrangement suited the respective home languages of the researcher and the assistant.

<sup>1170</sup> [www.pitara.com/talespin/stories/online.asp?story=27](http://www.pitara.com/talespin/stories/online.asp?story=27) (accessed 21 March 2013).

This specific story was selected and adapted for various reasons:

- The story content provides a concrete link to explain the research to the children and obtain their assent.
- Events related to an armed robbery are carried by a very humorous story line. It was anticipated that such a story would not only stimulate listeners' interest, but also hold their attention. It was also foreseen that saliency and surprise (as opposed to mundaneness and predictability) would foster memory storage and recall, with a view to subsequently testing their narrative ability. See Tredoux and Smith *Research in Practice* 177-178.
- As the main character of the story is in middle childhood, participants were able to easily identify with him. The way he handled the crisis also conveyed an empowering message to them.
- In the story, events are misunderstood and misinterpreted by some characters due to confusion caused by a crisis. The question of interest was whether a participant would be able to keep track of the real sequence of events and understand the gist of the story.

South African social context and present study and also translated it into Afrikaans as *Wees Versigtig* (Appendix 1).<sup>1171</sup>

The research assistant created 12 black-on-white cartoon illustrations depicting the story line.<sup>1172</sup> The sequence of scenes was presented visually by using PowerPoint slides while the group listened to the story. Each participant then received a set of 12 coloured wax crayons and, at random, an A-4 picture of one of the 12 story scenes to colour in. The researcher or research assistant helped some participants to colour in, if assistance was needed.<sup>1173</sup>

Because the group activity had to precede the child interview in order to obtain their individual assent for participation, it created a window of opportunity for some investigation. Many children with developmental disabilities have major difficulties in giving a spontaneous account of events.<sup>1174</sup> Therefore a quasi-experiment was conducted to determine whether the narrative ability of children with developmental disabilities improved after narrative training in sequencing.<sup>1175</sup> At each school, the

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- And lastly, it was anticipated that the story's level of difficulty and length would have sufficient discriminatory value; it would result neither in a floor effect (the story is too long and/or difficult) nor ceiling effect (the story is too short and/or easy).

<sup>1171</sup> See Appendix 1: The Afrikaans version has 1230 words, and the English version 1203. The Afrikaans version was read more often and it took approximately seven minutes to read.

<sup>1172</sup> This was done in consideration of the colouring-in activity that was to follow. Participants each gave personal meaning to pictures if they picked the colours themselves to colour in individual pictures.

<sup>1173</sup> For example, some participants with CP were unable to colour in themselves.

<sup>1174</sup> Rainville "Interviewing Children with Disabilities". In fact, R Feuerstein *et al Don't accept me as I am: Helping 'retarded' people to excel* (1988) 89 state,

"[c]hildren often do not consider their memory as an area that they can dominate, retrieving from it, at will, a given piece of information. If a memory is there spontaneously, they have it, they can express it. The mediator who makes the child recall his past experience creates an awareness in him that he can, on his own, retrieve the information from where it is stored by a process of reconstruction."

<sup>1175</sup> According to Borkowski *et al Intellectual and Developmental Disabilities* 267, "mediated learning helps 'special children' to perform in zones of proximal development in which they formerly showed no competence". The mediator ensures that the child has a learning experience with particular

number of participating learners was randomly divided into two approximately equal groups. The narrative condition group (NC) received narrative training, and while the non-narrative condition group (NNC) served as a control group – they received no narrative training.

#### Narrative training:

Approximately half of the sample received narrative training during their small group activity.<sup>1176</sup> While the NC participants were colouring in their individual pictures, either the researcher or the assistant commented on the scene portrayed in the picture in relation to the story. In the meantime, a coloured set of 12 A-4 story scene pictures was placed in sequence on the floor to the side of the room. Each participant was accompanied to ensure that he or she matched his or her picture correctly in the sequence. While each group member stood at his or her picture in the story line, the story was summarised according to the different scenes. Then the members returned to their chairs and a scripted summary of the story was once more recapped: A PowerPoint of the 12 coloured pictures were used as the visual representation of the scenes and a bold number next to its description on each picture indicated its position in the sequence.

During their group activity, the NC group received mediation of temporal order.<sup>1177</sup> According to Feuerstein, the cognitive modifiability of a child depends on how successfully barriers associated with disability can be overcome by means of

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content with a view to him or her mastering a particular cognitive skill. The modality used during MLE is selected, for example, for a child with a visual impairment, content will be introduced in such a way that he or she accesses it through auditory and tactile perception. Or, a nonverbal child will have a nonverbal means available to respond to questions and/or to participate in the session.

<sup>1176</sup> Green and Klecan-Aker 2011 *Child Language Teaching* 263, 271: Green and Klecan-Aker had success with narrative training of children with language related SLD of the similar chronological age group of the sample of the study. Their training over a 13-week period was highly structured though, and intensive. The researchers caution that the positive effect achieved with their sample cannot be generalised to children with other disabilities.

<sup>1177</sup> Feuerstein *et al Don't accept me as I am* 90-91: Mediation of temporal order will also develop a child's ability to sequence events in chronological order with a view to giving a narrative account.

mediation.<sup>1178</sup> Feuerstein *et al*/concede that the nature as well as the severity of the disability are two very important aspects<sup>1179</sup> which have a direct correlation with the intensity of mediation required to bring about cognitive modification.<sup>1180</sup>

#### Assent:

All participants, therefore both NC and NNC, looked at a series of six PowerPoint slides while they listened to a brief explanation of the rationale of the study (Appendix 2). Each participant was asked if he or she would come again for an individual turn.

#### 4.3.6 Child interview

The researcher and her assistant conducted the child interviews. A testing kit consisted of

- a laptop with the *Google Forms* computerised interviews and an internet dongle;
- the Lyon and Saywitz legal competency test (Form A, B or C) and the morality form, the visual stimuli for each question printed in landscape format and arranged in sequence in an A-5 flip file;
- an A-4 flip file consisting of the Lyon and Saywitz test manual with the questions of the three forms and morality form (in English and Afrikaans);
- a gift box and an apple;
- for the purpose of coding, an A-5 flip file containing the 12-picture summarised version of the story;
- an A-4 flip file containing a printed version of the questions (in Afrikaans and English) (in case of a power failure);<sup>1181</sup> and
- the picture that the participant coloured in during the group activity.

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<sup>1178</sup> Feuerstein *Instrumental Enrichment* 62: Modifiability is defined as "the capacity of an individual to benefit from, and make use of, opportunities provided by life's experience and his ability to adapt to situations more remote and more complex than those to which he was initially exposed".

<sup>1179</sup> Feuerstein *et al Don't accept me as I am* 8-9.

<sup>1180</sup> Feuerstein *et al Don't accept me as I am* 9.

<sup>1181</sup> C Davies *et al* "Computer-based and Internet-delivered assessment" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) 198.

A day or more after the group activity, each child participant was interviewed individually according to a semi-structured format (Appendix 3).<sup>1182</sup> Three versions of the interview acknowledged the differing developmental capacities of the age groups (6 years, 7-8 years and 9 years): the older the children the more questions were asked and the longer the duration of an interview. The questionnaire for the 6-year-olds served as the basis, with questions being added progressively for the older age groups. All responses were recorded online. The duration of an interview was 10 to 30 minutes, depending on the ability of the participant. The contents were submitted to the child interview data set after the tester encoded the information.

Irrespective of age, the interview structure consisted of the following sections for all participants.

#### Introduction:

The participant was reminded of the group activity and the rationale behind participation.

#### Narrative:

Narrative ability as an important facet of testimonial competency was investigated.<sup>1183</sup> The narrative section was divided in two phases. Firstly, a free recall invitation was made. Secondly, five focused questions were asked on presentation of the child's coloured-in picture (Appendix 3). The semantic memory of participants enabled them to recount the story (para 2.6.2)<sup>1184</sup> and their narrative skills allowed verbal responses to questions.<sup>1185</sup>

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<sup>1182</sup> To have the individual interview at least one day after the child participant heard the story would better ensure that long-term memory was accessed and not short-term memory.

<sup>1183</sup> V Talwar *et al* "Children's Conceptual Knowledge of Lying and its Relation to Their Actual Behaviors: Implications for Court Competence Examinations" *Law and Human Behavior* (2002) 26(4) 395 at 413.

<sup>1184</sup> Gudjonsson and Henry 2003 *Legal and Criminological Psychology* 243, 248-249.

<sup>1185</sup> Asad *et al* 2013 *Child Language Teaching* 321: There are two kinds of narratives. "Personal narrative is a recount of factual past events, while fictional narrative is creating or recalling a story

The incidence of confabulation (para 2.6.2) and syncretism (para 2.6.3) in these children was of specific relevance to shedding light on the issue of confusing reliability and competency (para 2.4.2),<sup>1186</sup> and of mistakes thus being considered as lies.<sup>1187</sup> Because no obvious motivation applied for participants to lie while recounting the story, deviations from the facts were analysed as errors. Participant responses were converted to the statistical data set by means of coding (Appendix 3).

#### Lyon and Saywitz oath-taking competency test:

Either Form A, B or C (combined with the four morality tasks) of the Lyon and Saywitz test (para 2.7.1) was administered next. The forms and the morality scale have some difference in level of abstraction: the form items are visual and concrete, while the items of the morality scale are less concrete and cannot be figured out merely by applying visual discrimination skills. Each form has four questions, and the instructions are not only very simple but also repetitive.<sup>1188</sup> Because the test-taker's

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from what was heard or read before." Both personal and fictional narratives require narrative skill from the narrator. Both also require a basic degree of semantic memory (para 2.6.2).

<sup>1186</sup> J Kenniston "Color" in AG Walker *Handbook on Questioning Children: A Linguistic Perspective* 3 ed (2013) 131; TD Lyon *et al* "Coaching, Truth Induction, and Young Maltreated Children's False Allegations and False Denials" (2008) 79(4) *Child Development* 914 at 916.

<sup>1187</sup> While the syllogism is based on true premises, the conclusion reflects illogical reasoning:

Premise 1: The child makes mistakes.

Premise 2: A lie is a kind of mistake.

Conclusion: The child tells lies.

<sup>1188</sup> Lyon *et al* 2008 *Child Development* 917-918 give details:

"[The oath-taking competency test] consists of questions about eight pictures, four regarding children's understanding of the meaning of 'truth' and 'lie' and four regarding children's understanding of the negative consequences to lying. For the meaning questions, pictures of two child characters looking at a single object are presented. One character labels the object correctly, and the other character labels the object incorrectly, with the labels depicted as pictures within talk bubbles. Children are asked which character 'told the truth' (two trials) or 'told a lie' (two trials), thereby assessing their understanding that truth refers to accurate statements and lie refers to inaccurate statements. For the consequence questions, pictures of two child characters talking to an adult (judge, doctor, social worker, or grandmother) are

label for the visual stimulus (regardless of being right or wrong) is used, cognitive limitations reflected in expressive vocabulary are bypassed. Furthermore, LNFS children can also respond. An item does not require a verbal answer, because the answer is pointed at.

Considering the marked developmental challenges of the participants, the researcher decided to keep to the original version of the Lyon and Saywitz test. While the latest version employs only one truth-lie question (paras 2.7.1 and 2.7.6), its administration ran the risk of an unreliable conclusion. Developmental challenges, for example, a limited comprehension of instructions initially, distractibility and/or problems with receptive vocabulary, can interfere as nuisance variables during testing. It follows that one wrong answer can then not be regarded as a valid indication of whether the participant actually understood the difference between the truth and lies.

By administering the Lyon and Saywitz competency questions, participants were provided with an opportunity to demonstrate their (implicit) understanding of the difference between truth and lies and the negative consequences of lying. Consequential to some forms of developmental disability, some children may be unable to use advanced functions of reasoning to articulate an (explicit) explanation of moral concepts, for example by giving a definition. Talwar *et al* state that methods used to assess legal competency should be appropriate to the child's developmental capacity.<sup>1189</sup> They consider the Lyon and Saywitz test to be suitable.<sup>1190</sup>

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presented. One character is described as telling 'the truth,' and the other is described as telling 'a lie'. Children point to the character who 'will get into trouble,' with correct responses demonstrating children's understanding that lying has negative consequences. Correct responding to the meaning and consequence questions would qualify a child witness as competent to take the oath."

<sup>1189</sup> Talwar *et al* 2002 *Law and Human Behavior* 396.

<sup>1190</sup> Talwar *et al* 2002 *Law and Human Behavior* 400, 410.



Albeit nonverbal, the visual layout of the Lyon and Saywitz questions does however require a basic ability to interpret cues due to the use of speech bubbles. Kerr and Durkin found that the Theory of Mind (ToM) (paras 3.2.3 and 3.4.5) of preschoolers with ASD (para 3.4.5) allowed for the understanding of thought bubbles as a form of mental representation.<sup>1191</sup> The researchers claim that visual cues enhance the children's information processing by lessening the demands on working memory.<sup>1192</sup> This research therefore confirmed the Lyon and Saywitz test was an appropriate instrument for testing children with ASD in the sample as well.

#### Interview:

The questions to evaluate conceptual knowledge of moral terms related to the competency examination were introduced by describing ways in which the participant could explain the meaning of "big words" which were to be discussed during the next section. This clarification was done in a playful manner (Appendix 3). Such an approach was followed for two reasons.<sup>1193</sup> Firstly, the researcher wished to modulate the power differential between the tester and child participant (paras 3.2.6 and 3.7.1). Secondly, the trick game provided an opportunity to get an impression of the participant's developing ToM (para 3.4.5).

Six open-ended questions were asked to ascertain the nature of the normative conceptualisation of the truth, a lie, a promise and an oath (Appendix 3). Answers were recorded verbatim. Any verbal response that suggested the participant's "implicit" or "explicit" understanding of the meaning of a moral concept, was coded as conceptual understanding of the concept. For the 7- and 8-year-olds, a question about making a mistake was added (para 2.7.1). Another question was added for the 9-year-olds.<sup>1194</sup> The reason for the latter inclusion was to ascertain whether

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<sup>1191</sup> S Kerr and K Durkin "Understanding of Thought Bubbles as Mental Representations in Children with Autism: Implications for Theory of Mind" (2004) 34(6) *Journal of Autism and Developmental Disorders* 637 at 646.

<sup>1192</sup> *ibid.* This notion is supported by Nel *How to empower children with disabilities*, as she contends that in the case of ASD, "it is visual over verbal".

<sup>1193</sup> Griessel *et al Psychological Assessment in the SA context* 117, 120.

<sup>1194</sup> Evans and Lyon 2012 *Law and Human Behavior* 195-203.

hypothetical questions on lying and truth-telling could be used with children of 9 years of age (and older) who had significant developmental delays (para 2.7.4).<sup>1195</sup> Responses were analysed both quantitatively and qualitatively.

#### Closure:

After the tester thanked the research participant, she accompanied him or her to their class. The tester then quantified the child's responses by means of a coding system and completed an observation checklist. In anticipation of statistical covariation,<sup>1196</sup> 10 variables were coded immediately after conducting each individual interview (Appendix 3). The data of the participant were submitted electronically to the dataset on *Google Drive*.

#### 4.3.7 Child interview adaptations for the visually impaired

The following adaptations were made in preparation to the child interviews at the school for children with visual impairments:<sup>1197</sup>

- Group activity

All groups consisted of two or three learners. The researcher was advised that the visually impaired learners would follow the visual sequence on a computer screen better by sitting very close to it, than when pictures were projected at a distance from them. The story was therefore also presented in the visual format of a 12-picture series, but on the researcher's laptop screen. Every group member was able to adjust his or her distance from the screen and all children with low vision preferred to view black outlines on a white background. No colouring in followed, and no participant received narrative training. The rationale of the research was explained and their assent asked by employing the same structured presentation utilised at the other schools.

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<sup>1195</sup> See Walker *Handbook on Questioning Children* 69.

<sup>1196</sup> Durrheim *Research in Practice* 200-201, 206: Covariation, or covariance, refers to the relationship between two or more variables. If a relationship exists, the correlation coefficient indicates its strength.

<sup>1197</sup> Griessel *et al Psychological Assessment in the SA context* 121.

- Individual interview

Form B (and the set of four morality questions) of the Lyon and Saywitz competency test was administered. This form was selected because its tasks were the easiest to convert from a visual to a tactile modality (para 3.5.3 and Appendix 4). The usual procedure was followed, but instead of labelling by means of visual identification, the participant employed his or her tactile sense to identify objects, compare objects and respond to questions. The step-wise administration procedure of a task proved to fit the adapted form very well (para 4.3.6 and Appendix 4).

Next, the free recall invitation was given and then the focused questions were asked. The questions determining understanding of moral concepts were also put to the participants. Responses were coded exactly the same as for other participants, but with the omission of the picture section.

#### 4.3.8 Teacher questionnaire

The teacher questionnaire was created as a *Google Forms* on *Google Drive*. The link to complete this questionnaire online was sent to every participant's teacher, who completed a questionnaire for each learner in her class participating in the study. To complete one questionnaire required approximately 15 to 30 minutes. The teacher was requested to evaluate the learner in terms of skills organised in the following sections:

- basic sensory competency,<sup>1198</sup>
- cognitive development,<sup>1199</sup>
- moral competency,<sup>1200</sup> and
- witness competency.

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<sup>1198</sup> Diagnosis of visual and/or hearing impairment, as well as any adaptations necessary for optimal learning.

<sup>1199</sup> Attention and concentration; visual perception and memory, auditory perception and memory, expressive and receptive language, understanding of temporal concepts, distinction between fact and fantasy, ToM, memory recall ability and narrative ability.

<sup>1200</sup> Distinction between truth and lie, and other moral behaviour.

#### 4.3.9 Parent questionnaire

The parent questionnaire was also created as a *Google Forms* on *Google Drive*. The link to complete this questionnaire online, was sent to caregivers who provided an e-mail address for this purpose on the informed consent form. A printed version of the parent questionnaire was used by fieldworkers who interviewed those parents without internet access.<sup>1201</sup>

According to the 2011 Census, 43,7% of households in the Western Cape have access to the internet.<sup>1202</sup> The researcher realised the importance of including caregivers without internet access in the study considering the limiting effect of bias on the generalisability of the outcome, i.e., its external validity.<sup>1203</sup> It was assumed that caregivers with internet access functioned in a higher socio-economic status (SES) bracket than those without.<sup>1204</sup> Collecting data by means of the manual completion of the parent questionnaire was thus aimed at limiting (if not avoiding) a skewed distribution of observations, and therefore, bias.<sup>1205</sup> Bias refers to statistical

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<sup>1201</sup> Davies *et al* *Psychological Assessment in the SA context* 195:

“Concern has been expressed about the so-called ‘digital divide’ between those with access to computer technology and those without it. Test-takers who have not had access to computer technology and the Internet are likely to be disadvantaged by this, which could impact on their test performance and thus raise issues of fairness and bias. Consequently, ... assessment practitioners should try to obtain up-to-date information about the equality of access for the various client groups that they serve. Where equality of access is an issue, alternative assessment measures should be used.”

<sup>1202</sup> Statistics South Africa “Census 2011 Provinces at a glance” Report no.: 03-01-43 (2012) <http://www.statssa.gov.za/Census2011/Products/Provinces%20at%20a%20glance%2016%20Nov%202012%20corrected.pdf> (accessed 18 August 2014).

<sup>1203</sup> M van der Riet and K Durrheim “Putting design into practice: writing and evaluating research proposals” in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 90; WA Landman *Navorsingsmetodologiese grondbegrippe / Basic Concepts in Research Methodology* (1988) 97.

<sup>1204</sup> KW Grieve and C Foxcroft “Factors affecting assessment results” in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) 246-247.

<sup>1205</sup> Kanjee *Research in Practice* 493.

data that are non-representative of the group under investigation, and this non-representation may not necessarily be obvious.

Time required to complete the questionnaire was between 20 and 35 minutes. With a view to obtaining descriptive information, enquiries were made about the child's family circumstances and developmental history in general. Pertaining to the current research, specific aspects of the participant's moral and cognitive development were explored.<sup>1206</sup> In conclusion, the parent expressed an opinion regarding the testimonial competency of his or her child.

#### 4.3.10 Data analysis and interpretation

Inter-tester reliability was assessed. Nine child interviews conducted by the researcher and nine interviews conducted by the research assistant were randomly selected from the child interviews data set. The researcher coded the research assistant's interviews and *vice versa* and a Cohen's Kappa was calculated.

A description of the sample was compiled by means of descriptive data analysis. This method is defined as, "analysis that aims to describe data by investigating the distribution of scores on each variable, and by determining whether the scores on different variables are related to each other".<sup>1207</sup> Inferential statistics were subsequently calculated, with a view to generalising findings.<sup>1208</sup> The descriptive and inferential statistics were calculated with SPSS Statistics Version 21. On the basis of the conclusions drawn from assessing the current sample, the guidelines on

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<sup>1206</sup> Aspects of moral development: parental values; role of religion; child's moral behaviour, e.g., lie-telling; disciplinary style.

Aspects of cognitive development: language; time concepts; memory; imagination; critical thinking.

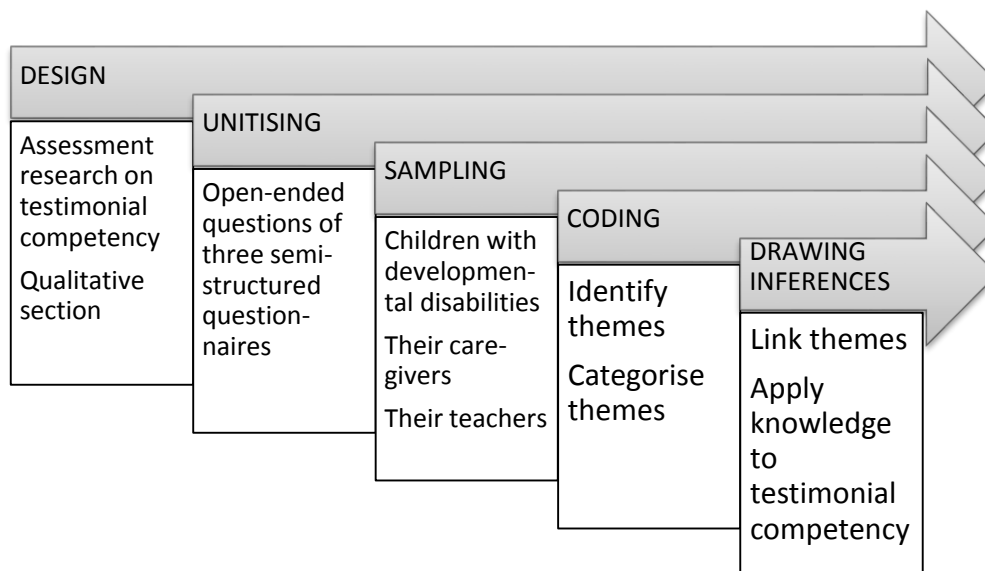
<sup>1207</sup> "Glossary" M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 558.

<sup>1208</sup> "Glossary" *Research in Practice* 560. As C Tredoux and M Smith "Jumping to conclusions: an overview of inferential statistical methods" in M Terre Blanche *et al* (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) 217 contend, "probability theory allows us to make statistical inferences about populations on the basis of observations with samples". At 216: Probability theory is the basis on which statistical analyses are performed to determine the likelihood of obtaining similar results in future if the study is repeated.

testimonial competency were formulated to be applied to the population of children with developmental disabilities in middle childhood which the sample represented.

Content analysis “is the process of organising information into categories related to the central questions of research”.<sup>1209</sup> The scope of the current study determined that qualitative analysis remained on a semantic level by identifying patterns of descriptive meaning relevant to the issue of competency.<sup>1210</sup> A deductive approach was used for the systematic analysis of information provided by caregivers and teachers, as well as for the responses of participants to open-ended questions.<sup>1211</sup> The procedure according to Krippendorff was followed:<sup>1212</sup>

Figure 4.1 Content analysis according to Krippendorff



<sup>1209</sup> GA Bowen “Document Analysis as a Qualitative Research Method” (2009) 9(2) *Qualitative Research Journal* 27 at 32.

<sup>1210</sup> V Braun and V Clarke “Using thematic analysis in psychology” (2006) 3 *Qualitative Research in Psychology* 77 at 84.

<sup>1211</sup> Vaismoradi *et al* 2013 *Nursing & Health Sciences* 401; Braun and Clarke 2006 *Qualitative Research in Psychology* 83-84.

<sup>1212</sup> K Krippendorff “Content analysis” in E Barnouw *et al* (eds) *International encyclopedia of communication* 1 (1989) 406-407 [http://repository.upenn.edu/asc\\_papers/226](http://repository.upenn.edu/asc_papers/226) (accessed 25 August 2014).

Four subject themes were of particular interest to the researcher: caregiver perspectives on participants' moral development; the semantic meaning of the moral concepts for the child participants; teachers' descriptions of their perceptual and cognitive development, and the contextual understanding of child witness competency in relation to developmental disability by caregivers and teachers. These themes were anticipated to be useful in supplementing the guidelines with contextual descriptions and practical explanations.

#### **4.4 FIELDWORK**

##### 4.4.1 Authorisation

Authorisation to conduct research in departmental schools was obtained from the Western Cape Education Department (WCED) in mid-August 2013.<sup>1213</sup> The application to the WCED was met with a noticeably positive attitude, to the extent that the administration required for working in schools located in different school circuits over an extended period was thoughtfully simplified by the relevant WCED official soon after the fieldwork started.

The fieldwork lasted from the end of August 2013 to the end of August 2014.<sup>1214</sup> (No fieldwork was done during the last term of 2013 in accordance with WCED policy.) Seven special needs schools in the Western Cape participated; four schools in the Cape Town area (Paarl, Brackenfell, Kuils River and Landsdowne), and one each in Worcester, Oudtshoorn and George. Five schools had one or more educational psychologists on their staff with whom arrangements were made. The occupational therapist of one of the other two schools took charge of the fieldwork schedule, and at the remaining school, the head of department (foundational phase) and resident

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<sup>1213</sup> It was decided against proceeding with the application to the Eastern Cape Education Department (ECED) for permission to conduct research at only one of its schools because, in comparison to the WCED, the ECED procedure required not only the completion of a complicated application form, but also various other time-consuming steps. For example, the researcher's supervisor had to submit a letter of recommendation.

<sup>1214</sup> The deadline for the submission of teacher questionnaires to complete the fieldwork at the last school was extended to 15 September 2014 in consideration of the time pressure the initial deadline had created for the participating teachers.

speech therapist were designated to assist with research activities. Three schools have Afrikaans only as the language of instruction and another English only, while the remaining three schools are parallel medium – Afrikaans and English learners are accommodated in separate classes. One school has a separate LSEN (Learners with Special Educational Needs) unit, and two of the schools a separate building housing learners with a severe degree of ASD. At five of the seven schools the researcher was provided with the learners' psychological files in order to peruse information in order to complete the research participant details.

Only two of these seven schools were among those that were initially identified during the planning stage (para 4.3.2). The ECED school was replaced by a special school in the Cape Town area (with a good representation of the age cohort). Three of the other schools (also with high numbers in the respective age groups) declined participation in the study for reasons such as a limited fit between the level of functioning of their learners and the understanding of developmental "delay" or "disability", and/or, because the time frame prescribed by the research application policy was not followed. However, these schools continued to be helpful in providing suggestions of other special schools to approach.

Consequently, the snowball method of sampling was used.<sup>1215</sup> However, on enquiry, learners at three of the suggested schools could not be included in the research study. At one of the schools the age group of learners and the age group of the study did not match. At the other two schools, the testing material and procedure used during the participant interview were unsuitable to the severity of the disabilities of the learners. One large special needs school was approached, but then displayed its lack of interest by not honouring arrangements made.

#### 4.4.2 Research team

The researcher was assisted by a research assistant.<sup>1216</sup> During the planning phase, the research assistant designed the pictures for the story used during the group activity. She accompanied the researcher to schools, presented some group activity

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<sup>1215</sup> Durrheim and Painter *Research in Practice* 139.

<sup>1216</sup> She held a BA (Hons) in Psychology and had a keen interest in research.



sessions and conducted numerous individual interviews. However, a primary duty was the fieldwork administration and coordination. She was responsible for arranging testing at the schools, through liaison with designated staff members to prepare for sampling and for finalising the completion of the teacher questionnaires. She also sent the link to caregivers who completed the parent questionnaire online. Additionally, she helped the researcher in extracting the relevant information from participants' school files to create the research participant details data set. The research assistant also captured the contents of written questionnaires on data files. Assistance with the clean-up after completion of the fieldwork was another primary duty.

Fieldworkers were contracted to visit caregivers who were unable to complete the online questionnaire and had to respond to a printed version. Fieldworkers received training in completing the printed version during a three-hour session.

It was difficult to find fieldworkers. Negotiations with, and a subsequent meeting at, Student Development at the University of the Western Cape during September 2013 failed to source undergraduate students for this purpose. Two fieldworkers were trained in Lavender Hill on 20 March 2014, but they declined to sign the contract.<sup>1217</sup> Nevertheless, the third attempt to appoint fieldworkers for this area was successful. A fieldwork coordinator,<sup>1218</sup> responsible for arranging appointments and the three fieldworkers<sup>1219</sup> in the Cape, was sourced through the social research company SOREASO<sup>1220</sup> and trained on 13 June 2014. The two fieldworkers<sup>1221</sup> in Oudtshoorn and George were sourced through the Department of Social Development,

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<sup>1217</sup> Apparently the sourcing agency had given them the impression that in offering to do the fieldwork, they would be creating full-time jobs for themselves. Furthermore, the task of visiting 58 dwellings spread over a wide geographical area – in the Cape Town area and in Worcester – by means of public transport was overwhelming.

<sup>1218</sup> She was an experienced fieldwork coordinator regularly contracted by SOREASO.

<sup>1219</sup> They were full-time students registered at Cornerstone University, Salt River.

<sup>1220</sup> [www.soreaso.co.za](http://www.soreaso.co.za).

<sup>1221</sup> They were auxiliary social workers who completed their practical training during the fieldwork period.

Oudtshoorn and trained on 9 June 2014. A social worker who was working in the Oudtshoorn area, supported the fieldworkers in that location, while the research assistant provided assistance in the George area.

#### 4.4.3 Informed consent

All caregivers involved had a basic proficiency in either English or Afrikaans, consequently no translation into other languages was necessary. A letter of introduction, personally addressed to the caregiver of each learner in the sample, was put in the latter's school bag by his or her teacher. An information sheet explaining the study and an informed consent form (specifying every research activity involved in conducting the study) were attached to the letter. It was specifically mentioned that participation was voluntary and that consent could be withdrawn at any stage.<sup>1222</sup> The parent approved of his or her child's participation by way of returning the signed consent form and providing contact details (with a view to the completion of the parent questionnaire).<sup>1223</sup>

Outstanding consent forms were followed up with the caregiver on the first day of testing at most of the schools. At one school it was unequivocally not allowed. When permission for participation was given by telephone, the parent was requested to return the signed consent form, either the original one or a duplicate that was re-sent.<sup>1224</sup>

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<sup>1222</sup> Only one parent of a 6-year-old preschooler withdrew his written informed consent a day after he gave it. Some parents who had consented to their child's participation, however declined to complete the parent questionnaire.

<sup>1223</sup> The consent form specified all the research activities: access to information on the child's school psychological file; conducting the child interview on aspects of moral and cognitive development, during which the Lyon and Saywitz test was administered, and the completion of a behaviour checklist thereafter; the completion of the teacher questionnaire on relevant developmental aspects; and the participation, as a caregiver, in completing the parent questionnaire on developmental aspects of the participant. Signed consent was also obtained for the analysis of collected information and making research findings.

<sup>1224</sup> Contrary to their undertaking during a telephone conversation, a small number of parents eventually failed to return the informed consent form.

#### 4.4.4 Assent

At the end of each group activity, after a simplified explanation of the purpose of the research, every participant was asked if he or she would return for the individual interview. Only one learner indicated that he did not want to return for the individual session.<sup>1225</sup> However, when other learners in his class were fetched for their individual sessions, he changed his mind and asked to have a turn.

#### 4.4.5 Pilot run

A pilot run was held at School 1, the first school visited.<sup>1226</sup> Since no changes were made to the contents of the assessment schedules, the data of the pilot run was included in the data set of the study.<sup>1227</sup>

On the first occasion of sampling, it was found that the inclusion criterion – that a cognitive measurement be available for each participant – was too strict since it would exclude a substantial number of learners in each age cohort. Of the prospective participants, 17 had had to be excluded from the sample on the basis of this criterion. It was an unexpected discovery that a number of tests were used to determine the level of functioning. This criterion was therefore relaxed, and any measure of developmental delay or disability were thus included and/or accepted. Available results on other applicable tests were then carefully entered into the data set of each research participant. The initial data set was extended to include other tests as far as possible.

The research assistant was trained to conduct individual interviews at the first school by observing the researcher conducting individual interviews with participants. Although, at the start of interviews, participants were informed of the reason for her presence, the research assistant was positioned unobtrusively behind participants.

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<sup>1225</sup> School 6.

<sup>1226</sup> Macleod in Kanjee *Research in Practice* 490: "Pilot studies are used to identify possible problems with proposed research, using a small sample of respondents before the main study is conducted".

<sup>1227</sup> This group is easily recognisable not only by the date of fieldwork but also their participant numbers, if it is necessary to check the statistical integrity of the data.

The size of the groups was established at four to six participants and the procedure for narrative training was set (Appendix 5). Some additions were made to the selection of options used to evaluate and code the participant's responses during the interview.<sup>1228</sup> A fieldworker assisted during the trial run by completing seven parent questionnaires at the homes of caregivers without internet access.<sup>1229</sup> She reported that the language used was too difficult for some caregivers to understand. Supplementary to the existing questions, additional formulations and/or descriptive word phrases were subsequently added to improve clarity.<sup>1230</sup>

Cognisant of the number of learners eligible for inclusion in the sampling frame but who were not yet included, the researcher and assistant returned to School 1 at the end of the fieldwork period.

#### 4.4.6 Actual sample

The suspicion that a target of 60 participants per school was overoptimistic, was confirmed during exploratory conversations with schools regarding inclusion. Contrary to the special schools' age statistics for 2012, which indicated many schools with more than 60 learners in the age group of the study,<sup>1231</sup> such numbers were not found during sampling (para 4.3.2). In fact, the planned sampling procedure became irrelevant.

Consequently, class lists indicating the date of birth or age of learners were most useful. In an attempt to get as close as possible to the planned sample size, the parents of every learner in the age group of the study were sent a letter of introduction and an informed consent form to sign if they were willing to participate.

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<sup>1228</sup> For example, "Emotional" was added to the observations checklist, because a participant on the ASD spectrum started to cry during his interview. The option "It was IMPOSSIBLE to complete the evaluation" was added under Administration as well.

<sup>1229</sup> She was a part-time administrative clerk.

<sup>1230</sup> For example, words like "imagination" and "distinguish" were explained. An alternative question for "Please describe how you discipline your child" was, "What do you do when you child did something wrong or you were unhappy with his / her behaviour?"

<sup>1231</sup> WCED: Directorate Knowledge and Information Management "SNE Annual Survey as on 21/11/2013".

Furthermore, in an attempt to increase the actual sample, the researcher decided not to limit fieldwork to those schools that were identified during planning, but also to approach other appropriate schools to participate.

The difference between the planned sample (para 4.3.2) and the actual sample is related to three causal factors.

(a) The inclusion criteria of the theoretical sample were unrealistic.

Firstly, only a small number of 6-year-olds were found at the schools. It transpired that the average age for a child with special needs to be transferred from mainstream schooling to specialised education, is eight years. As was explained, a developmental delay may be transient, and, the younger the child, the less certain it is whether the delay is the precursor of a developmental disability (para 3.1.1). Consequently, young learners who struggle are accommodated in the mainstream for a period of time in, for example, special needs classes, or are monitored by auxiliary staff of a designated special school in a school district. In many cases however, a formal departmental transfer eventually follows. Alternatively, young children with specific neurodevelopmental conditions and who are severely affected are frequently directly referred by clinics or hospitals for specialised education after developmental screening.

In an attempt to compensate for the unexpectedly low number of 6-year-olds in the sample, the inclusion criterion was raised at the beginning of 2014, and with 10-year-olds also being made eligible for testing. (The 10-year-olds were assessed with the interview format created for the 9-year-olds (para 4.3.6).) However, more 6-year-olds became available at the beginning of 2014. The logical explanation is that at the beginning of the academic year, fewer 6-year-old learners had had their birthday, while by the end of it most learners had turned seven years.

Secondly, the availability of a measurement of cognitive ability as inclusion criterion proved to be unworkable. Although the application for and subsequent transferral to specialised education are based on the outcome of a school psychological assessment (including an IQ test), in reality a significant number of learners are placed by the WCED as a result of a paediatric developmental assessment and/or

neurodevelopmental diagnosis. Some of these learners remain untestable (para 3.1.1), while other learners are assessed only after they start to attend special schools. Furthermore, quite a wide selection of tests are used to reflect the level of intellectual functioning of these children. As soon as this was realised (para 4.4.5), the criterion for inclusion in the sampling frame was adjusted to an objective confirmation of the presence of a developmental delay or disability, e.g. a diagnosis or test outcome.

(b) The actual sample reflected the demographical characteristics of (special needs schools in) the Western Cape, rather than the planned frequencies for the various strata of the sample.

A stratified sample was planned, with the variables of each stratum distributed in equal proportions (para 4.3.2). With a view to representativeness, the intention was to interview an equal number of participants in each of three population groups (black, coloured and white). The research study was designed for an equal representation in each age group (6, 7, 8 and 9 years). Lastly, within the total sample, the ratio of language of instruction (Afrikaans and English) as well as of gender (female and male) was also intended to be equal.

However, the actual sample was established by the individual parents of learners in the age cohort who gave permission for their participation in the study. The proportional distributions within the population group and language of instruction strata respectively resemble provincial population demographics and age ratio in WCED special needs schools respectively:

- The coloured community represents the largest population group in the Western Cape province, with a percentage of 49%.<sup>1232</sup> The coloured population group had the highest frequency in this study, which corresponds with population group representation within the WCED specialised education schools:<sup>1233</sup>

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<sup>1232</sup> Statistics South Africa "Statistical release P0318 General household survey 2013" (2014) <http://beta2.statssa.gov.za/publications/P0318/P03182013.pdf> (accessed 18 August 2014).

<sup>1233</sup> WCED: Directorate Knowledge and Information Management.

<b>BLACK</b>	<b>COLOURED</b>	<b>INDIAN</b>	<b>WHITE</b>
22%	66,5%	0,5%	11%

For 2013, the actual population group distribution in the seven participating schools was as follows:<sup>1234</sup>

<b>BLACK</b>	<b>COLOURED</b>	<b>INDIAN</b>	<b>WHITE</b>
10%	59%	1%	30%

- According to the WCED Special Needs Education (SNE) Survey for 2013, the applicable age distribution among learners in the special education schools of the province was as follows:<sup>1235</sup>

<b>6 years</b>	<b>7 years</b>	<b>8 years</b>	<b>9 years</b>	<b>10 years</b>
9%	15%	19%	26%	31%

For 2013, the actual age distribution in the seven participating schools was as follows:<sup>1236</sup>

<b>6 years</b>	<b>7 years</b>	<b>8 years</b>	<b>9 years</b>	<b>10 years</b>
6%	16%	19%	28%	31%

(c) A marked rate of attrition occurred.

Attrition refers to participant drop-out. When this happens in a quantitative research study, it may threaten its internal validity "because people who withdraw may share particular attributes".<sup>1237</sup> Internal validity refers to "the extent to which relationships between independent and dependent variables are not confounded with the presence of extraneous variables".<sup>1238</sup> Participants' withdrawal may result in significant changes to the body of information investigated and a finding of causal

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<sup>1234</sup> *ibid.*

<sup>1235</sup> *ibid.*

<sup>1236</sup> *ibid.*

<sup>1237</sup> Tredoux and Smith *Research in Practice* 177.

<sup>1238</sup> Landman *Basic Concepts* 97.

links between certain factors may no longer be valid, since analysis was performed on a non-representative data set.<sup>1239</sup> The risk of performing statistical analysis on an incomplete data set is relative to the importance and meaningfulness of the contributions that were lost. The researcher attempted to contain the risk by adding another school to the sample and returning to the pilot school to continue testing.

Table 4.2 Rate of attrition

	SCHOOL								TOTAL
	1 Pilot	2	3	4	5	6	7	1 Final	
<b>PARTICIPANTS</b>									
SAMPLED <sup>1240</sup>	27	38	17	39	25	30	45	55	276
CONSENTED <sup>1241</sup>	16	29	17	26	17	29	31	40	205
ACTUAL <sup>1242</sup>	16	28	09	24	13	29	28	37	<b>184</b>
<b>COMPLETED QUESTIONNAIRES</b>									
TEACHER	16	28	06	21	13	26	26	36	172
PARENT	11	19	04	05	07	17	13	08	084

At the end of a 12-month period of fieldwork, the total number of participants in the study was 184. The percentage of attrition from eligible participants to actual learners assessed, was 33,3%. The specific factors relevant to the loss of members from the sample are discussed next.

- A missed sampling opportunity had a significant negative impact on the size of the actual sample.

When approached initially, the principal of School 3 was much in favour of its inclusion in the research project. The school statistics indicated large numbers of

<sup>1239</sup> Van der Riet and Durrheim *Research in Practice* 90.

<sup>1240</sup> All eligible participants according to the school's class lists.

<sup>1241</sup> All participants of the school whose parents gave verbal or written consent.

<sup>1242</sup> All learners at a school who participated in the child interview.



learners to be available in the applicable age groups, and its participation would have offered an opportunity for proper sampling.<sup>1243</sup>

Some time after the initial exploratory meeting, a follow-up meeting with the psychologist and other designated staff members took place with a view to making arrangements for fieldwork. It then became clear that initial expectations would not be met.<sup>1244</sup> The researcher was provided with a list of learners to whom letters of introduction could be sent. Her efforts to use class lists for the sampling procedure were resisted and it also proved impossible to make further enquiries about outstanding consent forms. Fieldwork had to be postponed to the last week of term to limit inconvenience to the school.

In retrospect, costs incurred in order to secure this site for fieldwork were clearly disproportionate to its contribution to the study. School 3 contributed the smallest number of participants of all the schools that participated.<sup>1245</sup>

- Exclusions were made due to ethical reasons.

In preparation for the fieldwork at School 5, the teachers of the classes eligible for sampling were present during a meeting. Two exclusions were made beforehand. The opinion was that two learners were not suitable because the testing procedure would be emotionally upsetting.

- Parental unresponsiveness contributed to the reduced sample size.

Adherence to ethical requirements prescribed that a parent must give permission for a learner to be interviewed at school (para 4.4.3). The letters of introduction with the attached informed consent form were, on average, sent out two to four weeks before the actual fieldwork was to be done at a particular school. However, at most of the schools similar caution was given: usually parents were very slow to respond to circulars, or might not respond at all. At six of the seven schools the first request

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<sup>1243</sup> The WCED SNE Annual Survey 2012 indicated 91 learners in the age group of interest.

<sup>1244</sup> For example, the school had offered to communicate with the parents beforehand to prepare them for the communication to introduce the study.

<sup>1245</sup> n = 9.

to return the signed consent form was poor indeed. The exception was School 6 (table 4.2). This school compiled a cover letter that was attached to the researcher's documentation, and most of the signed consent forms awaited the researcher and assistant on the first day of fieldwork.

During the pilot run, only those children whose caregivers had returned their signed consent forms were included. But from School 2 onwards, on the first day of fieldwork, the researcher and assistant phoned every parent who had not yet returned the letter of consent. A number of the caregivers could not be reached by phone, either because their cellphone or telephone numbers were not available on the school's file or because the numbers provided were incorrect. Of those who could be reached, the number of refusals was insignificant. A small group of parents had not understood what the research actually was about, while another group first wanted more information before giving permission. Most caregivers gave consent by telephone and an undertaking to return the completed informed consent form the next day. Some caregivers claimed that they had already returned the form, and arrangements were made for another letter of consent to be sent for them to sign. A few consent forms arrived later or after testing finished at the school, but a portion of the outstanding forms were not received at all. This reduced the number of parent interviews that could be arranged, but had no effect on the completion of teacher questionnaires.

- The fieldwork schedule clashed with the school calendar (or programme schedule of the participating school).

Five of the seven schools have hostels for learners from geographically remote and/or rural areas. The WCED has a policy for the transport of children between the hostels at specialised education facilities and their homes. For example, transport arrangements for the compulsory home weekend of the term, long weekends, and holidays usually entail that learners leave school a day early and return on the first or second school day after the recess ends. This had a major impact on fieldwork at School 3 since all hostel learners in the small sample had to be excluded. At School 7, during March to April 2014, the hostel children remained at home for a period of seven school days during which the non-hostel children attended school as usual.

These logistical realities resulted in hostel learners at School 7 being excluded from the sample because they were either not present to receive the letters of introduction or were not in attendance during the interview period.

The last fieldwork opportunity was the second round at School 1. In an attempt to maintain the number of participants, it was decided to continue fieldwork after the June holidays of 2014. The researcher was prepared for the hostel learners leaving earlier, but unprepared for the very low attendance rate of learners the week preceding the last day of term. The testing of participants was therefore completed only at the beginning of the third term.

- The level of absenteeism was high.

Learners in special needs schools are absent more often than learners in mainstream schools. Apart from health complications associated with some of the developmental conditions and the medical attention required, it was explained that caregivers more readily tended to keep them home, and for longer periods.

These circumstances contributed to attrition in one of two ways at each participating school. Firstly, there were learners whose parents consented to their participation, but who were absent on the days the group activity sessions were held. Their non-attendance disqualified them for individual sessions later. Secondly, there were learners whose parents consented and who subsequently participated in the group activity, but who were absent on all the days that individual interviews were conducted. In an effort to curb attrition resulting from the first instance, group activity sessions were no longer done only at the beginning of fieldwork at a school, but if necessary continued until the second-last day with a view to including as many participants as possible.

- Disrupted internet connection caused the loss of a participant.

The child interview was computerised and submitted online immediately after having interviewed the participant. On occasion the internet connection was interrupted

during the interview.<sup>1246</sup> In the case of one participant, data could not be recovered reliably after an interruption and he had to be dropped from the sample.<sup>1247</sup> This was a hard blow, because this participant was doing well; for example, his recount of the story during free recall consisted of an above-average number of details.

The descriptive statistics of the actual sample of 184 participants with developmental disabilities are given in the five tables below.

Table 4.3 Distribution of chronological age in actual sample

<b>AGE</b>	<b>FREQUENCY</b>	<b>PERCENTAGE %</b>
06 years	20	11
07 years	40	22
08 years	61	33
09 years	46	25
10 years	17	09
<b>TOTAL</b>	184	100

Table 4.4 Age distribution according to population group in actual sample

	<b>POPULATION GROUP</b>			<b>TOTAL</b>
	Black	Coloured	White	
<b>AGE</b>				
06 years	03	12	05	20
07 years	03	29	08	40
08 years	02	47	12	61
09 years	07	34	05	46
10 years	04	11	02	17
<b>TOTAL</b>	19 (10%)	133 (72%)	32 (18%)	184 (100%)

<sup>1246</sup> According to the tester remarks, it happened during six child interviews.

<sup>1247</sup> School 4.

Table 4.5 Age distribution according to language of instruction in actual sample

	LANGUAGE OF INSTRUCTION			TOTAL
	Afrikaans	English	Afrikaans / English	
<b>AGE</b>				
06 years	12	07	01	20
07 years	32	08		40
08 years	52	07	02	61
09 years	36	10		46
10 years	17			17
<b>TOTAL</b>	149 (81%)	32 (17%)	03 (2%)	184 (100%)

Table 4.6 Age distribution according to home language in actual sample

	HOME LANGUAGE					TOTAL
	Afrikaans	English	Afrikaans / English	Xhosa	Other	
<b>AGE</b>						
06 years	11	06	01	01	01 <sup>1248</sup>	20
07 years	31	07		01	01 <sup>1249</sup>	40
08 years	50	09		02		61
09 years	32	06	01	05	02 <sup>1250</sup>	46
10 years	14	01		02		17
<b>TOTAL</b>	138 (75%)	29 (16%)	02 (1%)	11 (6%)	04 (2%)	184 (100%)

<sup>1248</sup> French.

<sup>1249</sup> Zulu.

<sup>1250</sup> Sotho and Shona.

Table 4.7 Age distribution according to gender in actual sample

	<b>GENDER</b>		<b>TOTAL</b>
	Female	Male	
<b>AGE</b>			
06 years	08	12	20
07 years	19	21	40
08 years	22	39	61
09 years	20	26	46
10 years	08	09	17
<b>TOTAL</b>	77 (42%)	107 (58%)	184 (100%)

#### 4.4.7 Data collection: Child interviews

The attitude of all teachers whose class routines were affected by the testing was positive and generally accommodating. At School 5 the times available for testing were very tight due to the self-care routine required for specific disabilities, but it had no effect on the number of learners tested. At no school could testing be conducted continuously under optimal test conditions.<sup>1251</sup> On occasion, (temporarily) vacant offices, therapy rooms and classrooms and computer laboratories had to serve as testing rooms. The most favourable conditions were at School 4 where the majority of the participants were tested in two offices in the (at that time) unoccupied wing for medical personnel. The main problem was distractions, both auditory and visual. For example, one participant at School 7 was tested in his occupational therapy room and it was very challenging to keep him focused. Some participants were initially distracted by sitting very close to the tester recording responses on the laptop.

At the time of fieldwork at Schools 1 (second turn), 4 and 5, unexpected disruptions in the internet connection resulted in the computer freezing while participants were being interviewed. As a result, all responses entered before that point were lost. On most occasions the researcher or assistant could “rescue” some data. If the

<sup>1251</sup> Griessel *et al Psychological Assessment in the SA context* 111.

disruption happened at the beginning of the interview and the participant had not provided many details, notes were immediately made from memory and data re-entered. Where there were too many details to remember accurately, only those sections that the tester could recall with confidence were coded. Variable performance owing to internet connection disruptions is one of the marked disadvantages of using computerised assessment measures.<sup>1252</sup> (During clean-up a duplicate parent questionnaire was also found – according to the time stamp the second questionnaire was submitted 30 seconds after the first.)

Two groups of participants need special mention regarding testing. The researcher was not aware, beforehand, of the substantial incidence of a spectrum of speech and language problems, including LNFS (para 3.2.4) associated with developmental disabilities. The children were expected to respond verbally during the interview and this situation obviously hampered their participation. The range of ASD found among participants was mild to severe (para 3.4.5). Most participants in the latter group were unable to cooperate and follow instructions.

During testing at School 4, the adaptations for learners with visual impairments were utilised. With item B4 of the Lyon and Saywitz test (Appendix 4), an aspect of developmental theory was unexpectedly confirmed.<sup>1253</sup> While most participants gave the horse (the largest object in size) expected labels such as "horse", "donkey" or "dog", one participant, having felt the tail, labelled it "elephant". This label made sense when it is considered that identification was done by means of analytic touch (para 3.5.3). Furthermore, although the adjusted test items worked very well with this group, it was obvious that the repetition of the simple instruction was not well-suited to the level of functioning of most of the older participants.

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<sup>1252</sup> Davies *et al Psychological Assessment in the SA context* 191, 194.

<sup>1253</sup> A distinction is made between synthetic and analytic touch. By means of analytic touch the child analyses the parts of an object too big to enclose in his or her hand, and then the whole is mentally synthesised.

#### 4.4.8 Data collection: Teacher questionnaires

A total of 172 teacher questionnaires were completed. The majority of teachers preferred to complete the printed (instead of the online) version. Some schools experienced difficulty in accessing the online questionnaire via the internet link and used the printed version.

The teachers of two of the three schools visited during 2013, returned their questionnaires only during 2014. Other schools' teachers were also slow. Constant reminders were given until the deadline. Difficulty in getting questionnaires returned and minor attrition related to the systemic effect of personal circumstances of staff members. At School 2 the designated teacher had cancer. At School 3 one of the participating teachers resigned. At School 4 a staff member and at School 7 a participating teacher passed away unexpectedly. The deaths obviously challenged the ability of respective colleagues to reorganise.

It came as a surprise that teachers favoured the "Cannot say" choice if they could.<sup>1254</sup> Perhaps this is related to a motivational factor in that the teachers in the study had not explicitly consented to mindfully completing as many questionnaires as there were participants in their classes. The average number of questionnaires per teacher was six, but one teacher had 14 participants in her class. To some extent this response pattern curtailed the opportunity of utilising their assessment as an "objective" source of information.

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<sup>1254</sup> For example,

<b>QUESTION</b>	<b>Cannot say</b>	<b>Yes</b>	<b>No</b>
Does this learner understand the difference between the truth and a lie?	47%	44%	09%
Does this learner understand the moral importance of ... telling the truth?	58%	37%	06%
In your opinion, if this learner had to go to court and tell ..., would he or she be able to do so?	49%	15%	36%



#### 4.4.9 Data collection: Parent questionnaires

Data collection by means of the parent questionnaire proved to be the most challenging. Of the 184 participants, 32 learners (18%) stayed in hostel and six children (3%) resided in children's homes.

Some caregivers declined to participate by not providing their contact details on the consent form they signed for their children, which were needed to enable arrangements for the completion of the parent questionnaire. The number of caregivers who provided contact details was 113, of whom 30 received the internet link. The majority needed reminders from the research assistant and eventually 23 questionnaires were completed online.

Appointments were made with parents without internet access to be visited by fieldworkers to complete the printed version of the semi-structured questionnaire. Two fieldworker teams assisted the researcher (para 4.4.2).

According to the fieldwork coordinator report of the Cape Town area – Worcester team, some parents preferred to be interviewed at work during working hours rather than at home. Eventually, only 37 of 58 questionnaires were completed. Substantial difficulties were encountered during fieldwork:

- The greatest difficulty was that many of the contact numbers provided no longer existed, or went to voicemail. The coordinator contacted schools to obtain alternative numbers, but with these there was also little success.
- The living arrangements of some of the child participants changed, so that the person who signed the consent form was no longer the caregiver.
- Some parents were annoyed by the telephone call to arrange the interview as they felt their privacy was invaded.
- Some caregivers did not keep the appointments that were arranged.
- Some homes were in areas that were unsafe for fieldworkers to enter.
- One caregiver was interviewed in the fieldworker's vehicle because no other space was available. The fieldworker learnt afterwards that the caregiver had TB.
- One parent harassed a fieldworker by calling her in the middle of the night asking personal questions.

- Some caregivers confused the fieldworkers with social workers and expected them to assist with issues that had nothing to do with the research.

In the Oudtshoorn – George region, the research assistant arranged interviews for the two fieldworkers in the George area. To save time and limit costs, if only a single visit would have had to be made to any outlying town to the caregiver of a participant who was in a school hostel, it was dropped from the list. Of 25 addresses on their list, 17 parent questionnaires were completed. This fieldwork team met with the following challenges during the interviews they conducted:

- In some instances, appointments could not be made as phones would ring unanswered or go to voicemail. If messages were left, there was no response.
- Addresses provided by some parents were incomplete and/or when directions were given, impossible to find.
- Some addresses given were no longer valid as the caregivers had moved.
- When appointments were proposed, parents indicated they were not available.
- One parent did not turn up for the arranged appointment. When the fieldworker phoned to enquire her whereabouts, she claimed she could speak Xhosa only. However, when someone assisted the fieldworker and addressed her in Xhosa, the parent hung up.

Nevertheless, the majority of caregivers interviewed had a positive attitude and were grateful that their children with special needs were the focus of an investigation. The fieldworkers' overriding impression was that many households visited were affected by unemployment. One parent asked the fieldworker if she would receive payment for participating in the interview.

When the research assistant tried to obtain alternative phone numbers for caregivers she was unable to reach on the numbers they had provided on the consent form, the school secretary provided possible reasons for the problem. These were that cellphone theft was a common occurrence and when parents bought new phones they failed to inform the school of the new number; alternatively, some caregivers could not afford to replace stolen phones and their numbers would no longer be active.

The numerous difficulties experienced during fieldwork are associated with parent sample attrition:

“It has been reported that in developed countries, attrition is often linked to situational inconveniences (e.g. interviewer called at a bad time and participant too busy to participate), and loss of vulnerable groups (e.g. lower social classes, minority race groups and substance abusers). In developing countries, attrition is often due to mobility (e.g. urban-circular migration and movement between rural and urban family networks) and reluctance to participate in research among people from higher social classes because of inconvenience.”<sup>1255</sup>

#### **4.5 LIMITATIONS OF THE STUDY**

The theoretical claim is that testimonial competence and specifically performance during the legal competency examination, are primarily related to the cognitive and moral development of the child witness. The research study was designed to assess the relevant developmental aspects of participants – with particular attention being paid to moral development – in the child interviews. The plan was to utilise existing results of specific psychometric tests for intellectual functioning as an indicator of cognitive development. However, it was found that, in practice, application forms to transfer learners to special education frequently had not contained any cognitive measurement. According to their psychological files, some learners were admitted to the special school on account of a developmental screening test resulting from a neurodevelopmental diagnosis. Furthermore, the variety of cognitive assessment scales applied in this context was much wider than anticipated. Consequently, the robust number of cognitive measurement scores anticipated to investigate the predictive value of intellectual functioning during competency determination was not attained.<sup>1256</sup>

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<sup>1255</sup> SA Norris *et al* “Panel Studies in Developing Countries: Case Analysis of Sample Attrition over the Past 16 Years within the Birth to Twenty Cohort in Johannesburg, South Africa” (2007) 19 *Journal of International Development* 1143 at 1145. [References omitted]

<sup>1256</sup> Durrheim and Painter *Research in Practice* 148: “Predictive validity is established by determining whether the measure predicts future events that are logically related to the construct.”

That the planned sample size was not reached during data collection is a shortcoming. The marked drop-out rate of caregivers at the time of completing the parent questionnaire further weakened the statistical confidence with which inferences were made after statistical analysis. The loss of parent information on the children’s moral upbringing and general functioning in the home environment appeared to be associated with lower SES and less stable living conditions. Therefore, the outcome may not be fully representative of different styles of child rearing. Conversely, the high retention of teacher participation is an advantage. The teachers were regarded as a reliable source of information concerning the participants’ abilities relevant to the study. However, their preference for the “cannot say” response weakened their contribution.

Two more limitations concern the validity of the current study. The more generalisable the research outcome is, the better the researcher is able to describe the population in question and make recommendations accordingly.<sup>1257</sup> Generalisability depends on representativeness.

According to Statistics South Africa, the 2013 national population estimate for the age bracket five to nine years per population group is:<sup>1258</sup>

<b>BLACK</b>	<b>COLOURED</b>	<b>INDIAN</b>	<b>WHITE</b>	<b>SOUTH AFRICA</b>
84 %	9 %	2 %	5 %	100 %

According to the 2011 census, the population group percentage ratio in the Western Cape province is as follows:<sup>1259</sup>

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<sup>1257</sup> Van der Riet and Durrheim *Research in Practice* 91.

<sup>1258</sup> Statistics South Africa “Mid-year population estimates 2013” Statistical release P0302 <http://www.statssa.gov.za/publications/statsdownload.asp?PPN=p0302&SCH=5500> (accessed 17 August 2014).

<sup>1259</sup> Statistics South Africa “Statistical release (Revised) Census 2011 P0301.4” (2012) <http://beta2.statssa.gov.za/publications/P03014/P030142011.pdf> (accessed 18 August 2014). The percentages in the original table were rounded off.

<b>BLACK</b>	<b>COLOURED</b>	<b>INDIAN</b>	<b>WHITE</b>	<b>WESTERN CAPE</b>
33 %	49 %	1 %	16 %	100 %

Firstly, the guidelines on testimonial competency, which were compiled following the current research project, are likely to have reasonable validity for learners in WCED special needs schools in the six- to 10-year age range. However, the validity of results for children of the same age with developmental delays and/or disabilities in South Africa would only be known when the research is duplicated on a national level with a sample representative of the community of children with disabilities in the lower range of middle childhood.

The second shortfall concerning the validity of the present study is the underrepresentation, in accordance with the demographic distribution of the Western Cape province, of six- to 10-year-old children of the black population group (para 4.4.6). The very low frequency of black children found in the participating schools (para 4.3.2) is perhaps explained by a combination of two factors, i.e. the language of instruction at a school and its geographical distance from the child's home. For many caregivers of children with disabilities it is probably not a difficult decision to enrol them at a school catering for special educational needs when the language of instruction is either Afrikaans and/or English. This is especially so because frequently the children are also automatically provided with school transport. However, parents of children with disabilities living in predominantly black communities perhaps realise that the language of instruction could be a significant obstacle if their children attended an Afrikaans and/or English medium school. At the age of school entry (usually six or seven years), it is the exception rather than the rule for children in these communities to be conversant in any other language than their mother tongue. It is possible that these children with special needs may as a result continue to attend mainstream schools rather than a WCED special needs

school – of which only seven offer Xhosa as a teaching language.<sup>1260</sup> It is also possible that some of these young children do not, or do not yet, attend school – which does not seem to be an unusual decision among parents in the lower SES bracket (para 4.3.2).

Moreover, Xhosa-speaking learners in the study were interviewed in either Afrikaans or English. The assumption was that if they were taught in either Afrikaans or English, these participants would have some proficiency in either of these languages. However, after the present study, it is strongly recommended that in future studies participants in this age group be interviewed in their mother tongue. During testing the optimal performance of Xhosa-speaking participants was hampered by communication difficulties. According to Walker, children who communicate in a second language (and thus not in their mother tongue) in a forensic environment, are likely to be faced by significant challenges. Therefore, to assess testimonial competency in the light of the relevant developmental aspects of those children with special needs in the Western Cape with neither Afrikaans nor English as their mother tongue, this study should at least be repeated with a sample of Xhosa children similar to the research population, and the assessments done in their vernacular.

The research results are presented in the following two chapters. In Chapter 5, the interpretation of the quantitative results is discussed. Chapter 6 provides a discussion of the qualitative results of the current study. The conclusions made following the assessment research conducted on the legal competency of children with developmental disabilities are presented in Chapter 7 in the form of the guidelines.

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<sup>1260</sup> WCED Directorate Knowledge and Information Management "SNE Annual Survey 2013". According to the statistics, there are 74 WCED special needs schools in total. Seven of these school cater for instruction in Xhosa.

# CHAPTER 5

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## QUANTITATIVE RESEARCH

Over a period of twelve months a sample of 184 participants with developmental disabilities was tested. Thirty-four (34) interviews (19%) were conducted in English and 150 interviews (81%) in Afrikaans by the researcher and her research assistant (para 4.4.2). The inter-tester reliability was calculated (para 4.3.10) and found to be satisfactory with Cohen's Kappa, where  $K = 0.87$ .<sup>1261</sup>

This chapter reports on the statistical analysis performed on and the subsequent interpretation of the data obtained during the fieldwork. The data also included relevant information that was collected by means of parent and teacher questionnaires.<sup>1262</sup> The chapter is divided into two sections. The statistical tests performed on the data, as well as the variables employed during the statistical analysis, are discussed in the first section. The results of the inferential statistics are reported and discussed in the second section.

### 5.1 INFERENCE STATISTICS

When the results of inferential statistics tests performed on the data of a sample are analysed, conclusions can be drawn on the nature of the sample.<sup>1263</sup>

#### 5.1.1 Independent variables

An independent variable "produces an effect in a causal explanation".<sup>1264</sup> Participant characteristics such as age, gender, language and population group were treated as

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<sup>1261</sup> "Interrater Reliability: Encyclopedia of Research Design"

[http://www.bibb.k12.ga.us/cms/lib01/GA01000598/Centricity/Domain/105/Interrater%20Reliability%20Article\\_1.pdf](http://www.bibb.k12.ga.us/cms/lib01/GA01000598/Centricity/Domain/105/Interrater%20Reliability%20Article_1.pdf) (accessed 16 November 2014); "Cohen's Kappa Index of Inter-rater Reliability" [www.psych.unl.edu/psycrs/handcomp/hckappa.PDF](http://www.psych.unl.edu/psycrs/handcomp/hckappa.PDF) (accessed 17 November 2014): Inter-rater reliability is considered acceptable when  $K > 0.70$ .

<sup>1262</sup> An unexpected preference for the "cannot say" response by participating teachers restricted the usefulness of some of their responses.

<sup>1263</sup> Tredoux and Smith *Research in Practice* 216.

<sup>1264</sup> Terre Blanche *et al Research in Practice* 560.

potential independent variables.<sup>1265</sup> From a developmental perspective, age as an independent variable has considerable importance.

In this study, three other independent variables are of specific relevance. The first is narrative training, the causal variable of the quasi-experiment. The narrative condition (NC) group was compared to the no-narrative condition (NNC) group. The NC group received mediation to teach temporal order and the NNC did not (para 4.3.5). The second and third independent variables are developmental disability and cognitive functioning which are discussed in the following paragraphs.

(a) Representation of developmental disabilities

Information provided by caregivers on the developmental milestones (para 3.1.1) of the participants confirmed that the sample could be considered as a valid representation of children with developmental delays. According to 84 parent questionnaires, 51% of participants reached the motor developmental milestone of walking later than the expectation and the toilet-training of 56% of participants was

<sup>1265</sup> The distribution ratios in the actual sample are summarised according to its four strata:

Stratum 1: AGE (table 4.3)

6 years	7 years	8 years	9 years	10 years
4	7	11	8	3

Stratum 2: POPULATION GROUP (table 4.4)

Black	Coloured	White
1	7	2

Stratum 3: LANGUAGE

- language of instruction (table 4.5)

Afrikaans	English
8	2

- home language (table 4.6)

Afrikaans	English	Xhosa	Other
38	8	3	1

Stratum 4: GENDER (table 4.7)

Female	Male
4	6



delayed. Sixty-eight (68) percent of participants' initial development of speech was atypical.

Table 5.1 reports on the developmental disabilities represented in the sample. It is important to keep in mind that the statistics given on the various disabilities in this table are not mutually exclusive – a number of participants had been diagnosed with more than one disability according to the information in their school psychological files. For example, in theory an association exists between intellectual disability (ID) (para 3.3) and DS (para 3.4.3) or ASD (para 3.4.5).

Table 5.1 Representation of developmental disabilities in sample (N = 184)

<b>DEVELOPMENTAL DISABILITY</b>	<b>FREQUENCY OF CASES (n = 362)</b>	<b>REPRESENTATION IN SAMPLE<sup>1266</sup> (%)</b>
ID (para 3.3)	140	76
Other e.g. TBI (para 3.4.6)	34	19
Visually impaired (para 3.5.3)	32	17
ADHD (para 3.5.2)	31	17
CP (para 3.4.2)	26	14
Epilepsy (para 3.4.1)	24	13
ASD (para 3.4.5)	20	11
DS (para 3.4.3)	18	10
Communication challenges (paras 3.5.1 and 3.5.4)	18	10
FASD (para 3.4.4)	14	08
Learning problems (para 3.5.1)	05	03

(b) Classification of cognitive functioning

The results of a variety of (psychometric) tests were entered in the research participant dataset (para 4.3.4). With a view to making use of the results of those participants for whom cognitive measurements were available (para 4.4.6), the following procedure was followed to create an independent variable:

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<sup>1266</sup> Because representation is not mutually exclusive, percentages will not total 100%.

1. The JSAIS, SSAIS-R and ISGSA were all developed by the Human Sciences Research Council (para 3.1.4). The score range and descriptions of the level of these standardised tests correspond. For the current study a Scholastic Aptitude (SA) score was regarded as comparable to an Intelligence Quotient (IQ) score, because both scores give a numerical expression of the construct general cognitive ability. The scores of those participants whose most recent results were available on these tests, were encoded according to the level description. There was a small number of participants whose scores were already expressed in terms of the category of functioning.

A verbal IQ score on either the SSAIS-R or JSAIS was accepted for inclusion in the dataset for Afrikaans or English mother-tongue speakers only. For some participants, a verbal and/or a nonverbal IQ score was documented in their files. The constructs represented by the verbal IQ score were regarded as having a better fit with the competency construct of the current study, in comparison with the constructs reflected by the non-verbal IQ score.<sup>1267</sup> Non-verbal scores were therefore not considered for inclusion. Furthermore, verbal IQ scores of non-mother tongue speakers were not included due to the issue of validity (para 3.1.4).

2. A mental age (para 3.1.2) was available for a substantial number of participants as a result of the administration of a developmental test. The chronological age of each participant at the time of testing was documented in the research participant details. For these participants, a ratio IQ could subsequently be calculated applying the formula:

$$IQ = \frac{\text{Mental age (MA)}}{\text{Chronological age (CA)}} \times \frac{100}{1}$$

3. Test ages for tests administered by occupational therapists, e.g. the Beery and the Bender Gestalt Visual-Motor Test, were not considered. The same exclusion

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<sup>1267</sup> Verbal IQ represents language-related (reasoning) tasks and non-verbal IQ reflects tasks in which reasoning is done with forms, symbols and patterns, with language abilities having lesser importance. Three components of testimonial competency require basic verbal reasoning.

argument for non-verbal IQ scores applied (see above). There was little justification to correlate a participant's ability for visual-motor integration with his or her level of cognitive functioning, even more so in a group that included a substantial number of members with atypical perceptual and/or motor development.

4. It was regarded as acceptable to combine the two data sets (standardised IQ and ratio IQ) since the present study did not require more than a rudimentary system to organise the data. The intelligence level descriptions of the three HSRC psychometric tests,<sup>1268</sup> combined with the levels of cognitive disability,<sup>1269</sup> were used to categorise participants in terms of mental functioning. Table 5.2 reflects the classification system employed in the study.

Table 5.2 Classification system of cognitive functioning

<b>RANGE</b>	<b>DESCRIPTION</b>
130 and higher	Very superior
120 – 129	Superior
110 – 119	High average
90 – 109	Average
80 – 89	Low average
70 – 79	Borderline
69 and lower:	Cognitively disabled:
55 – 69	Mild
40 – 55	Moderate
25 – 39	Severe
24 and below	Profound

The cognitive test scores of 136 participants (74% of the total sample) were classified according to the level of intellectual functioning. The frequencies that reflect the different levels of cognitive functioning appear in table 5.3.

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<sup>1268</sup> M Robinson *Manual for the Individual Scale for General Scholastic Aptitude Part I Background and standardization* (1998) 81; R van Eeden *Manual for the Senior South African Individual Scale – Revised (SSAIS-R) Part I Background and standardization* (1991) 48; EM Madge *Manual for the Junior South African Individual Scales (JSAIS) Part I Development and Standardization* (1981) 91.

<sup>1269</sup> American Psychiatric Association (APA); Sparrow *et al Vineland-II* 253.

Table 5.3 Representation of level of cognitive functioning in sample

<b>LEVEL OF FUNCTIONING</b>	<b>FREQUENCY (n=136)</b>	<b>PERCENTAGE (%)</b>
Borderline	10	07
Mild	46	34
Moderate	49	36
Severe	23	17
Untestable	08	06

### 5.1.2 Dependent variables

Two dependent variables were created with a view to investigating the two components of competency, e.g. narrative ability and moral capacity. A dependent variable "registers the effect of variation or manipulation in a research study".<sup>1270</sup>

#### (a) Narrative ability score

For the current argument, the narrative ability score had to reflect a number of expectations associated with the communication competency of a child witness in general. The ideal witness would be able to give a spontaneous verbal account of an event. While he or she would be able to relate events in a chronological order, the witness would also not confuse details due to syncretic thinking or confabulation. The witness would be able to communicate the events intelligibly. Good questions would serve as memory triggers, and the ideal witness would thus be able to provide further details in response to focused questions. Once again, answers to questions would contain correct information only.

The analysis of how the participants recounted the story during the child interview was used to calculate a narrative ability score. A maximum score of 6 consisted of a combination of the following skills:

*Narrative ability = Free recall: chronology + Free recall: no syncretic thinking + Free recall: no confabulation + Free recall: gist of story + Focused questions: new information + Focused questions: only correct information*

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<sup>1270</sup> Terre Blanche *et al Research in Practice* 558.

For the purpose of statistical calculations, the narrative ability scores were categorised as follows: a score of 0 and 1 were coded as "1" ("below average"), 2 and 3 were coded as "2" ("average") and a score of 4, 5 or 6 was coded as "3" ("above average").

(b) Moral capacity score

A moral capacity score was calculated for each participant by totalling his or her correct responses on the Lyon and Saywitz form score (containing four truth-lie distinction items) and the morality scale score (containing four obligation to tell the truth items). The maximum score that could be obtained was 8. In order to do the statistical calculations, the scores were coded as follows: if a participant obtained 0, 1 or 2, it was coded as "1" ("below average"); the scores 3, 4 and 5 were coded as "2" ("average"), and a 6, 7 or 8 score was grouped as "3" ("above average").

The results of the Lyon and Saywitz test were used to calculate a score for moral capacity, because with this test moral capacity is assessed at its most basic level – the participant needs to demonstrate only the understanding that an incorrect label is "a lie" and a correct label is "the truth". Reasoning that reflects more advanced cognitive development is not required (paras 2.3.3 and 2.5) and therefore, children who had not yet developed the capacity to distinguish between a mistake and a lie, for example, would also be able to identify the correct response.

(c) Hypothetical questions score

The nine- and 10-year-olds answered four hypothetical questions on truth and lies. A hypothetical questions score was calculated by totalling a participant's correct answers. For the purposes of statistical analysis, these scores were classified as follows: a score of 0 or 1 was coded as "1" ("below average"); a score of 2 was coded as "2" ("average") and the scores of 3 and 4 were combined as a "3" ("above average").

### 5.1.3 Statistical tests

Three inferential statistical tests were used for data analysis. Only those results that clarify findings relevant to the study are reported and discussed in the second section.

#### (a) Chi-square tests

Chi-square tests are performed when nominal data are analysed and are often used in the social sciences.<sup>1271</sup> Nominal data refers to the categorisation of information and the assignment of a distinguishing number to each category.<sup>1272</sup> Chi-square tests were particularly useful in this study because of the kind of data collected from the parent and teacher questionnaires, as well as during the child interviews. The chi-square tests, and the Pearson chi-square in particular, were performed most frequently. Associations between the different variables of the study (paras 5.1.1 and 5.1.2) were inspected and when a relationship was statistically significant, i.e. the improbability hypothesis was rejected,<sup>1273</sup> the results were reported in a correlation matrix (Appendix 6).

#### (b) T-Test

With the t-test, the means of two groups are treated as estimates of a population of scores and then compared with each other.<sup>1274</sup> On account of statistical procedures performed, a conclusion is made whether the means of a group reflects the characteristics of the same population or not.<sup>1275</sup> A t-test was performed to compare the means of the NC group to the means of the NNC group (para 5.2.4) on various variables in order to determine whether the learning experience had had an effect.

#### (c) One-way ANOVA

The Analysis of Variance tests require a complex statistical analysis due to the number of data elements that have to be analysed simultaneously.<sup>1276</sup> Different means on a dependent variable present in the data are compared.<sup>1277</sup> The three Lyon and Saywitz forms (para 5.2.6) were compared with one another and because

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<sup>1271</sup> DurrheimTredoux and Smith *Research in Practice* 232-234.

<sup>1272</sup> Durrheim and Painter *Research in Practice* 155.

<sup>1273</sup> Durrheim *Research in Practice* 206-208.

<sup>1274</sup> Tredoux and Smith *Research in Practice* 226.

<sup>1275</sup> *ibid.*

<sup>1276</sup> Tredoux and Smith *Research in Practice* 227.

<sup>1277</sup> *ibid.*

the ANOVA test produced a significant F-ratio, post-hoc tests were performed on the means.<sup>1278</sup> The latter tests are performed to reveal data patterns present.<sup>1279</sup>

## 5.2 RESULTS

### 5.2.1 Child interviews

It was impossible to complete the child interview with 35 of the participants in the sample.<sup>1280</sup> In light of the difficulty that testing children with speech difficulties and ASD (para 3.4.5) posed, chi-square tests were performed to further investigate this observation.<sup>1281</sup> There was no significant correlation between incomplete interviews and communication difficulties, but unsuccessful testing and ASD showed a strong positive relationship, with statistical significance.<sup>1282</sup> In table 5.4, the behavioural observations are arranged in descending order of highest frequency (“often”) found among participants.

Table 5.4 Frequency of behavioural observations during child interviews (N=184)

	<b>NOT AT ALL (%)</b>	<b>SOMETIMES (%)</b>	<b>OFTEN (%)</b>
Distractible	42	32	26
Unresponsive	68	16	16
Fidgeting / overactive	60	28	12
Stereotypical behaviours	79	09	12
Disinterested	83	09	08
Impulsive / overhasty	76	19	05

<sup>1278</sup> Tredoux and Smith *Research in Practice* 229.

<sup>1279</sup> *ibid.*: “Post-hoc tests are statistical procedures, similar to t-tests, that detect a pattern of differences in a set of means.”

<sup>1280</sup>

<b>ADMINISTRATION</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
Easy	86	47
Difficult	40	22
Very difficult	23	12
Impossible	35	19
<b>TOTAL</b>	184	100

<sup>1281</sup> Tredoux and Smith *Research in Practice* 232-233.

<sup>1282</sup>  $p < 0.001$ .

Slow	77	18	05
Uncooperative	88	08	04
Emotional	95	03	02

The categories distractibility, fidgetiness and impulsivity correspond with the symptoms of ADHD (para 4.5.2). As can be seen in the table, of all the behavioural observations, distractibility occurred most frequently during testing (26%), but not on a large scale: according to the distribution, the participants without major difficulties to remain focused (42% and 32% respectively) were substantially more. The categories unresponsiveness (16%), hyperactivity (i.e. fidgeting and overactiveness) (12%), disinterest (8%), uncooperativeness<sup>1283</sup> (4%) and emotionality<sup>1284</sup> (2%) reflected the behaviour of the participants who were unable to complete the full child interview.

Furthermore, perseveration and echolalia (para 3.4.5) as descriptors of stereotypical behaviour, appear frequently in the tester's remarks. Other stereotypical behaviour that was noted was thumb sucking, flapping, rocking, arm twisting, finger wringing and nail picking. A small number of participants were talkative, but language was not utilised to participate in verbal exchange (*ibid*). Inappropriate laughing also occurred (*ibid*). There were participants who were unable to communicate verbally but who showed their continued interest to participate by communicating nonverbally (para 3.4.2).

### 5.2.2 Narrative responses

The narrative section of the child interview consisted of two parts. Participants were first invited to recount the story from memory. Then open-ended, focused questions

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<sup>1283</sup> Tester remarks "*Sy het omgedraai in die stoel en geweier om te antwoord. Wil ook nie terug gaan klas toe nie. ...*" ("She turned around in her chair and refused to answer. Does also not want to go back to class. ...")

<sup>1284</sup> Tester remarks "*Hy raak heeltemal oorweldig en begin huil met Lyon en Saywitz. Onderhoud gestaak.*" ("He becomes totally overwhelmed and starts to cry with the Lyon and Saywitz. Interview terminated.")



were posed and the answers of participants were recorded. The results will be discussed according to the two parts, i.e. free recall and focused question responses.

(a) Free recall

Eighty (80) or 44% of participants were unable to share any story details in response to the free recall invitation. The majority of the remaining 104 participants who were able to give some account of the story found it very challenging to recall and recount many details. Only a small number of participants in the older age group (8 to 10 years) gave a detailed narration in response to a free recall invitation (Appendix 6 table 1).

Utilising the content of a story to investigate participants' narrative ability offered the opportunity to examine the accuracy of details they provided during free recall. Most of the participants experienced difficulty in recounting correct details only and to give an accurate report of the events of the story (Appendix 6 table 2). With age, detail accuracy decreased, and the group of 7-year-olds were the best able to provide only-correct details. There was also a decrease in detail accuracy relating to the level of participants' cognitive functioning (Appendix 6 table 3): participants with severe cognitive limitations provided less accurate information in comparison to participants with borderline intellectual functioning. The difference in free recall accuracy was obvious when participants with a mild delay in intellectual functioning were compared to those in the group with a moderate delay. The latter group had a strong resemblance to the group with severe ID. In the group of participants who were able to present information in a chronological order, an age effect was found (Appendix 6 table 4). Younger participants had a lesser sense of temporal order than the older participants, and chronology was more often taken into account by the participants in the older age groups during narration. However, the 9-year-olds formed an atypical group, since their consideration of temporal order showed greater similarity to that of the younger age groups.

The inaccuracies associated with narration are syncretism (para 2.6.3) and confabulation (para 2.6.2). When participants' free recall performance<sup>1285</sup> was analysed in terms of syncretic thinking, it was found that a substantial number had not employed syncretic thinking – it was absent in the accounts of 60% of participants. Furthermore, chi-square testing revealed that age had an effect on these responses (Appendix 6 table 5): as age increases, responses that featured syncretism decreased. However, the group of 7-year-olds stood out in the sense that their free recall narration was less influenced by syncretism than would be expected on the basis of the maturational pattern. Furthermore, a significant correlation was found between syncretic thinking and ID (Appendix 6 table 6) while the level of cognitive impairment was also associated with its presence: participants with borderline intellectual functioning exhibited less syncretism in their responses than those with moderate ID. Moreover, although the small numbers call for caution, there was also a relationship found between syncretic responses and communication delays, DS, ASD and blindness (Appendix 6 table 7). With regard to blindness as a developmental disability, the finding is the opposite of what it is for the other conditions: having no vision was associated with a lack of syncretism. The participants with no vision actually outperformed the rest of the sample, i.e. the participants without legal blindness, regarding the absence of syncretism.

Participants' free recall responses<sup>1286</sup> were also analysed in terms of confabulation. Once again the group of participants who did not fill memory gaps by confabulating, was greater than those who did, but the difference between the two groups (non-confabulators and confabulators) was smaller than the difference between those who employed syncretism and those who did not: 54% of participants demonstrated no confabulation while 46% confabulated. Further analysis indicated an age effect: confabulation increased with age (Appendix 6 table 8). On the other hand, there was a prominent group of 7- and 8-year-olds present in the sample who had not confabulated. Moreover, a statistically significant association was found between

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<sup>1285</sup> n = 104.

<sup>1286</sup> n = 105.

confabulation and the developmental disabilities of communication delays, blindness, DS and ASD (Appendix 6 table 9). While DS and ASD were associated with a tendency for more responses of confabulation, communication delays and no vision were related to less confabulation, although caution should be exercised due to the small sample size. No participant with a communication delay gave a confabulation response during free recall. And as it was the case with syncretism, the no vision group of participants outperformed their counterparts in terms of the lack of confabulation during free recall.

Of the 104 participants who gave some narration during the free recall stage, 32% made spontaneous references to the gist of the story as opposed to 68% of participants who had not. A correlation of statistical significance was found between age and being able to relate the gist of the story during free recall (Appendix 6 table 10) – the pattern indicated that getting the gist of the story did not get easier from the youngest group (6 years) to the oldest group (10 years). There were some 7- and 8-year-olds who managed better to get the point of the story in comparison to the 9-year-olds. Also, a statistically significant relationship was found between being able to provide the gist of the story and the level of cognitive functioning of participants (Appendix 6 table 11): for participants with borderline intellectual functioning it seemed less of a challenge than for those participants with severe ID.

#### (b) Open-ended focused questions

The memory of 58% of the participants<sup>1287</sup> was stimulated when they were presented, as visual cues to recall further details, with the pictures they coloured in. Here the effect of age was of statistical significance (Appendix 6 table 12): recalling new information on presentation with a visual stimulus increased with age. The group of 9-year-olds stood out as atypical, because it had a lesser effect on them than the developmental progression would have led one to expect. It was also found that the level of cognitive functioning played a role regarding the stimulation of recall by means of a visual cue (Appendix 6 table 13): the lower the level of functioning, the less was the effect of the visual cue stimulating recollection.

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<sup>1287</sup> n = 160.

In response to the open-ended focused questions, 65% of participants<sup>1288</sup> offered new information, i.e. material not mentioned during the preceding free recall stage.<sup>1289</sup> The age of participants played a significant role (Appendix 6 table 14): participants provided progressively more new information if they were older. The 9-year-old participants once again differed in that they provided less new information than what statistical progression would have led one to expect. Furthermore, a statistically significant correlation between the level of cognitive functioning and the supplementing of new information emerged (Appendix 6 table 15). Participants with borderline intellectual functioning provided more new information in response to the focused questions than participants with severe ID or those whose disabilities disallowed formal testing.

The analysis of the frequencies of information accuracy reveals the following picture:

<b>NEW INFORMATION PROVIDED WITH OPEN-ENDED FOCUSED QUESTIONING</b>		
(n = 123)		
Only-incorrect	Both incorrect and correct	Only-correct
7%	67%	26%

A lower percentage of participants provided only-incorrect (as opposed to only-correct) new information in response to the focused questions. However, the percentage of participants who offered both incorrect and correct new information was substantial. In the group of participants who supplied only-correct information in response to the questions, an age effect (Appendix 6 table 16) and level of cognitive functioning effect (Appendix 6 table 17) occurred. Therefore, the older participants provided more correct only new information in comparison to the younger ones. The 9-year-olds group was once again an exception as their response pattern resembled that of the 7-year-olds. Participants whose cognitive functioning was less compromised by ID provided more correct new information in comparison

<sup>1288</sup> n = 129.

<sup>1289</sup> Tester remarks *Dit is baie opvallend hoe die gefokusde vrae sy herroeping gestimuleer het. Uitstaande detail. Hy het geweier om die poets te bak. Hy persevereer op 'n gedagte, bv. verjaardag.* ("It is very obvious how the focused questions stimulated his recall. Exceptional detail. He refused to play the trick. He perseverated on a thought, e.g. birthday.")

to those participants whose cognitive functioning was more affected by ID. This was similar to what occurred in the small group of participants who responded with only-incorrect details during the focused questions enquiry. While an age effect was found (Appendix 6 table 18), the small numbers appeared to confirm the strong tendency of participants to offer a combination of correct and incorrect details. Regarding the association between the level of cognitive disability and choice of incorrect only details (Appendix 6 table 19), this tendency towards a combination of correct and incorrect details was also seen, and it was especially obvious in participants with borderline intellectual functioning.

The inspection for confabulation was continued in the responses to the focused questions. The opposite of the free recall pattern was found: 56% of 124 participants gave one or more confabulation response and 44% of participants did not confabulate. Therefore, in response to the questions, a higher frequency of participants confabulated, but, as was the case in the free recall stage, confabulation also increased with age (Appendix 6 table 20). The group of 9-year-old participants once again deviated from the developmental pattern because they were less inclined to confabulate in relation to the group of 8-year-old participants. It was also found that the less cognitively challenged participants were, the greater was the inclination to confabulate (Appendix 6 table 21). The correlation between the teachers' rating of confabulation among participants and the analysis of confabulatory responses in response to the focused questions was statistically significant.<sup>1290</sup>

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1290

<b>CONFABULATION (FOCUSED QUESTIONS)</b>	<b>When this learner recalls from memory, how often would s/he (also) give information that is not part of the story?</b>				
	<b>Cannot say</b>	<b>NEVER</b>	<b>SOMETIMES</b>	<b>USUALLY</b>	<b>TOTAL</b>
<b>YES</b>	21	8	25	5	59 (38%)
	36%	14%	42%	9%	100%
<b>NO</b>	14	12	21	0	47 (31%)
	30%	26%	45%	0%	100%

The tester's remarks<sup>1291</sup> prompted the researcher to compare the last question to the other four focused questions that were asked during this phase (Appendix 3). While it was an open question, it was not actually focused, i.e., a question on a specific topic. The participant was invited to provide any outstanding details of the story, but in the format of an implied question. In retrospect, the difficulty level of this last question was higher than the preceding specific questions.

### 5.2.3 Narrative ability

The construction of the narrative ability score was explained in paragraph 5.1.2. The distribution of the narrative ability scores in the sample (N = 184) was:

No score <b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Full score <b>6</b>
96	22	16	21	17	9	3
52%	12%	9%	11%	9%	5%	2%

The majority of participants had no (52%) or a very limited ability (12%) to give a narration of the course of events that resembles the narrative ability of an ideal witness (para 5.1.2). However, 7% of the participants displayed such a narrative ability, and the narrative competence of another 29% were considered to be average.

### 5.2.4 Narrative training

The quasi-experiment was conducted to test whether the mediation of temporal order – teaching randomly selected participants to relate an event in sequential

<b>NOT APPLICABLE</b>	28	10	7	3	48 (31%)
	58%	21%	15%	6%	100%
<b>TOTAL</b>	63 (41%)	30 (20%)	53 (34%)	8 (5%)	154 (100%)

$p = 0.004$

<sup>1291</sup> Tester remarks *Gefokusde vrae: met die laaste vraag is dit konfabulasie.* ("Focused questions: with the last question it was confabulation."); *Hy het net konfabulasie ingebring op die laaste oop vraag van die gefokusde vrae.* ("He brought in confabulation only with the last open question of the focused questions.")

order – fostered narrative performance (para 4.3.5). Of the sample, 90 participants or 49%, were in the narrative condition (NC) group and 94 participants in the no-narrative condition (NNC) group. It was found that the learning experience made no substantial difference to the narrative ability score (para 5.1.2) of the NC group in comparison to the NNC group.<sup>1292</sup>

Two findings of statistical significance emerged from further statistical analysis. Firstly, in comparison to the NC group, more participants from the NNC group volunteered new information during the focused questions stage.<sup>1293</sup> Secondly, the responses to the focused questions of the NC group were more accurate in the sense that they contained a higher frequency of only-correct details and a lower frequency of a combination of accurate and inaccurate responses, in comparison to the NNC group.<sup>1294</sup>

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1292

	Narrative ability score						
	0	1	2	3	4	5	6
<b>NC</b>	50	8	9	10	7	6	0
(n = 90)	55%	9%	10%	11%	8%	7%	0%
<b>NNC</b>	46	14	7	11	10	3	3
(n = 94)	49%	15%	7%	12%	11%	3%	3%
<b>TOTAL</b>	96	22	16	21	17	9	3
(N = 184)	52%	12%	9%	11%	9%	5%	2%

1293

	NEW INFORMATION (FOCUSED QUESTIONS)			
	YES	NO	NOT APPLICABLE	TOTAL
<b>NC</b>	51	9	30	90
	57%	10%	33%	100%
<b>NNC</b>	68	1	25	94
	72%	1%	27%	100%
<b>TOTAL</b>	119	10	55	184
	(65%)	(5%)	(30%)	(100%)

$p = 0.010$

### 5.2.5 Trick

An opportunity was created for each participant (except the visually impaired group) to play a trick on the interviewer (para 4.3.6). This was done for two reasons – firstly with a view to putting the child at ease and secondly to observe whether the child’s ToM allowed him or her to pick up implied cues.<sup>1295</sup> The behaviour of 128 participants in reaction to the trick invitation was analysed. Besides the non-participation of the visually impaired group, there were also participants who remained unresponsive. Thirty-three (33) percent of the participants clearly understood the implied instruction to play the trick. Eleven (11) percent showed initiative by playing the trick in a different way than was suggested. Twenty-four (24) percent needed assistance, e.g. repetition of the cue or some prompting to play the trick. And 33% of the participants showed obvious enjoyment after the game.

### 5.2.6 Lyon and Saywitz oath-taking competency test

One of the three forms of the original version of the Lyon and Saywitz test, as well as its morality scale, was administered to every participant (para 4.3.6).<sup>1296</sup> In all

1294

	<b>ONLY-CORRECT DETAILS (FOCUSED QUESTIONS)</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
<b>NC</b>	28	28	34	90 (49%)
	31%	31%	38%	100%
<b>NNC</b>	20	47	27	94 (51%)
	21%	50%	29%	100%
<b>TOTAL</b>	48 (26%)	75 (41%)	61 (33%)	184 (100%)

$p = 0.032$

<sup>1295</sup> Tester remarks *Hy hou die appel langs hom in die lug en glimlag breed. Dit lyk of hy nie besef dat ek steeds die appel kan sien nie.* (“He holds the apple next to him in the air and smiles broadly. It seems as if he does not realise that I can still see the apple.”)

<sup>1296</sup> The frequencies of the item responses of each form are:

	<b>Correct (%)</b>	<b>Incorrect (%)</b>	<b>No response (%)</b>	<b>TOTAL (%)</b>
<b>FORM A (n = 61)</b>				
A1	43	41	16	100
A2	49	36	15	100
A3	54	26	20	100



three forms of the test and the morality scale, a pattern was noted: the fourth item consistently received more correct responses than the first item.

When the scores obtained on the different forms (A, B and C) were compared with one another by performing a one-way ANOVA test (para 5.1.3), a significant form effect on the Lyon and Saywitz score ( $F = 7.38$ ,  $df = 2$ ,  $181$ ,  $p = 0.001$ ) was revealed. Form B was found to be the easiest of the three forms, because the Tukey Pairwise comparison tests showed a significant difference in the scores when Form A and B were compared ( $p = 0.004$ ), as well as when the scores of Form B and C were compared ( $p = 0.001$ ), but not when Form A and C were compared ( $p > 0.89$ ).

It was investigated whether the higher success rate on form B was attributable to the adaptations made to the modality of representation for participants with visual impairments (para 4.3.5). When the performance of the participants of School 4 were compared to the performance of the other participants who had done form B, the difference approached statistical significance, but the results remain inconclusive due to the small sample size.

To evaluate the suitability of the test for inclusion, the participants' reactions during administration were evaluated. The evaluation system allowed for more than one response to be ticked for each individual participant, e.g. "gave appropriate labels"

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A4	51	33	16	100
<b>FORM B (n = 49)</b>				
B1	67	25	08	100
B2	65	25	10	100
B3	78	14	08	100
B4	76	16	08	100
<b>FORM C (n = 74)</b>				
C1	49	24	27	100
C2	46	23	31	100
C3	45	26	29	100
C4	54	14	32	100
<b>MORALITY SCALE (N = 184)</b>				
Morality 1	54	27	19	100
Morality 2	60	20	20	100
Morality 3	61	19	21	100
Morality 4	59	22	19	100

and “was negatively affected by repetition”.<sup>1297</sup> Twenty-five (25) percent of the participants were unable to produce (intelligible) labels for the visual stimuli and in the absence of verbal labels the questions could therefore not be asked. Fifty-five (55) percent of participants gave expected names for the visual stimuli of the test, while 23% gave unexpected labels. There were participants who demonstrated an option bias: some either favoured the truth- or lie-teller (7%) and others either preferred the left or the right hand side (8%). And 13% of the participants were negatively affected by the repetitive nature of the four questions. According to the tester’s remarks, there was one participant who found the morality scale much more challenging than the form (para 4.3.6).

The scores of the participants (N = 184) on the different forms of the Lyon and Saywitz test and the morality scale<sup>1298</sup> were used to calculate each participant’s moral capacity score (para 5.1.2):

No score <b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	Full score <b>8</b>
30	4	17	16	24	12	18	21	42
16%	2%	9%	9%	13%	7%	10%	11%	23%

<sup>1297</sup> Consequently percentages exceed 100% when added.

<sup>1298</sup>

	No score <b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	Full score <b>4</b>
<b>Form A (n = 61)</b>	12	11	16	11	11
	20%	18%	26%	18%	18%
<b>Form B (n = 49)</b>	04	05	06	13	21
	08%	10%	12%	27%	42%
<b>Form C (n = 74)</b>	20	10	16	11	17
	27%	14%	22%	15%	23%
<b>Form A – C (N = 184)</b>	36	26	38	35	49
	20%	14%	21%	19%	26%
<b>Morality scale (N = 184)</b>	42	20	27	24	71
	23%	11%	15%	13%	38%

The percentage distribution of scores from 0 to 8 indicated discrimination value – the sample was consequently classified in three competency groups: no or limited ability, average ability and fully competent.

#### 5.2.7 Four hypothetical questions

The 9- and 10-year-olds (n = 62) answered four hypothetical questions. It seemed the participants first orientated themselves in terms of the reasoning required to answer such a line of questioning (question 1) and then proceeded with the rest of the questions. However, in retrospect, question 4<sup>1299</sup> could have been the easiest question to answer, not as the result of a practice effect, but due to its contents. The reasoning required to answer the question tapped the participant’s semantic memory (knowledge base) rather than his or her ability for hypothetical thinking. The percentage of responses to the respective questions is reflected in the next table.

Table 5.5 Responses to hypothetical questions

	<b>Correct (%)</b>	<b>Incorrect (%)</b>	<b>TOTAL (%)</b>
<b>Hypothetical question 1</b>	50	50	100
<b>Hypothetical question 2</b>	55	45	100
<b>Hypothetical question 3</b>	53	47	100
<b>Hypothetical question 4</b>	57	43	100

The scores obtained by the group of older participants on the hypothetical questions were as follows:

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<sup>1299</sup> “What if someone asked you the name of your school. You said, ‘I am in [school of participant]’. Are you telling the truth or a lie?”

No score <b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	Full score <b>4</b>
19	5	10	6	22
31%	8%	16%	10%	35%

The participants' hypothetical questions scores were correlated with their scores for moral capacity (para 5.1.2) to investigate a possible relationship. With the Pearson's product-moment correlation test (para 5.1.3) a strong relationship was found that was statistically significant, irrespective of the form the participants were tested with.<sup>1300</sup>

These statistics indicated a significant positive correlation between the scores, suggesting that participants had similar performance on the two measures: If a participant had difficulty with the basic (moral) reasoning required by the Lyon and Saywitz, he or she also had difficulty with the more advanced reasoning required by the hypothetical questions and *vice versa*.

#### 5.2.8 Conceptual understanding of moral concepts

Participants' responses to the questions that were aimed at exploring their understanding of the concepts of the truth, lies, a promise and an oath were evaluated. A participant was considered to have an understanding of a moral concept when his or her response contained a description of the concept, either by way of a definition and/or a clear example explaining it. In the table below the frequencies of conceptual understanding are expressed in percentages:

	<b>Yes (%)</b>	<b>No (%)</b>	<b>Not applicable (%)</b>	<b>TOTAL (%)</b>
<b>Truth</b>	23	52	25	100
<b>Lies</b>	39	38	23	100
<b>Promise</b>	15	60	25	100
<b>Oath</b>	01	75	24	100

<sup>1300</sup> Moral capacity score (A) and hypothetical questions score: Pearson  $r = 0.74$ ,  $p < 0.001$ .

Moral capacity score (B) and hypothetical questions score: Pearson  $r = 0.89$ ,  $p < 0.001$ .

Moral capacity score (C) and hypothetical questions score: Pearson  $r = 0.85$ ,  $p < 0.001$ .

It was impossible to evaluate the responses of approximately 25% of the participants since they were unable to produce intelligible verbal responses to the questions. The concept of lying was best understood (39%) in relation to the other concepts. Only 1% of the participants possessed a conceptual knowledge of an oath. Albeit still at a low frequency, a larger percentage of the participants (15%) understood the meaning of “to promise”.

The moral capacity score (paras 5.1.2 and 5.2.7) was used to examine whether a relationship existed between the participant’s performance on the Lyon and Saywitz and the post-interview evaluation of having a conceptual understanding of the moral concepts of truth and falsity. The analysis was limited to these two concepts in view of the size of the two samples. Statistically significant relationships between the respective moral capacity group scores and the rating of an understanding of the concepts of truth or lie were found after performing chi-square tests.<sup>1301</sup> This means, whether the participant did form A, B or C, combined with the morality scale, the score he or she obtained correlated with his or her understanding of the truth or a lie. No score or a low score had an obvious relationship with a lack of conceptual understanding of the truth or a lie, and *vice versa* in the case of a high score.

A similar examination was done regarding participants’ hypothetical question scores (para 5.2.7). Statistically significant relationships were once again found in the conceptual understanding of the truth as well as of lies,<sup>1302</sup> but the effect of sample size should be considered.

An age effect was found in the understanding of respectively truth and falsity when the association between age and these concepts was examined (Appendix 6 tables 22 and 23). While more participants had a conceptual understanding of lies than of the truth, the understanding of both concepts developed with age. No 6-year-old in the sample was able to verbally conceptualise either truth or falsehood. Furthermore, a statistically significant relationship was found between the conceptual understanding of the truth and lies and the level of cognitive functioning,

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<sup>1301</sup>  $p < 0.001$ .

<sup>1302</sup>  $p < 0.001$ .

as well as when the type of developmental disability was associated with cognitive impairment (Appendix 6 tables 24 and 25). In comparison, the concept of lying was less familiar to participants with cognitive impairment than to those without. In the group of participants who were cognitively challenged, most participants with borderline intellectual functioning understood the concept of falsity. But as the level of cognitive functioning changed from borderline to severe ID, so did participants' understanding of the two concepts gradually decrease. When the correlation tests were performed on the different developmental disabilities represented in the sample, the following groups displayed a marked difficulty with the conceptual understanding of truth: communication delays, DS and ASD (Appendix 6 table 26). In fact, no participant with one of these developmental disabilities was able to articulate a conceptualisation of the truth. The categories DS and ASD were associated with a marked difficulty to conceptualise falsehood (Appendix 6 table 27). No participant with Down syndrome expressed a conceptual understanding of either truth or falsehood.

Although low frequencies provide some reason for caution, it was noted that participants with legal blindness differed from the other disabilities (*ibid*) in respect of their comprehension of truth and lies respectively. Eighty (80) percent of the participants who were legally blind (in comparison to 35% of the rest of the sample) showed a conceptual understanding of falsity and 60% of the participants with no vision (in comparison to 19% of the participants with vision) understood the concept of truth (Appendix 6 table 28). A negative correlation between blindness and cognitive disability ( $r = -0.547, p < 0.001$ ) was found. Therefore, in the group of visually impaired participants, legal blindness had a significant inverse relationship with ID: participants who were blind were usually not cognitively impaired.

### 5.2.9 “Have you ever told a lie?”

A number of 145 participants<sup>1303</sup> responded to the question:

<b>Have you ever told a lie?</b>	
<b>Yes</b>	<b>No</b>
22%	78%

The results of the chi-square tests indicated that the level of cognitive functioning had some relationship to participant responses (Appendix 6 table 29). While all participants with borderline intellectual functioning responded to the question in the negative – the majority of those who responded that they had lied before were participants with severe ID.

Furthermore, ASD and DS as developmental disabilities were each associated with a specific response pattern, in comparison to the non-ASD or non-DS groups respectively (Appendix 6 table 30). More than 55% of participants in each of these groups were unable to respond to this question. The small number of participants in the DS group who did respond gave preference to “yes”, while the small number of participants in the ADS group preferred “no” as their response. All participants with no vision responded to this question and showed a slight preference to answer in the affirmative (Appendix 6 table 31). Among their counterparts (vision group) the preference to deny was pronounced.

An age effect emerged (Appendix 6 table 32). Although less than 50% of the 6-year-olds answered this question, all the 10-year-olds responded. In every age group more participants denied ever having told a lie, and with age the “no” preference became stronger. In the group of 9-year-olds this increased strength of the preference was less obvious.

The participants’ responses to this question also showed an association of significance with the variables free recall: gist of story (Appendix 6 table 33), as well

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<sup>1303</sup> The “no response” group consists of 39 participants whose cognitive ability had not allowed the processing of this question’s relatively complicated syntax.

as with their comprehension of the two moral concepts (Appendix 6 table 34). Whether a participant got the gist of the story or not, the obvious preference was to deny ever having lied. However, all the participants who had not responded to this question were part of the group whose free recall responses could not be analysed for gist. Furthermore, those participants who had a conceptual understanding of either the truth or lies were more inclined to deny that they had ever lied. But a “no” answer could not be seen as a reliable way of determining conceptual understanding, because those participants who had no conceptual understanding of the two concepts favoured “no” as the answer.

#### 5.2.10 Opinions on testimonial competency

According to the opinion of 84 caregivers, 36% of the participants were competent to give evidence in court. Conversely, the teachers responded to the question in the following way:

<b>In your opinion, if this learner had to go to court and tell about something that happened to him / her or a familiar person, would he / she be able to do so?<sup>1304</sup></b>		
<b>Yes</b>	<b>No</b>	<b>Cannot say</b>
14%	35%	51%

A correlation of statistical significance was found between the teachers’ opinion of incompetency and cognitive disability<sup>1305</sup> as a developmental condition. The teachers held a similar opinion with regard to Down syndrome<sup>1306</sup> and ASD.<sup>1307</sup> This means that teachers generally held the opinion that participants with ID, DS and ASD were incompetent to give evidence.

Chi-square tests were performed to examine whether there was an association between the caregivers’ opinion and the teachers’ opinion on testimonial competency. No correlation was found.

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<sup>1304</sup> N = 172.

<sup>1305</sup>  $p = 0.019$ .

<sup>1306</sup>  $p = 0.024$ .

<sup>1307</sup>  $p < 0.001$ .



### 5.3 DISCUSSION

Two competencies – narrative ability and moral capacity – of participants in the age group six to 10 years were examined. Although a number of participants were unable to complete the testing procedure and some of the other participants did not respond to certain questions, the behavioural observations made during testing confirmed that the child interviews were generally conducted with relative ease (para 5.2.1). In this section a general discussion of the quantitative research findings precedes a discussion on the results pertaining to participants' narrative ability, and the outcome of the testing of their moral capacity.

The results indicate that the difficulty levels of the two capacities differed: more effort from participants seemed to have been required during the testing of narrative ability than was the case with the moral competency testing. For example, just over 50% of the participants were able to comply with the free recall invitation (para 5.2.2). In comparison, approximately 75% of participants responded intelligibly to the Lyon and Saywitz forms (para 5.2.6). Thirty-six (36) percent of participants reached an average to above-average narrative ability score according to the criteria for the ideal witness (para 5.2.3). Seventy-three (73) percent of participants attained an average to above-average moral capacity score (para 5.2.6). The results indicate that three groups of varying competency emerged: a group with no or very limited competency, one with average competency, and another with full competency. The existence of these groups was independently confirmed by the evaluations of caregivers and teachers.

There were participants who gained prominence during the statistical analysis.

- The group of nine-year-olds frequently deviated from the expected age progression when the effect of age was investigated. It was noted, however, that home languages other than Afrikaans and English had the highest representation in this age group: 15% of this group was Xhosa-, Sotho- or Shona-speaking, or alternatively, 47% of the participants with a home language other than Afrikaans or English fell in the nine-year-old cohort (table 4.7). This observation confirms the importance of repeating this study with a

sample of children in the black population group with interviews conducted in their vernacular (para 4.5).

- The teachers had a general opinion that participants with ID, DS and ASD would be incompetent witnesses (para 5.2.10). DS and ASD were indeed found to be associated with major cognitive and communicative impairments. Although the receptive language of children with DS is a relative strength (para 3.4.3) as opposed to the relative strength of expressive language in verbal children with ASD (para 3.4.5), the impact of language and communication restrictions was apparent in the results, highlighting the vulnerability of these participants.
- Participants with legal blindness were found to be least affected by cognitive challenges (para 5.2.8). This finding could be the likely explanation for these participants' frustration with the repetition of the Lyon and Saywitz items (para 4.4.7). The no vision group also outperformed their counterparts in the sample with regard to syncretism and confabulation (para 5.2.2), and in comparison to their counterparts, clearly had less difficulty with the conceptualisation of the concepts truth and falsity (para 5.2.8). It therefore follows that a basic instrument such as the Lyon and Saywitz test was actually not required for assessing their conceptual understanding.

Overall, the findings point to the developmental nature of the competencies assessed. The various age groups frequently differed in terms of the aspects of the respective competencies that were measured. Maturation had in most instances a positive effect. These capacities were thus associated with the development of cognition, language and morality. The level of cognitive functioning was particularly associated with specific response patterns. However, it transpired that challenges in cognition did not necessarily render participants incompetent.

In the following paragraphs, the findings on participants' narrative ability are discussed. In general, participants were better able to respond to the open-ended focused questions than to the invitation to relate the story by means of free recall. This confirmed the notion that verbal cues serve as scaffolding for the retrieval from

memory for children who are developmentally challenged (para 4.6.2), in a similar fashion to children without developmental delays (para 3.2.2 (d)). The low percentage of participants who provided only-incorrect (as opposed to only-correct) new information in response to these questions confirms the general usefulness of open-ended focused questions in the forensic interviewing schedule for children with special needs and limited competency. Furthermore, participants' recall from memory was also stimulated by visual cues.

It was found that participants' account of the story events usually contained a combination of correct and incorrect information. Contrary to actual competency assessments, there were two factors that favoured this analysis: participants related a story known to the researcher and had no motive to misrepresent details in response to the interviewer's questions. It could therefore be determined that when incorrect details were related, it was linked to confabulation and/or syncretism. In the forensic context the interviewer and child witness do not share a frame of reference. These findings consequently alert professionals to the possible presence of these phenomena in the narratives of children with developmental disabilities in the forensic context.

Confabulation is indicative of an individual having difficulty with memory recall (para 2.6.2). The gaps in memory are filled with fabricated details during the narration of a course of events. In this study confabulation occurred more often in response to the focused questions than during the narrative stage. It is therefore important to follow the forensic protocol and commence with free recall. An age effect was found – confabulation responses increased with age. There was also an association between confabulation and the level of cognitive functioning – the greater the level of ID, the lower the frequency of confabulation. The teachers' rating of confabulation among participants was found to be valid.

Syncretism refers to a form of illogical reasoning – due to idiosyncratic logic an incoherent account of events is produced in which actual details are combined in a

peculiar fashion (para 2.6.3).<sup>1308</sup> Syncretism was found among 40% of participants. An age effect occurred as it decreased with age: younger participants displayed more syncretic thinking than older participants. This is consistent with the development of narrative ability (*ibid*). A level of cognitive functioning effect was found as well: the more cognitively impaired, the more likely the occurrence of syncretism.

The results show that a brief intervention to teach temporal order to a group of participants during the group activity was unsuccessful. The barriers imposed by the nature and severity of the disabilities represented in the NC group clearly required more intensive training, tailored to the needs of each individual child (para 4.3.5). However, the validity of the outcome of this quasi-experiment is challenged by a confounding variable<sup>1309</sup> that went undetected until the chi-square tests were analysed. An inverse relationship of statistical significance was found between cognitive disability and legal blindness. This finding invalidated the assumption that the experimental and control groups were equivalent in terms of critical features.<sup>1310</sup> The above average conceptual understanding of the no vision group in relation to the rest of the sample also suggested that the experimental group and control group were not matched on level of cognitive functioning.

The findings related to participants' moral capacity are addressed in the following paragraphs. Of the four concepts, the notion of lies was best represented in the participants' developing moral knowledge base. Only 1% of participants possessed any conceptual knowledge of an oath. Albeit still at a low frequency, a larger percentage of participants (15%) understood the meaning of "to promise".

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<sup>1308</sup> Tester remarks *Sy het met die mes en die 'gun' deurmekaar geraak. Sy praat van die mes maar bedoel eintlik die 'gun' omdat sy teen haar kop gewys het toe sy daarvan vertel.* ("She was confused by the knife and the gun. She talks about the knife but actually means the gun because she pointed to her head when she spoke about it.")

<sup>1309</sup> "Glossary" in Terre Blanche *et al Research in Practice* 557: "**Confounding variable** An uncontrolled 'extraneous variable' that co-varies with the experimental manipulation, thus undermining the internal validity of the experiment."

<sup>1310</sup> Tredoux and Smith *Research in Practice* 182.

The usefulness of the original Lyon and Saywitz oath-taking competency test was investigated. It is likely that a dynamic assessment situation was created by the repetition of similar items. The researcher's opinion that it was important to use more than one item for this group of children was confirmed (para 5.3.6). The participants found form B the easiest, but the other two forms also showed excellent statistical properties. This test had obvious advantages in testing the rudimentary understanding of truth and falsity in participants who are challenged by disabilities such as speech and/or cognitive impairments. The four hypothetical questions created by the researcher to test older participants' moral reasoning, as applied in the social context, also worked well. A strong positive correlation with the Lyon and Saywitz test was found. Furthermore, due to the statistically significant correlation between the tests and participants' understanding of truth and lies, these scales are considered to be valid<sup>1311</sup> instruments to determine the basic moral conceptualisation among children with developmental disabilities in middle childhood. However, it is not required for children with typical cognitive development and who have expressive language to communicate about their reasoning.

The outcome of this research confirmed that the understanding of the moral concepts related to the legal setting is complementary to the course of cognitive and moral development of children with developmental disabilities. In comparison to the younger participants, a higher frequency of the older participants understood the concepts of truth and lies. Participants were more knowledgeable about lies and lying than about the truth. The ability to conceptualise these two moral concepts also correlated with the level of cognitive impairment – participants with severe ID understood these concepts the least. Irrespective of age, participants were unfamiliar with the concept of an oath, but more participants had a conceptual understanding of "to promise".

Participant responses on "Have you ever told a lie?" corresponds with the Evans and Lyon study (para 2.4.3), in that most participants in the younger age group denied

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<sup>1311</sup> "Glossary" *Research in Practice* 561: Validity refers to the fit between the instrument and the construct that it measures.

ever having told a lie. It seems that a “no” answer to this question was the ToM of a group of participants in action (para 3.4.5).<sup>1312</sup> It is likely that, from the participant’s perspective, a “yes” answer would have reflected negatively on his or her morals, and that the interviewer would conclude that he or she was dishonest, especially because the preceding exchange had brought the negative consequences of lying to mind. An age effect and the effect of level of cognitive functioning were found. The young participants favoured a no response. The more affected he or she was by ID, the greater the likelihood that a participant would respond with an affirmative answer. It was confirmed that caution should be exercised when an interviewer poses direct questions about lying in the first person (para 2.5), and that this particular question is developmentally inappropriate to explore the moral development of a witness (para 2.4.3).

The research plan was for the results of the quantitative research to be supplemented by the findings of the qualitative research. The qualitative analysis is provided in the following chapter.

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<sup>1312</sup> Tester remarks *Jy kan sien hoe ongemaklik hy is om nie te jok nie en sê toe dus ja hy het. Skaam en verleë toe hy daaroor praat.* (“You can see how uncomfortable he is not to lie and therefore says yes he had. Shy and embarrassed when he speaks about [the lie].”)

# CHAPTER 6

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## QUALITATIVE RESEARCH

The content analysis was performed on all responses to the open-ended questions in the child interview, and also the responses to the relevant questions posed in the teacher and parent questionnaire pertaining to the current cognitive, language and moral functioning of a participant.

With a view to broadening the researcher's contextual understanding of the participants in the study, a number of caregivers shared their perspectives on child-raising with her, by completing the questionnaire on various developmental aspects, particularly with regard to the child's moral development (para 6.1). The challenges associated with rearing a child with a developmental disability emerged from 84 caregiver responses. Parents and caregivers were also requested to express an opinion on the witness competency of their children (para 6.4).

The responses of participants who were able to respond verbally to the six questions on the four concepts examined – the truth, a lie, a promise and an oath – were analysed.<sup>1313</sup> Participants' understanding of the moral concepts are described in paragraph 6.2.

A total of 172 teacher questionnaires were returned. The teachers' assessment of participants was considered of major importance in order to compile realistic and practical guidelines. Teachers were asked to assess participants in terms of skills related to testimonial proficiency and, where deemed applicable, for further comment (para 6.3). Teachers also expressed an opinion regarding the learners' competency to participate as a witness in the legal process (para 6.5). The last section of the chapter provides a summary of the findings (para 6.6).

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<sup>1313</sup> A number of "I don't know's" and non-responses occurred and were explained by the cognitive and communicative limitations of the participants. Unintelligible verbalisations were excluded from the categorisation procedure.

## 6.1 CAREGIVING ENVIRONMENTAL FEATURES RELATED TO MORAL DEVELOPMENT

### 6.1.1 Value system

According to the caregivers, 87% of participants were involved in religious activities like Sunday or Muslim school, prayer meetings or church choir singing.<sup>1314</sup> Ninety-four (94) percent of this group ascribed to the Christian and 6% to the Muslim faith.<sup>1315</sup> The caregivers' value systems were explored by enquiring which two values they regarded as the most important during their children's upbringing (para 2.5). Two perspectives emerged from the responses.

In general, the two most important values for caregivers were respect and honesty. The respect category included respect for authority, which was specifically mentioned by some parents. The value of honesty was translated by examples of moral conduct, for example, not stealing and/or not lying. A category less often chosen, but still clearly significant, was parents' focus on pro-social qualities, for example unselfishness and affection. Other general categories mentioned were: religious conviction, obedience and responsibility.

The response of one mother is a fitting introduction to another perspective:

"I would like to teach my child that she is very special, that we love her very much and that we will care for her always doesn't matter what happens. She needs to feel secure and safe and above all she should be a happy child. The values that I want to teach her is that she is special just the way she is because the Lord made her perfect."<sup>1316</sup>

Caregivers with parental responsibility for raising children with major developmental disabilities had a specific perspective on values. A number of parents communicated a measure of discomfort with the implications that disability holds for "success" in

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<sup>1314</sup> N = 84.

<sup>1315</sup> n = 73.

<sup>1316</sup> "Ek wil my kind leer dat sy baie spesiaal is, dat ons baie lief is vir haar en dat ons altyd vir haar sal sorg maak nie saak wat gebeur nie. Sy moet geborge voel en veral 'n gelukkige kind wees. Die waardes wat ek haar wil leer is dat sy spesiaal is net soos sy is want die Here het haar volmaak gemaak."



the future. Other parents emphasised the importance of children feeling emotionally secure in their families at present. Limitations in communication and assertiveness skills rendered some children vulnerable. Children's self-acceptance and the fact they should attain independence held special meaning. Albeit in different ways, what the parents expressed was the value of their children's optimal development, with a view "to be socially acceptable in society and to lead a well-adjusted happy life" in the future. Their children's education was therefore important.

### 6.1.2 Discipline

In some instances disciplining a child with a developmental disability could be a challenge, with certain methods of restraint proving to be ineffective with particular children due to, for example, temperamental characteristics such as fearfulness or aggression.

Most caregivers gave preference to positive discipline associated with the authoritative parenting style, i.e. talking to and/or teaching children appropriate behaviours according to normative expectations (para 3.2.5). One parent remarked that she found a system of rewarding positive behaviour useful. A few parents used only negative discipline associated with the authoritarian parenting style by way of shouting and spanking. Two parents used threats or a sense of guilt to get their children's cooperation.<sup>1317</sup>

A substantial group of caregivers used a combination of disciplinary methods. The most popular combination was first to talk and instruct, followed by a slap or a hiding if the child would not listen. Two parents stressed the importance of talking about the reason for the hiding to the child afterwards. Methods employed included time-out or suspending privileges, also in combination with others.

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<sup>1317</sup> "As hy steel gaan hy tronk toe." ("If he steals he goes to jail."); "Liewe Jesus hou nie van ongehoorsame kinders nie." ("Jesus doesn't like disobedient children.")

### 6.1.3 Managing lie-telling behaviour

Table 6.1 Responses on lie-telling behaviour questions

QUESTION	Yes	No
Generally speaking, do you consider your child to be honest?	81% <sup>1318</sup>	19%
Do you think your child tells more lies than other children of his / her age?	15%	86%
Can you usually detect that your child is lying?	87%	13%

Elaborating on questions on lying, various parents indicated that lie-telling behaviour was not an issue they needed to deal with.<sup>1319</sup> Some caregivers related this non-issue to their children's severe communication limitations. Some children were experienced as honest by nature. Alternatively, other parents commented that their children had difficulty grasping moral concepts such as lying or the distinction between lying and making mistakes.<sup>1320</sup>

A substantial number of caregivers approached lying by means of induction, i.e. with non-threatening direct conversations about truth and falsehood (paras 3.2.5 and 3.2.6). However, some comments reflected the difficulty caregivers experienced in teaching these concepts to children with marked cognitive limitations. Some children demonstrated a basic understanding but, at times, became confused. For example, when children interpreted their mistakes as punishable behaviour, they would employ a variety of mechanisms (e.g. arguing, denying, blaming or lying) to protect themselves. Restrictions in Theory of Mind (ToM) seemed to play a role (paras 3.2.3

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<sup>1318</sup> N = 84.

<sup>1319</sup> "I can't say [he] has actually lied to me. I can say, at times he doesn't listen, and when I ask him why he hasn't done what I have asked him for instance, he will either go and do it, or just not respond if he doesn't want to do it. The closest to lying ... is when I tell him its (sic) time for school, and he will say to me not its (sic) time for church. He does this some mornings when he doesn't want to go to school for example. However, he says it in a joking way, because he knows he has to go to school, and its (sic) time for school not church."

<sup>1320</sup> "*Hy voel nie hy het 'n fout gemaak nie, al het hy 'n fout gemaak.*" ("He doesn't feel he made a mistake, even though he had.")

and 3.2.5).<sup>1321</sup> It has been argued that children whose stage of cognitive development does not allow them to distinguish between truth and lies are not expected to lie (para 2.5). And related to an immature ToM, a few descriptions referred to gullibility<sup>1322</sup> and acquiescence<sup>1323</sup> (paras 3.2.5 and 3.2.6).

A direct enquiry was made into gullibility of participants. The finding was:

<b>QUESTION</b>	<b>Not at all</b>	<b>Somewhat</b>	<b>Very</b>
How gullible is your child?	27%	35%	38%

Parents who commented that their children did not display typical behaviour<sup>1324</sup> when they lied or when lies were exposed, were the exception. It seemed that a number of children felt the need to correct any disequilibrium created in the parent-child relationship by admitting the truth and/or apologising, and for physical gestures of affection to confirm that amends were made.<sup>1325</sup> One parent also mentioned that her child wanted to explain to her what had happened. However, for many children, disclosing falsities was not a simple and straightforward process. Withdrawal, either subtle or obvious, generally appeared to be an attempt to maintain nonverbal leakage control (para 3.2.5): a child would ignore the caregiver or refuse to speak, stay in his or her room, run away and go somewhere else for a while. More typical behaviours observed by caregivers when their children lied were: laughing, crying, arguing, denying, looking fearful, ashamed or guilty, becoming quiet or serious, or acting aggressively. Therefore, the method a child employed to uphold deception

<sup>1321</sup> "Hy weet nie hoe om te jok nie." ("He does not know how to lie.")

<sup>1322</sup> "Iemand sal vir haar 'n storie vertel en sy sal vir haar glo." ("Someone will tell her some story and she will believe her"; "Omdat sy so gou verlei kan word." ("Because she can be deceived so quickly."); "Hy glo gou 'n storie en vra nie baie [uit] nie." ("She believes a story easily and doesn't really question much.")

<sup>1323</sup> "Sy (sê) in baie gevalle ja vir als." ("In many instances she says yes to everything.")

<sup>1324</sup> "His body language and facial expression will look (sic) shocked. He will tell [the] parent that he lied by using his name." See ASD, para 3.4.5.

<sup>1325</sup> "She will come and apologize & want a hug. She wants parent to look her in the eyes so she know's (sic) parent knows she is sorry."

and prevent the truth from being exposed frequently exposed the lie: "He is very reserved, then it looks as [if] he falls into his own fault".<sup>1326</sup>

Four parents addressed the issue of lying from a religious point of view. Three parents described their appeal for truthfulness as a Christian value in a positive way. The other parent commented: "You talk to her and say Jesus loves her, if you tell lies, then you steal and if you steal you go to jail. Stealing starts with lying".<sup>1327</sup>

The subject of lying appeared to be emotionally laden for a number of caregivers: They would express dismay in different ways, but mostly by angrily confronting their children. One parent said, she always threatened to lock up the child in a dark room. Two other caregivers would threaten their children with spanking. Another caregiver would react by shaming the child. A number of participants would be punished for lie-telling. Some caregivers used a combination of reprimanding and hitting the hands, while others employed only physical punishment, or time-out, or removing privileges.

## **6.2 VERBAL CONCEPTS RELATED TO MORAL DEVELOPMENT**

### 6.2.1 Language development

During child participant interviews, the relative adverb "when" was employed, by way of an additional question, in order to make questions on normative concepts less abstract.<sup>1328</sup> This enabled participants to provide a description or example to explain the meaning of a moral concept instead of responding with a definition. In general, the additional question was found to be helpful, but at one particular school a substantial number of participants, instead of responding to the circumstances of an event, gave a time, by providing the name of a day of the week (such as "Monday"). The researcher later learnt some children were being taught the days of the week at that time. The lesson material obviously interfered with interpreting these questions.

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<sup>1326</sup> "Hy is baie teruggetrokke, dan lyk hy [hy] val in sy fout."

<sup>1327</sup> "Jy praat met haar, en sê haar liewe Jesus het haar lief, as jy leuns (sic) vertel, dan steel jy en as jy steel gaan jy tronk toe. Steel begin by leuns (sic)."

<sup>1328</sup> "What is a lie? ... When does a child tell a lie?"

An overview of the responses confirmed delayed language development (para 3.2.4). At approximately eight years of age, children's auditory discrimination skills allow for the general command of homophones and homonyms (*ibid*). Suitable examples illustrating the challenge these phonetics forms posed during the interviews will be presented in the next sections.

### 6.2.2 Basic moral concepts

The knowledge base linked with the conceptualisation of the four moral words – "truth", "lie", "promise" and "oath" – was explored during the child interview and will be discussed in the subsequent paragraphs. The following four points serve as an orientation to this discussion:

- The basic form of conceptualisation is considered to be identification. In terms of truth-telling and lying, this was tested by the Lyon and Saywitz forms. An object that is labelled correctly is the "truth" and an object labelled incorrectly is a "lie". Most participants demonstrated such basic understanding (para 5.2.6).
- In response to the questions posed during the interview, a participant was considered to have given a definition of the truth or a lie, if he or she (a) referred to its relationship to reality, e.g. "The truth is what really happened"; (b) gave an example of either of the concepts; or (c) defined one by means of negating the other, e.g., "A lie is not the truth".<sup>1329</sup>
- When a concept was explained using a specific instance as a representation of its meaning, it was classified as an example. An example was operationalised as a specific description of an instance to demonstrate the meaning of the word.

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<sup>1329</sup> Lyon 2000 *Southern California Law Review* 1039.

- A definition was operationalised as a descriptive statement reflecting a correct meaning of the word. Developmentally, it was expected that participants would utilise subordinate sets for defining concepts, rather than superordinate groupings, if direct definitions were given.<sup>1330</sup>
  - *What is the truth? When does a child speak the truth?*

The contents of 66 answers to the truth-question were analysed.<sup>1331</sup> Ambiguous and incorrect responses, e.g. stating that the truth is a “lie”, were excluded. Eventually 77% of the responses were grouped according to themes with a view to gaining insight into the participants’ reasoning regarding the moral concept of truth.

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<sup>1330</sup> Owens *Language Development* 365-367:

From the beginning of middle childhood, children’s word definition ability progresses in two ways. Conceptual understanding starts with personal (perceptual) experience and develops into meaning shared with others. Furthermore, it develops from a one-word description of an action to a sentence that reflects an understanding of multipart linguistic relationships. To give a proper word definition is considered “a metalinguistic skill”, and is related to a shift in processing information by means of the cognitive function of categorisation, and refining it. Although the most marked development of the ability to classify occurs between five and nine years, it only matures fully during adulthood. For the younger group of children in middle childhood, the definition of words will contain subordinate categories, and as they get older, the latter will be progressively replaced by superordinate categories. Adults are able to apply abstract superordinate classes to word definitions, due to mature cognitive and linguistic processing.

Example: Milk is white and it tastes nice → Milk is something you drink → Milk is a white liquid that humans usually have for its nutritional value.

<sup>1331</sup>

<b>AGE GROUP</b>	<b>6 years</b>	<b>7-8 years</b>	<b>9-10 years</b>
<u>Unusable</u> responses	<b>07</b>	<b>27</b>	<b>19</b>
Repetition of (part of) question	02	05	05
Random word / phrase / comment	03	16	13
Irrelevant reference to activity /story / trick	02	06	01
<u>Applicable</u> responses	<b>02</b>	<b>34</b>	<b>30</b>
Ambiguous / incorrect	-	11	04
Analysed	02	23	26

Table 6.2 Participants' understanding of the truth

THE TRUTH ...	FREQUENCY (%)
is when you do not lie.	27
goes with honesty and admitting a wrongdoing.	20
is telling something in the "right" (and not the "wrong") way.	12
goes with obedience.	12
is telling something exactly as it happened.	10
is not a bad behaviour.	07
agrees with somebody's perception of what has happened.	06
belongs with God and the church.	05
prevents punishment.	01

A group of participants who defined truth as the opposite of lying, added an explanation to their statements. Two participants particularly mentioned a negative consequence of lie-telling.<sup>1332</sup> While one participant stated that one is obliged not to lie,<sup>1333</sup> another participant focused on the obligation to speak the truth.<sup>1334</sup> For one participant the positive consequences of truth-telling stood out, i.e. not to be punished. Three participants related truth-telling to religious teaching. Some participants described the truth in terms of not behaving badly, e.g. swearing, cheating or fighting; for others it was about obedience to authority. A high frequency of those participants who linked truth to honesty and the admission of fault<sup>1335</sup> clarified statements with examples about conflict among siblings or in the

<sup>1332</sup> "Die waarheid is as jy jok vir iemand, gaan jy tronk toe." ("The truth is if you tell a lie to somebody, you will go to jail."); "Hy vertel die waarheid; sê maar hy vertel leuens vir hom ma, dan slaat (sic) hom ma vir hom." ("He tells the truth; but say he tells lies to his mom, then she smacks him.")

<sup>1333</sup> "n Mens mag nie jok nie." ("One is not allowed to lie.")

<sup>1334</sup> "Jy moet [die waarheid] praat." ("One must speak the truth.")

<sup>1335</sup> "As jy die waarheid vertel dan vertel jy die regte storie wat gebeur het. As jy iets verkeerd gedoen het dan moet jy sê die waarheid wat jy verkeerd gedoen het." (If you tell the truth then you tell the real story of what happened. If you did something wrong then you must tell the truth of what you did wrong.)

peer group.<sup>1336</sup> Twelve (12) percent of participants associated the truth with relating a correct version, and for 10% it was about an accurate reflection of events.

- *What is a lie? When does a child tell a lie?*

The contents of 62 answers to the lie-question were analysed.<sup>1337</sup> There are various Afrikaans words for "a lie". It had not been anticipated that one of these, *leuen*, would be confused with *leen* (to borrow).<sup>1338</sup> However, as the synonym *jok* (fib) was used in the second exploratory question, many participants who were initially confused, made sensible contributions.

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<sup>1336</sup> "As iemand baklei, of soos Boetie vir jou slaan, dan moet hy (Boetie) sê, ek het vir hom geslaan."  
("If someone fights, or if your brother hit you, then he (the brother) must say, I have hit him.")

<sup>1337</sup>

<b>AGE GROUP</b>	<b>6 years</b>	<b>7-8 years</b>	<b>9-10 years</b>
<u>Unusable</u> responses	<b>10</b>	<b>26</b>	<b>24</b>
Homonym / homophone distraction	-	04	03
Repetition of (part of) question	05	05	06
Random word / phrase / comment	05	14	15
Irrelevant reference to activity /story / trick	-	03	-
<u>Applicable</u> responses	<b>02</b>	<b>38</b>	<b>30</b>
Ambiguous	-	06	02
Analysed	02	32	28

<sup>1338</sup> For example, one ambiguous response was "*Leen as jy geld vra. Want as jy die geld steel, dan kom die polisies.*" ("Borrow when you ask money. Because if you steal money, then the police come.")



Table 6.3 Participants' understanding of a lie

<b>A LIE ...</b>	<b>FREQUENCY (%)</b>
is saying something that is the opposite of what actually happened.	23
is just like other bad behaviour.	21
gets you punished.	21
is not the truth.	06
is wrong, you must tell the truth.	06
is for when you made a mistake.	05
hides something you don't want others to know.	05
shows that you like the devil.	05
lets you grow a Pinocchio nose!	03
is playing a trick.	03
is used for not getting in trouble.	01
shows you "don't know anything".	01

Twenty-three (23) percent of participants described a lie as a false statement,<sup>1339</sup> mostly by means of giving an example. A high frequency of these examples involved explanations to parents.<sup>1340</sup> Twenty-one (21) percent of participants explained lying in relation to other "bad" behaviours, e.g. stealing, swearing or disobedience.<sup>1341</sup> Another 21% explained lies in terms of consequences – such as getting punished.<sup>1342</sup> Six (6) percent indicated a moral obligation to speak the truth,<sup>1343</sup> while for 5%

<sup>1339</sup> " 'n Jokstorie ... Wanneer hy iets vir sy ma sê wat nie rêrig so is nie." ("A lie story ... When he tells his mother something that is not really like that.")

<sup>1340</sup> "Leuens as ek sê, my pa ek't nie daai ruit uitgegooi nie en ... toe sê sy (sic) pa hy (sic) het eintlik daai ruit uitgegooi en toe slaan hom (sic) pa hom (sic)." ("Lies if I say, my father I didn't break that window and ... then my father said I did actually break the window and then my father hits me.")

<sup>1341</sup> See the comments on the evidence of Ramon Fitzgerald, para 2.3.3.

<sup>1342</sup> " 'n Pa gaan vir haar (sic) niks koop dan nie." ("Then a father is not going to buy [me] anything.")

<sup>1343</sup> " 'n Leuen? 'n Mens dink dit nie in jou kop nie. Jy praat die waarheid. Jy mag nie jok nie." ("A lie? One does not think about that in your head. You speak the truth. You must not lie.")

participants falsehood had the religious connotation of being evil.<sup>1344</sup> And lastly, the analysis indicated that lying could be functional in the following circumstances: when the child made a mistake, wanted to hide something from another, wished to cover up something he or she did not want someone else to know or wanted to protect him- or herself from trouble.

The follow-up question was, *What happens when a child told a lie?* Eighty-three (83) responses were analysed.<sup>1345</sup> Excluding one exception, all participants responded that a lie would result in negative consequences of some kind for the child who lied. The single exception answered that nothing would happen because nobody would know it was a lie. The consequences provided ranged from the realistic, e.g. getting a hiding, a scolding or other kind of punishment, to the unrealistic, e.g. going to jail, the devil or dying. It is likely that these unrealistic consequences were linked to a style of discipline which uses threats to get children to behave (para 6.1.2). It is possible that the 5% of participants who referred to Pinocchio's nose were not serious about the subject, perhaps because they had not yet directly experienced serious consequences of lying.

<sup>1344</sup> "As jy lieg dan gaan jy na die duiwel toe." ("If you lie you go to the devil.")

<sup>1345</sup>

<b>AGE GROUP</b>	<b>6 years</b>	<b>7-8 years</b>	<b>9-10 years</b>
<u>Unusable</u> responses	<b>03</b>	<b>17</b>	<b>15</b>
Homonym / homophone distraction	-	-	01
Repetition of (part of) question	02	03	03
Random word / phrase / comment	-	10	08
Irrelevant reference to activity /story / trick	01	04	03
<u>Applicable</u> responses	<b>06</b>	<b>46</b>	<b>37</b>
Ambiguous	02	04	-
Analysed	04	42	37

Table 6.4 Participants' responses to the consequences of lying

<b>THE CONSEQUENCES OF LYING IS ...</b>	<b>FREQUENCY (%)</b>
a hiding.	34
punishment.	16
being taken to jail.	14
getting into trouble.	09
a scolding.	08
a nose that grows like Pinocchio's.	05
being reported to an authority figure.	04
that others dislike you.	04
being sent home.	02
someone talking to you about it.	01
death.	01
going to the devil.	01
nothing, because no one knows.	01

The last question in the section on lying was: *Have you ever told a lie?* Evans and Lyon refer to this question as the past occurrence morality question (para 2.4.3).<sup>1346</sup> The previous questions on lie-telling were put in the third person, referring to "a child", while this question made a direct enquiry into the child's openness about lie-telling. The follow-up question on a "yes"-response was an open question with a view to exploring the participant's personal experiences of the consequences of lie-telling. The majority of participants denied ever having told a lie (para 5.2.9).

A number of participants who admitted to lie-telling made reference of the trick they played on the interviewer (para 5.2.5) when their answer was explored. This was seen as a clear confirmation of overextension or, an overinclusive definition of falsity that included every counterfactual instance (para 2.5). Furthermore, in this study the link between a "yes" response and development came apparent – both age and level of cognitive development played a role (para 5.2.5).

<sup>1346</sup> Evans and Lyon 2012 *Law and Human Behavior* 195-203.

- *What is a mistake? When does a child make a mistake?*

The mistake-question was posed to all participants except the six-year-olds. The rationale behind the question was whether participants could distinguish between intentional (e.g. lying) and unintentional (e.g. accident) behaviour. It was completely unexpected that participants were distracted by homophones (para 3.2.4).<sup>1347</sup> Sixty-eight (68) participants contributed to the analysis.<sup>1348</sup>

Table 6.5 Participants' understanding of a mistake

<b>A MISTAKE IS ...</b>	<b>FREQUENCY (%)</b>
not getting (school) work right.	21
to fight with someone.	18
when you lie.	13
stealing something.	10
someone getting hurt by accident.	08
when something goes wrong because you were not thinking.	07
when you joke or play a trick.	06
breaking something.	04
preparing a dish and then it flops.	03
getting sick and having to go to the doctor.	03
being noisy.	03
having an accident (toileting).	01
using a swear word.	01
not being able to see.	01

<sup>1347</sup> Instead of *fout* (mistake), a number of Afrikaans participants heard *sout* (salt) or *hout* (wood).

<sup>1348</sup>

<b>AGE GROUP</b>	<b>7-8 years</b>	<b>9-10 years</b>
<u>Unusable</u> responses	<b>17</b>	<b>20</b>
Homophone distraction	03	05
Repetition of (part of) question	02	04
Random word / phrase / comment	10	08
Irrelevant reference to activity /story / trick	02	03
<u>Applicable</u> responses	<b>41</b>	<b>36</b>
Ambiguous	05	04
Analysed	36	32

Approximately half of the participants (51%) reflected an understanding of the effect of having limited or a lack of control in a situation.<sup>1349</sup> Things could go wrong as a result of ignorance or inattention.<sup>1350</sup> However, the other half of the participants (49%) seemed to have interpreted the question differently: rather than the behaviour itself, the mistake was the trouble resulting from the action.<sup>1351</sup> Two participants referred to being angry while fighting, which could imply lesser judgement and therefore these responses complement the idea of an unfavourable outcome of impulsive actions (7%).<sup>1352</sup>

- *What is a promise? When does a child promise something?*

Fifty-six (56) answers to the promise question were analysed.<sup>1353</sup> The children seemed to have a marked difficulty with vocabulary to describe the concept, but readily provided examples of their understanding of when promises were relevant. Of interest was the challenge posed by the complex syntax when the verb “to promise” was used in a sentence (para 2.5). A few responses indicated that participants had difficulty in determining who the subject was to whom the verb “to

<sup>1349</sup> “A mistake is when you didn’t see someone and you turn around with your arms straight and you hit her by mistake.”

<sup>1350</sup> “*Wel jou ma sê jy moet kos maak en dan is dit 'n flop.*” (“Well your mom has said you have to make the food and then it was a flop.”)

<sup>1351</sup> “When you tell wrong things. You must tell the truth ... you must not be wrong.”

<sup>1352</sup> “*As hulle mens se scooter raak, dan raak mens kwaad. 'n Mens moet eers dink.*” (“If they touch your scooter then you get angry. You should think first.”)

<sup>1353</sup>

<b>AGE GROUP</b>	<b>6 years</b>	<b>7-8 years</b>	<b>9-10 years</b>
<u>Unusable</u> responses	<b>09</b>	<b>27</b>	<b>17</b>
Repetition of (part of) question	03	06	-
Random word / phrase / comment	05	17	16
Irrelevant reference to lie / truth	01	04	01
<u>Applicable</u> responses	<b>04</b>	<b>32</b>	<b>30</b>
Ambiguous	-	05	05
Analysed	04	27	25

promise" referred.<sup>1354</sup> The alternative, i.e. an occasion when the child was promised something, was subsequently also considered. In fact, Walker's finding that children also understand promise in the forensic context of someone else making a promise to the child (para 2.6.3), was found. For example, the child was promised that he or she would get something special for not saying something.<sup>1355</sup>

Table 6.6 Participants' understanding of a promise

<b>A PROMISE ...</b>	<b>FREQUENCY (%)</b>
is when someone says something he or she is going to do, and then does it.	22
says you are no longer going to do naughty things.	16
means you are going to get something from someone.	14
goes with making up after fighting.	09
shows you will keep the secret.	07
that is broken, is the same as a lie.	07
is about something pleasant you are going to do in future.	07
goes with the Bible and church.	05
is broken, when you say something but then you don't do it.	04
says you will talk about what you know.	04
that is kept, is the same as the truth.	04
is needed to make sure someone believes you.	02

Two (2) percent of participants described a promise as a declaration of credibility. A substantial number of participants clearly expressed an understanding of a promise as a statement of intent made in the present referring to a future matter or event

<sup>1354</sup> For example, "*Wanneer belowe 'n kind iets? ... Nes mens nie baie praat nie.*" ("When does a child promise something? ... Just as you don't talk much.") It is unclear whether the participant promised to become quiet or whether the child was promised something if he or she stopped talking too much.

<sup>1355</sup> "*Jy mag vir niemand vertel nie. As sy sê sy gaan vir jou iets bring, dan belowe [die kind].*" ("You are not allowed to tell anyone. If she says she is going to bring you something, [the child] promises.")

(24%).<sup>1356</sup> If the promise was kept, the statement was the truth (4%) and a broken promise was considered a lie (7%). For other participants, it was about parental expectations regarding good behaviour (25%). However, the examples of other participants did not reflect social convention in this way, but rather referred to the dynamics of getting personal needs met (14%).<sup>1357</sup>

- *What is an oath? When does a child swear an oath?*

With the exception of two responses, the moral concepts “oath” or “swear” did not form part of the receptive vocabulary of the participants.<sup>1358</sup> In both Afrikaans and English, homonyms and homophones (para 3.2.4) caused major confusion. The homophones are discussed first.

- The homophones “oath” and “oats” distracted a few participants. Instead of “oath” one participant heard “off”.
- A few participants also heard “swim” instead of “swear” or, in Afrikaans “*swem*” instead of “*sweer*”.
- Some Afrikaans children heard “*eend*” (duck) instead of “*eed*” (oath). Furthermore, having confused “*eed*” (oath) with “*ee*” (to eat), the following exchange resulted as an example of a substantially similar number of answers:

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<sup>1356</sup> “*As iemand sê, ek gaan môre vir jou 'n karretjie gee en iemand sê, 'is nie!', dan sê ek 'ek belowe jou.'*” (“If someone says, I am going to give you a toy car tomorrow and someone says, ‘not so!’, then I say, ‘I promise you.’”)

<sup>1357</sup> “Promise means you are going to take me out to Spur and then buy me a new set of clothes.”

<sup>1358</sup>

<b>AGE GROUP</b>	<b>6 years</b>	<b>7-8 years</b>	<b>9-10 years</b>
<u>Unusable</u> responses	<b>11</b>	<b>58</b>	<b>17</b>
Repetition of (part of) question	01	01	-
Random word / phrase / comment	01	11	16
Homophone / homonym	09	46	01
<u>Applicable</u> responses	-	<b>02</b>	<b>01</b>
Ambiguous	-	-	01
Analysed	-	02	-

Researcher: *Wat is 'n eed?* (What is an oath?)

Child: *Saam met 'n vurkie?* (With a small fork?)

- In Afrikaans, auditory discrimination is required not to confuse “*sweer*” (to swear) with “*sweet*” (to perspire). A number of answers were attempts to reconcile a response to that meaning, e.g. “*Maar 'n kind kan sweet in die son as hy eet (eed) in die son.*” (“But a child can perspire in the sun if he eats in the sun.”)

The next two examples explain some of the difficulties they had with homonyms.

- The Afrikaans word “*sweer*” added to the confusion caused by the word “*eed*” for another participant. The verb “*sweer*” refers either to “to vow” or “to fester”.

Researcher: *Wanneer sweer 'n kind 'n eed?* (When does a child swear an oath?)

Child: *As hy vuil goed eet.* (If he eats dirty stuff.)

or

Child: *As hy jeuk.* (demonstrating something being applied to the skin)  
(If he itches.)

- Some English participants responded similarly to the examples below:

Researcher: *What is an oath? ... When does a child swear an oath?*

Child: *When the mother is not there then that person swear.*

or

Child: *When you say a swear word. ... I can't tell you because the teacher will hear.*

One participant clearly knew what an oath was and gave a definition, another gave an example and a third participant gave an ambiguous response.



- In the seven- to eight-year-old group: "It is also almost like a promise. When your mom says to you, you must not do it and you must swear an oath that you won't do it."<sup>1359</sup>
- Another participant in this age group said that an oath was when one got married, thereby referring to the matrimonial vows as an example.<sup>1360</sup>
- A six-year-old gave an ambiguous response: "She swear (sic) on her house there" – it is possible that it refers to the Afrikaans expression "to swear (with your hand) on the Bible".<sup>1361</sup> Considering this participant's age, it is likely that this response is an example of expressive language mimicry, i.e. using words or phrases spoken by others without having comprehension of their meaning.<sup>1362</sup>

### 6.3 ASSESSMENT BY TEACHERS

#### 6.3.1 Classroom adaptations

According to the teachers, 68% participants required some form of special adaptation in the classroom with a view to optimal functioning.<sup>1363</sup> While 22% of learners had a formally diagnosed visual impairment,<sup>1364</sup> 6% of learners were formally diagnosed with a hearing impairment.<sup>1365</sup> The most frequent adaptations mentioned by the teachers addressed participants' various attentional problems, but the special provisions made are listed below:

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<sup>1359</sup> "Dit is ook amper soos 'n belofte. Wanneer jou mamma vir jou sê, ... jy moet dit nie doen nie en moet 'n eed sweer jy sal nie."

<sup>1360</sup> "[As] 'n mens trou."

<sup>1361</sup> *Om met jou hand op die Bybel te sweer* - This saying quite likely refers to the period when witnesses had to put their right hand on the Bible to be sworn in in South African courts. It continues to be used informally, such as "She swears on her house the story is the truth": As a wager, she risks losing her house if she is proved wrong.

<sup>1362</sup> Garber *Developmental Psychology for Family Law Professionals* 60.

<sup>1363</sup> n = 154.

<sup>1364</sup> N = 172.

<sup>1365</sup> *ibid.*

- Classroom furniture (tables and chairs) were adjusted to physical disabilities of CP (para 3.4.2).
- A major group of participants had visual impairments, such as low vision<sup>1366</sup> and legal blindness<sup>1367</sup> (para 3.5.3) to visual problems requiring spectacles. In general, learners were positioned correctly in terms of the visual stimulus, and texts were enlarged. Similarly, learners who were hearing impaired (para 3.5.4) were positioned for optimal hearing, in addition to wearing hearing aids. One learner with epilepsy (para 3.4.1) also sat close to his teacher to enable continuous supervision.
- Symptoms related to ADHD (para 3.5.2) were generally managed by medication.
- One participant required communication by means of sign language (para 3.5.4).
- An individualised approach was taken to many learners – specific needs associated with their developmental disabilities were accommodated with individual education plans (IEPs). These plans were specifically relevant with regard to synchronising education and learners’ level of cognitive functioning. IEPs were also very important for learners with different degrees of autism (para 3.4.5).
- Furthermore professionals such as speech and language therapists, occupational therapists and/or physiotherapists were involved with many learners.

### 6.3.2 Attention and concentration

This section links with each component of testimonial competency (para 2.6). Attention is prerequisite for the neurological registration of sensory stimuli. The attention and concentration skills of 29% of participants were rated “poor”.<sup>1368</sup> Teacher comments on participants’ attention and concentration can be divided in two main categories. The highest frequency of comments described challenges in

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<sup>1366</sup> n = 17.

<sup>1367</sup> n = 15.

<sup>1368</sup> n = 154.

terms of ADHD or its symptoms (para 3.5.2), but there was also a group with immature attention directly related to ID (para 3.3) and/or ASD (para 3.4.5). The major limitations in focusing and sustaining attention (i.e. in concentrating) in the group with ID were attributed to a markedly low level of cognitive functioning. The insufficient need for joint attention, and context blindness of participants with ASD (para 3.4.5) were related to major difficulties with attention.<sup>1369</sup> One participant differed from these groups, and it appeared the limitation in attention and concentration was medically related: "He cannot concentrate for long times, he falls asleep easily. He is always tired."

Concerning the group with symptoms of ADHD, the comments were on short attention span,<sup>1370</sup> distractibility,<sup>1371</sup> inattentiveness related to a short attention span,<sup>1372</sup> and hyperactivity.<sup>1373</sup> Pharmacological treatment was not a consistent guarantee of a participant becoming symptom-free.<sup>1374</sup>

### 6.3.3 Visual perception and visual memory limitations

This section relates to perceptual abilities that are associated with the first and second components of testimonial competency (paras 2.6.1 and 2.6.2). The visual

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<sup>1369</sup> *"Leerder is baie aandagafleibaar en sukkel om te konsentreer en kan nie geredelik terugvoer gee wanneer opvoeder dit versoek nie en sal net die opvoeder aanstaar en glimlag."* ("Learner is very distractible and struggles to concentrate and cannot give feedback readily when this is requested by teacher, he will just stare at the teacher and smile.")

<sup>1370</sup> "Very short attention span – seems to pay attention but he does not make the effort to listen properly."

<sup>1371</sup> *"Hy neem nie opdragte in nie. Daar is altyd iets wat sy aandag aflei."* ("He doesn't register instructions. There is always something that distracts him.")

<sup>1372</sup> "She is often in a world of her own – either daydreaming, or 'fluttering' around or busy with her own thoughts and issues."

<sup>1373</sup> *"Hy is erg hiperaktief. Op 60mg Ritalin 'n dag. Dus kan hy net 'n minuut of twee konsentreer en sukkel om stil te sit agv sensoriese integrasie probleme."* ("He is very hyperactive. On 60 mg Ritalin per day. He can therefore only concentrate for a minute or two and struggles to sit quietly as a result of sensory integration problems.")

<sup>1374</sup> *ibid.*

perceptual skills of 24% participants were qualified as “poor” and 27% received similar rating for visual memory skills.<sup>1375</sup>

Most teacher responses reported on the restrictions or lack of ability of participants with visual impairments (para 3.5.3). For the very few other participants who were challenged in this respect, the visual limitations were linked to very low cognitive capacity, major difficulties with attention or short-term visual memory (i.e. to recall what was observed recently).

#### 6.3.4 Auditory perception and auditory memory limitations

This section relates to perceptual abilities that are associated with the first three components of testimonial competency (paras 2.6.1, 2.6.2 and 2.6.3). The auditory perceptual skills of 21% participants were described as “poor”, while 25% of participants were challenged by reduced auditory memory skills.<sup>1376</sup>

The major stumbling blocks for efficient auditory perception and memory skills were hearing impairments (para 3.5.4), severe difficulty in sustaining attention or the difficulty of processing auditory information for learners with ASD because of its strong relationship with speech and language abilities (para 3.4.5). Difficulties with auditory processing resulted in instructions being executed incorrectly, or a limited ability to recall any information received through the auditory system.

#### 6.3.5 Limitations regarding receptive language

This section relates to the ability to communicate, the third component of testimonial competency (para 2.6.3). Challenges reflected problematic language development and subsequently a restricted ability to comprehend spoken words and sentences. In some instances these restrictions were associated with ASD, children who were nonverbal or had a hearing impairment or because the language of instruction was the learner’s second language.

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<sup>1375</sup> n = 154.

<sup>1376</sup> n = 154.

According to the general opinion of the teachers, participants' receptive language was a relative strength in comparison to their expressive language.<sup>1377</sup> The finding that a strong statistical correlation exists between teachers' rating of participants' receptive and expressive language abilities respectively validates such opinion.<sup>1378</sup> This is consistent with general theory that the receptive vocabulary of people is generally broader than their ability to express themselves by means of language (para 3.2.4).

### 6.3.6 Limitations regarding expressive language

This section relates to the ability to communicate, the third component of testimonial competency (para 2.6.3). The most frequent reasons given by teachers for limitations in giving expression to experience by means of language were the use of a second language, marked speech problems and/or the restricted ability to use vocabulary to communicate, as associated with CP (para 3.4.2), DS (para 3.4.3) or severe ID (table 3.2). However, some learners communicated – nonverbally – by means of sign language. Such nonverbal communication was found indeed during the child interviews (para 5.2.1).

The command of a second language was related to limitations in both receptive and expressive language by teachers. This professional opinion clarified the occasional deviation of the nine-year-old group from the age progression (para 5.3).

<sup>1377</sup> Sixty-six (66) percent of participants were assessed to have good to average expressive abilities in comparison to 79% of participants with good to average receptive abilities.

<sup>1380</sup>

EXPRESSIVE LANGUAGE	RECEPTIVE LANGUAGE			TOTAL
	Good	Average	Poor	
Good	26	6	0	32 19%
	81%	19%	0%	100%
Average	14	65	2	81 47%
	17%	80%	3%	100%
Poor	0	24	34	58 34%
	0%	41%	59%	100%
<b>TOTAL</b>	40 23%	95 56%	36 21%	171 100%

$p < 0.001$

### 6.3.7 Limitations with temporal concepts

Teachers reported that 29% of participants had marked difficulty with concepts of time.<sup>1379</sup> This ability also pertains to communicative competence, the third component of testimonial competency (para 2.6.3). Some learners still had not mastered basic concepts such as the days of the week; other learners revealed this limitation by using temporal words (for example “yesterday” or “this afternoon”) incorrectly. One reason attributed to the restrictive employment of temporal concepts was that children with ASD (para 3.4.5) and low cognitive functioning (para 3.3) had great difficulty with abstractions.

### 6.3.8 Behaviour related to normative development

One of the questions put to the teachers was, “Do you have knowledge of a lie or lies that this learner told before?” Teachers had no knowledge of lie-telling for 83% of the group.<sup>1380</sup> A number of teachers elaborated with comments on the participants’ conduct at school, clarifying aspects of their normative development.<sup>1381</sup>

According to the teacher survey, 46% of participants had been in trouble in class.<sup>1382</sup> However, trouble in class was usually related to not fulfilling teacher expectations in terms of class work or because of negative interactions with peers (often during break time). A few incidents of stealing or manipulation to get something that a learner wanted<sup>1383</sup> were reported. It appeared that lying behaviour mostly had the function of self-protection, for example by denying a wrongful action and/or accusing somebody else of it.<sup>1384</sup> In the case of cheating, the function was self-gain,

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<sup>1379</sup> N = 172.

<sup>1380</sup> n = 154.

<sup>1381</sup> Not knowing the difference between the truth and lies; lying behaviour; getting into trouble.

<sup>1382</sup> n = 154.

<sup>1383</sup> “Lying to get what he wants, e.g. a ball.”

<sup>1384</sup> “When she has done something naughty she will blame one of her peers or simply deny that she did it.”

for example, manipulating the rules to win a game.<sup>1385</sup> Fabrications, e.g. complaining about another learner hitting him or her in the absence of confirmation of the possibility, were employed with a view to gaining the attention and perhaps goodwill of an adult.<sup>1386</sup> In one instance a teacher described a participant's concocted story: "Will sometimes add a story. Perhaps also because he expresses himself incorrectly and does not have the vocabulary to portray facts correctly".<sup>1387</sup> The impression was gained that fabrications were generally easily traced when tested against objective reality.<sup>1388</sup>

Two teachers commented on learners who did not realise they told lies.<sup>1389</sup> If this was the case, however, it could not be considered to be "lying" according to the definition of a lie (para 2.7.1). The first condition for a statement to be considered a lie is that the speaker had the intent to deceive someone else. Although some participants got into trouble with teachers for telling lies, some of the comments indicated the importance of establishing whether the behaviour was deceitful.

"Learners are not supposed to kiss each other and this learner kissed her little friend on the mouth, but the fact that it had not been done covertly (i.e. out of sight of the teacher) but openly and just in front of everybody and then having been very

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<sup>1385</sup> "Sal bv. sekere punte wat hulle moet aanraak, oorslaan, net om te wen / voor 'n maat klaar te maak." ("For example, will skip certain points that they must touch just to win / or finish before a friend.")

<sup>1386</sup> "Leerder sal dikwels sy ouma vertel dat van die ander leerders hom geslaan het maar dis gewoonlik nie waar nie." ("Learner will often tell his grandmother that other learners have hit him but it is usually not true.")

<sup>1387</sup> "Sal soms storie bylas. Moontlik ook omdat hy homself verkeerd uitdruk en nie die woordeskat het om sy feite korrek weer te gee nie."

<sup>1388</sup> "Sy sal stories oorvertel wat nie waar is nie. Sy vertel bv. van insidente wat sy nie eers by was nie." ("She will relate a story that is not the truth. For example, she will tell about incidents where she had not been present.")

<sup>1389</sup> "Sy besef nie sy vertel leuens nie."

frightened afterwards when she was reprimanded and got time-out, is indicative to me that she does not yet understand this act is wrongful / unacceptable."<sup>1390</sup>

In general, reasons given by teachers for participants not understanding the difference between the truth and lies are: severe cognitive limitations (para 3.3), ASD (para 3.4.5), malleability (para 3.2.6) and very limited language comprehension (para 3.2.4).

Comments regarding participants not comprehending the difference between a lie and a mistake (para 6.2.2) indicated similar causes to those for the inability to distinguish between the truth and lies – severe cognitive limitations and an inability to use vocabulary as a tool for expression due to the incomprehension of language.

#### 6.3.9 Additional comments

Teachers were invited to give further comments about participants when they believed the additional information was important for consideration in this study. The comments were grouped thematically and these categories are presented in order of descending frequency below.

- Participants were found to display the variety of symptoms associated with ADHD (para 3.5.2). Two teachers commented that these symptoms were under control when participants functioned in a structured environment, i.e. being given a particular task to do.
- Specific participants' personal circumstances (caregiving relationships) had an effect on their functioning.
- Nine participants were prone to adjust their opinions according to the expectations of others because of characteristics like malleability or when intimidated, gullibility, fear of strangers, or getting into trouble (paras 3.2.5 and 3.2.6).

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<sup>1390</sup> "*Leerders is nie veronderstel om mekaar te soen nie en die betrokke leerder het haar maatjie op die mond gesoen, maar die feit dat sy dit nie skelm (dws uit die oog van die onderwyser) gedoen het nie maar oop en bloot voor almal en na die tyd baie verskrik was toe sy aangepraat en 'time-out' gekry het, dui vir my dat sy nog nie verstaan dat dit 'n verkeerde / ontoelaatbare daad is nie.*"



- Participants showed positive traits (e.g. cooperativeness, obedience, honesty, positive attitude) that matched the teachers' expectations in class.
- In some participants, cognitive limitations played a significant role in terms of their comprehension.
- Behavioural problems (e.g. forms of aggression) were displayed by one group of participants, which were observed during peer group interaction in particular.
- Participants tended to be disobedient in class.
- Some participants were noisy.
- Four learners refused to participate in class activities as were expected by their teachers.
- The effect of participants' conditions on their speech and language abilities were important to consider. Mention was made of learners whose language use was limited to phrases. Two learners had limited or no language comprehension (receptive vocabulary). The extent of one learner's difficulty in expressing himself frustrated him. Another learner was hard of hearing (para 3.5.4) and used lip-reading.
- Prescription medication played an important role. Medication improved the behaviour of three participants with regard to cooperation in class. Another learner took medication for epilepsy (para 3.4.1), and she tended to be sleepy due to a side-effect.
- The medical situation of two of the participants had a significant impact on their emotional development.
- One participant was described as "inconsistent" and seemed "completely out of it ... at times".
- One learner was found to have a limited ability to recall information (auditory short-term memory).

#### **6.4 CAREGIVER OPINIONS ON TESTIMONIAL COMPETENCY**

The caregivers shared their understanding of testimonial competency by responding to a question on their children as potential witnesses. None of the participants whose parents completed a questionnaire were exposed to the legal setting

before.<sup>1391</sup> The reasoning applied correlated broadly with the components of testimonial competency (para 2.6). Moreover, their evaluation confirmed the position taken by Dickman that social interaction factors are an important consideration in respect of competency (para 3.7.1).

#### 6.4.1 Perceptual abilities

A number of parents responded that their children “registered” events that happened around them.<sup>1392</sup> On the other hand, one parent commented, “she has no sense of what happened. She will not be able to relate facts”.<sup>1393</sup>

An enquiry was made on whether the child’s imagination interfered with his or her reality testing, i.e. that the child would tell something from imagination as if it really happened. While 67% of parents reported that their children make the fact-fantasy distinction, 33% caregivers responded that their children did not.<sup>1394</sup> Forty-three (43) percent of this group of children who confused imagination and reality, did so completely removed from personal awareness.<sup>1395</sup>

#### 6.4.2 Memory

The inability of children to recall events that had happened to them was of concern to two of the caregivers.<sup>1396</sup> Another parent commented that his child’s good memory for events rendered him competent.<sup>1397</sup>

In another section of the questionnaire, the parents described participants’ memory as follows:

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<sup>1391</sup> N = 84.

<sup>1392</sup> “*Let alles op en kan presies wys wat gebeur het.*” (“Is very attentive and able to show exactly what happened.”); “*As daar iets gebeur, sal sy presies weet wat gebeur het.*” (“If something happens, she will know exactly what happened.”)

<sup>1393</sup> “*Sy ... het geen sin van wat gebeur het nie. Sy sal nie kan feite weergee nie.*”

<sup>1394</sup> N = 84.

<sup>1395</sup> n = 28.

<sup>1396</sup> “[*S*]y kan nie altyd onthou wat met haar gebeur het nie.” (“She cannot always remember what had happened to her.”)

<sup>1397</sup> “*Die kind sal kan praat in die hof, want hy kan elke gebeurtenis ... onthou.*” (“The child will be able to speak in court, because he can remember every event.”)

<b>How would you describe your child’s memory for events that happened to him / her?</b>	
He / she has a good memory about events that happened in the past.	50% <sup>1398</sup>
There are some events that my child has memories of, but there are also some significant (remarkable) incidents that my child has forgotten about.	24%
Because he / she easily forgets, my child does not recall much of past events.	22%
Other	04%

### 6.4.3 Communicative abilities

In a section of the questionnaire, caregivers assessed their children’s receptive and expressive language, as well as their understanding of temporal concepts.<sup>1399</sup> However, the correspondence between their rating and the ranking of these skills by the teachers was statistically insignificant.

Caregivers’ considerations regarding the communication of information were diverse. Firstly, from the caregivers’ perspective, the following aspects were relevant in determining children’s competency for communication:

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<sup>1398</sup> N = 84.

<sup>1399</sup>

	Usually	Sometimes	Seldom
<b>RECEPTIVE VOCABULARY</b> My child understands the meaning of words spoken to him / her.	64%	26%	10%
<b>TEMPORAL CONCEPTS</b> My child gets <u>confused</u> with the days of the week or with time.	41%	33%	26%
<b>EXPRESSIVE VOCABULARY</b> My child uses language to express (tell about) his / her thoughts, feelings or memories.	49%	22%	29%
<b>TEMPORAL CONCEPTS</b> My child finds it <u>difficult</u> to use the correct time words (e.g. “the day after tomorrow” or “two weeks ago”) to explain when an event occurred.	52%	22%	26%

- The need to convey information and using language as the tool<sup>1400</sup>
- Comprehension, and particularly in relation to receptive language, their understanding of questions<sup>1401</sup>
- Narrative ability – While children generally had the ability to give an account of an event,<sup>1402</sup> the following challenges were pointed out: speech problems;<sup>1403</sup> limited expressive vocabulary;<sup>1404</sup> having to respond to complex questions;<sup>1405</sup> inconsistency;<sup>1406</sup> difficulty with chronological order;<sup>1407</sup> incompleteness<sup>1408</sup> and fabrication.<sup>1409</sup>

Secondly, while some parents simply regarded their children as being unable to testify due to them having little or no functional speech (LNFS), other parents were

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<sup>1400</sup> Para 3.4.5: "When I ask him how was school, he repeats my question ... when I asked what you did? He either repeats my question or keeps quiet or asks me where our dog is?"; "At home he doesn't tell when someone has hurt him." Conversely, "*As iemand iets gedoen het, sal sy my sê.*" ("If someone did something, she will tell me."); "*Hy praat als.*" ("He talks about everything.")

<sup>1401</sup> "*Hy sal nie verstaan wat die vrae is wat aan hom gestel word nie.*" ("He will not understand what the questions are that are put to him.")

<sup>1402</sup> "*Hy kan uitlê hoe die situasie gebeur het.*" ("He can explain how a situation happened.")

<sup>1403</sup> "*Hy kan gebeurtenisse goed uitlê, maar jy moet mooi luister wat hy sê sodat jy kan verstaan wat hy sê.*" ("He is able to explain incidents well, but you have to listen carefully to what he says to understand what he says.")

<sup>1404</sup> "*Sy vermoë om ervaring in woorde om te sit is nie goed ontwikkel nie.*" ("His ability to convert experience into words is not well developed.")

<sup>1405</sup> "She has the ability but the questions need to be simple. At home she gives account better than other siblings."

<sup>1406</sup> "*Hy raak deurmekaar met sekere dinge.*" ("He gets mixed up with certain things.")

<sup>1407</sup> "Would give correct event information but might confuse the time line."

<sup>1408</sup> "*Hy sal vertel maar nie alles sê nie.*" ("He will recount but won't say everything.") Conversely, "I do think that he will be able to give evidence in court. He does tend to exaggerate at time (sic) but he always gets the basis of the story correct. A perfect example would be is (sic) that my mom took him to the mall this week and he could tell me exactly what my mom had bought at Jet Stores. He mentioned all the items which included socks, shoes and pants which I think is extremely remarkable. When I asked my mom she said that he is correct."

<sup>1409</sup> Para 2.6.2: "[H]e often adds other things that did not happen."

confident of their children's proficiency to give evidence despite LNFS. Their children communicated nonverbally. For example, in the words of two of these caregivers:

- "She understands and uses actions to describe. If given choices to answer, she can point our (sic) correct choices. She can give yes & no answers."
- "She will demonstrate and although she is very far behind with speech because of 'apraxia of speech'<sup>1410</sup> problems, we understand her clearly and usually know what she tries to say."<sup>1411</sup>

#### 6.4.4 Moral development

Eight caregivers made reference to the issue of morality. One parent commented that, because her child lives "inside herself",<sup>1412</sup> she could not know the difference between right and wrong. Another parent responded that her child lacked an "established value system" for the comprehension of moral concepts.<sup>1413</sup> Other caregivers stated their children's ability to make the truth-lie distinction. Four parents approached the question from the "reliable evidence" point of view (para 2.4.2): Normative characteristics such as honesty and sense of justice qualified their children to be witnesses.<sup>1414</sup> Conversely, suggestibility was thought to be a disqualification.<sup>1415</sup>

#### 6.4.5 Dynamics of social interaction

"She has the ability, but she might feel afraid and withdraw."

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<sup>1410</sup> Miller *Essentials of Neuropsychological Assessment* 177: "Lesions within the left precentral gyrus of the insula, located on the anterior wall of the cerebral hemisphere, directly behind the temporal lobe, have been found to cause *apraxia of speech* – an impairment in the ability to program movements of the lips, tongue, and throat for the production of speech."

<sup>1411</sup> "Sy sal wys en al is sy baie agter met spraak agv 'Apraksia van spraak' probleme verstaan ons haar duidelik en weet ek gewoonlik wat sy probeer sê."

<sup>1412</sup> Fig 3.1: "Omdat sy in haar leef en nie sal kan onderskei tussen waar en onwaar nie".

<sup>1413</sup> "Begrip van reg en verkeerd en gevestigde waardesisteem ontbreek."

<sup>1414</sup> "Omdat sy eerlik is, ons vertrou haar." ("Because she is honest, we trust her."); "Hy kan sien wanneer iets nie regverdig is nie, hy is baie oor die regte ding." ("He can see when something isn't fair, he values the right thing highly.")

<sup>1415</sup> "Hy ... kan ook deur partye beïnvloed word." ("He can also be influenced by other parties.")

Various caregivers evaluated the children's potential competency to testify in terms of their "emotional strength".<sup>1416</sup> Some children were described as excessively shy.<sup>1417</sup> Fearfulness was given as a general cause for children remaining unresponsive or, in the course of time, clamming up. Experiencing fear was related to having to communicate in the presence of, or with, strangers<sup>1418</sup> in a foreign environment,<sup>1419</sup> the idea of someone being in trouble<sup>1420</sup> and the involvement of law enforcement officials, especially the police.<sup>1421</sup> Contextual features such as support, assurance and patience promoted children's confidence during communication.<sup>1422</sup>

## **6.5 TEACHER OPINIONS ON TESTIMONIAL COMPETENCY**

The teachers also shared their understanding of testimonial competency in response to an enquiry on the participants as potential witnesses. Although teacher comments shared similarities with caregiver responses (para 6.4), they focused on specific abilities and skills related to competency. The discussion below is organised in terms of the importance ascribed to each of the various proficiencies. The frequency with which a theme was mentioned determined its importance, i.e. the ability emphasised most will be discussed first and the theme that received the least attention will be discussed last.

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<sup>1416</sup> "*Sy is nie emosioneel sterk nie.*" ("She is not emotionally strong.")

<sup>1417</sup> "He is very shy, cannot speak in front of many people."

<sup>1418</sup> "She does not respond well to strangers."; "She would have to know the people before helping them or answering questions."

<sup>1419</sup> "*Onkunde [oor] hof prosedures.*" ("Ignorance regarding court procedures."); "*Ek dink dat iemand vir hom eers sal moet verduidelik (sic) wat aan gaan.*" ("I think someone would first have to explain to him what is going on.")

<sup>1420</sup> "*Hulle moet hom eers gerus stel, dat hy nie in die moeilikheid sal wees nie.*" ("They first need to put him at ease that he won't get in trouble.")

<sup>1421</sup> "*Baie bang vir geregsdiens soos polisie.*" ("Very scared of law enforcement officials like the police.")

<sup>1422</sup> "He would need a controlled environment and the person working with him must have patience."

### 6.5.1 Abilities related to communication

The comments of teachers related to communication were classified into the themes speech, language and narrative ability.

Various participants had little or no functional speech (LNFS). Teachers remarked that if a learner had serious speech problems, it would be difficult to understand what he or she said. However, two responses indicated that the inability to use speech was not necessarily similar to incompetency:

- "She is a good listener but her speech is unclear. Other people wont (sic) be able to understand. Learner uses Tiny Handz sign language to communicate."
- "Cannot express himself verbally, he does have the insight to [give evidence]."<sup>1423</sup>

A number of participants were found to express themselves with difficulty, either because of limited vocabulary or language skills.<sup>1424</sup> The teacher of one participant opined that despite his limited expressive ability, he would be able to give an account of events with the necessary assistance.<sup>1425</sup>

A number of participants were regarded as competent as a result of their ability to narrate facts accurately<sup>1426</sup> and reliably or credibly (*geloofwaardig*) (para 2.4.2).<sup>1427</sup>

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<sup>1423</sup> "Kan homself nie verbaal verwoord nie, hy het wel die insig om te kan [getuig]."

<sup>1424</sup> "Beperkte woordeskat, kan haarself nie uitdruk nie." ("Limited vocabulary, cannot express herself.")

<sup>1425</sup> "[Hy] sukkel om homself uit te druk. Dink tog met die regte begeleiding sal hy gebeure kan weergee."

<sup>1426</sup> "As jy haar oor iets uitvra kan sy jou antwoord (met korrekte feite)." ("If you ask her about something she is able to answer you (with correct facts).")

<sup>1427</sup> "Die leerder vertel baie oop en eerlik wat haar huislike omstandighede is. Sy sal naweeknuus oordra en vertel gebeure op 'n geloofwaardige wyse. Dit stem ook ooreen met die inligting wat die skool het van die leerder se huislike omstandighede." ("The learner speaks very openly and honestly about her circumstances at home. She conveys weekend news and relates events in a credible way. It corresponds with the information the school has on the learner's circumstances at home.")

However, some of the narrators' accounts lacked details.<sup>1428</sup> Incompetency was associated with the confusion<sup>1429</sup> or distortion<sup>1430</sup> of details, incoherent narration<sup>1431</sup> or the inability to give an account of an event.<sup>1432</sup>

Unresponsiveness<sup>1433</sup> or acquiescence<sup>1434</sup> within the communication environment implied limited understanding.

### 6.5.2 Cognitive ability

The attentional ability of two participants stood out.<sup>1435</sup>

The relation between low level cognitive functioning and testimonial incompetency was obvious to some teachers.<sup>1436</sup> Cognitive limitations were associated with difficulty understanding the context,<sup>1437</sup> expectations,<sup>1438</sup> concepts<sup>1439</sup> and/or questions.<sup>1440</sup> Theory of Mind (ToM) (para 3.2.3) therefore played a role.

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<sup>1428</sup> "Sy sal gebeur nes dit gebeur het kan weergee alhoewel nie baie gedetailleerd nie." ("She will give account of events just as it happened although not very detailed.")

<sup>1429</sup> "Hy verwar dikwels gebeurtenisse." ("He often gets events confused.")

<sup>1430</sup> "Hy het goeie verbeelding en kan stories soms verdraai." ("He has a good imagination and can sometimes distort stories.")

<sup>1431</sup> "Hy praat baie deurmekaar en onsamehangend." ("He talks confusedly and incoherent.")

<sup>1432</sup> "Hy kan nie eers dele van 'n storie oorvertel ... nie." ("He cannot even recount parts of a story.")

<sup>1433</sup> "Sy ... sal [jou] net aanstaar as daar vrae aan haar gestel word." ("She will just stare at you if she is asked questions.")

<sup>1434</sup> "Sy sal selde uit haar eie praat, ... en sal meestal ja antwoord om iets te sê." ("She will seldomly speak of her own accord and will answer yes to say something.")

<sup>1435</sup> "Ability to pay attention to questions in unfamiliar circumstances."

<sup>1436</sup> "Verstandelik BAIE swak en kan beslis GEEN getuienis in die hof gee nie." ("Mentally VERY poor and can definitely give NO evidence in court.")

<sup>1437</sup> "Konteksbegrip swak" ("context comprehension poor").

<sup>1438</sup> "She will not understand what is expected from her."

<sup>1439</sup> "[H]y sukkel om sekere konsepte te verstaan." ("[H]e has difficulty understanding certain concepts.")

<sup>1440</sup> "Gegewe die leerder se lae kognitiewe vermoëns asook swak spraak, sal hy nie in staat wees om (alle) vrae te begryp en gepas te antwoord nie," ("Given the learner's low cognitive abilities as well as poor speech, he will not be able to understand (all) questions and answer them appropriately.")



"I don't think that he will be able to give reliable information in a court situation, because although he is aware of things happening around him and he is very verbal he doesn't really understand and simply experiences everything as happy and fun due to his syndrome and cocktail personality."

### 6.5.3 Social interaction environment

One teacher commented, "I think ... [the learner will be able to give evidence, but it] depends who the person is [the child tells about], but circumstances might determine the outcome". Another teacher remarked, "[She] is an honest child, but is quiet about bad things that sometimes go on at home. For example, [she] will be hungry but say nothing that there is no food at home".<sup>1441</sup>

According to the teachers, other restrictive factors are: lack of spontaneity;<sup>1442</sup> shyness,<sup>1443</sup> fearfulness,<sup>1444</sup> tendency to withdraw in reaction to expectations,<sup>1445</sup> unfavourable state of mind<sup>1446</sup> or precariousness.<sup>1447</sup> Seven participants were described as malleable, and would do what others told them to do.<sup>1448</sup> The link between these aspects and participants' emotional development (para 3.2.6) is obvious.

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<sup>1441</sup> "[Sy] is 'n eerlike kind, maar is stil oor die dinge wat by die huis aangaan. Sal bv honger wees, maar niks sê dat daar nie kos by die huis is nie."

<sup>1442</sup> In three cases competency was associated with self-confidence and spontaneity: "Sy kan gemaklik en met selfvertroue voor die ander leerders in die klas praat." ("She can talk comfortably and confidently in the presence of other learners in class.")

<sup>1443</sup> "Baie skaam om voor ander te praat." ("Very shy to talk in the presence of others.")

<sup>1444</sup> "Vrees" ("Fear"); "Gesels nie maklik met vreemdes." ("Does not easily speak to strangers.")

<sup>1445</sup> "Wanneer daar eise aan die leerder gestel word 'stol' sy en onttrek haarself van die situasie." ("When demands are made on the learner, she 'freezes' and withdraws from the situation.")

<sup>1446</sup> "Leerder mag dalk betroubare getuie kan aflê, afhangende van gemoedstoestand." ("Learner may perhaps give reliable evidence depending on mental state.")

<sup>1447</sup> "Leerder se funksionering is wisselvallig." ("Learner's functioning is erratic."); "Hierdie leerder se optrede is wispilteerig (sic)." ("The conduct of this learner is changeable.")

<sup>1448</sup> "Hierdie leerder kan baie gehoorsaam en pligsgetrou wees, maar is baie beïnvloedbaar en dit veroorsaak soms dat hy in die moeilikheid kom." ("This learner can be very obedient and diligent, but is very malleable and this results in him sometimes getting into trouble.")

#### 6.5.4 Memory

There were 11 comments about the ability to recollect. The memory capacity of three learners was regarded as very good in comparison to the others,<sup>1449</sup> although one teacher was of the opinion that one learner would still require support during testimony.<sup>1450</sup> Difficulties with memory of eight learners would hamper them to act as witnesses. The challenge of short-term memory recall (para 3.2.3) was specifically mentioned.<sup>1451</sup>

#### 6.5.5 Honesty

Most participants were described as honest – they were truth-tellers rather than lie-tellers.<sup>1452</sup> However, two learners were described as telling lies,<sup>1453</sup> for example when in trouble.<sup>1454</sup>

#### 6.5.6 ASD / Autism

Two ASD symptoms – lack of language comprehension and echolalia – were singled out as reasons for testimonial incompetency in four participants (para 3.4.5).

### 6.6 SUMMARY OF FINDINGS

The outcome of the qualitative research employed to gain an understanding of the testimonial competency of children with developmental disabilities supports the aim of the current study (para 1.2). The thematic analysis of the discourse of parents

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<sup>1449</sup> "*Baie goeie geheue (onthou dinge wat lank terug gebeur het).*" ("Very good memory (remembers things that happened a long time ago."); "*Onthou in fyn besonderhede alles van sy omgewing, geluide, teksture en reuke.*" ("Recalls in fine details everything of his environment, sounds, textures and smells.")

<sup>1450</sup> "*Hy onthou taamlik goed. Met ondersteuning sal hy kan [getuienis aflê], glo ek.*" ("He remembers quite well. I believe he will be able to give evidence with support.")

<sup>1451</sup> "*Korttermyn geheue herroeping swak.*" ("Short-term memory recall poor."); "He does not remember what happened during the day."

<sup>1452</sup> "*Leerder is baie eerlik en sal nooit 'n leuen vertel nie.*" ("Learner is very honest and will never tell a lie.")

<sup>1453</sup> "*[Hy] praat selde die waarheid en hy verdraai vinnig sy storie as hy uitgevang is.*" ("He seldom speaks the truth and he quickly distorts his story when he is caught out.")

<sup>1454</sup> "*Sy vertel maklik 'n leuen as sy sien sy is in die moeilikheid.*" ("She easily tells a lie when she sees she is in trouble.")

and teachers revealed three groups of potential witnesses: competent, competent when given the necessary assistance, and incompetent. The allocation of a child with a developmental delay or disability to a particular group is not straight-forward. Despite agreement about the factors that are relevant for determining competency, every child should be approached as an individual with a unique combination of strengths and weaknesses.

Generally, the participants were raised in homes with values and parenting styles that complement positive moral development (para 3.2.5). Lie-telling behaviour was not accepted by caregivers. However, when it did occur, the severity of some children's developmental disabilities might exclude them from being effectively disciplined. The participants' spontaneous responses during the child interview clearly reflected what they were taught at home.

As expected, participants' language development played an important role in communication during the child interviews (paras 2.6.3 and 3.2.4). Only one participant gave a clear definition of an oath. Out of the four concepts evaluated, the concept of lying was best understood by participants (paras 2.7.1 and 5.2.8). Lying was wrong and punished when exposed.

From an educational point of view, any approach to the testimonial competency of children with special needs requires the consideration of a variety of factors. Adaptations within the class setting provided numerous children with an opportunity to function optimally. This was especially relevant for children who had speech and language difficulties related to developmental disabilities, e.g. CP (para 3.4.2), DS (para 3.4.3) and ASD (para 3.4.5).

The ingenuous understanding of testimonial competency by the caregivers of the participants corresponded with its four theoretical components (para 2.6). The teachers emphasised a basic level of cognitive functioning (including the function of memory) (para 3.2.3) and communication proficiency (para 3.2.4), whether verbal or nonverbal, as decisive aspects of testimonial competency. According to the teachers, children with ASD (para 3.4.5) usually did not meet the requirements of giving testimony. Due to the correspondence between teachers' comments and applicable

theory, as well as to some of the findings of this study, teachers are considered to be an important source of information regarding competency.

The topic of competency raised the issue of reliability (para 2.4.2) in both parents and teachers. As witnesses these children could be believed due to an inclination for honesty. Alternatively, some participants were inconsistent and prone to acquiescence or malleability. It transpired that the dynamics of social interaction could either facilitate or restrict testimonial competency (*ibid*).

## CHAPTER 7

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### GUIDELINES FOR DETERMINING TESTIMONIAL COMPETENCY OF CHILDREN WITH DEVELOPMENTAL DELAYS

Testimonial competency consists of four basic mental functions: perception, memory, communication and morality. A witness with basic proficiency in three of the components – perception, memory and communication – will generally be able to provide the court with factual information on a specific personal experience during questioning. Swearability, the moral component of competency, refers to a witness understanding the difference between truth and falsehood, and conveying the willingness to be truthful. This component of competency hinges on the witness's cognitive as well as moral development.

Establishing witness reliability relates to the reporting of factual truth – whether a child witness gives an accurate account of personally experienced reality when questioned about it during a trial. Although witness reliability is also associated with the witness's cognitive and moral development, various contextual factors have the potential for a negative impact on his or her actual account of events during testimony (paras 2.4.2, 3.2.5 and 3.2.6). Witness credibility, however, refers to the credibleness of the evidence brought before the court. Evaluating credibility is a subjective matter, in which the legal evaluator's knowledge of the aspect in question plays an important role (paras 2.4.2 and 3.1.2). Witness competency and, respectively, the reliability and credibility of evidence have to be approached as closely related but separate phenomena.

The Equality clause of the Constitution requires that discrimination based on the prejudicial stereotyping of children with disabilities be abolished (para 1.1.2).

“[E]very attempt must be made to find reasons why they *should* be permitted to give evidence, rather than why they should not be allowed to testify.”<sup>1455</sup>

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<sup>1455</sup> Pillay 2012 *SAJP* 319.

It is thus crucial for the South African courts to clarify any distinctions (para 2.4.2) that are made between moral competency and witness reliability. The following examples serve to illustrate the challenges in this regard:

- A competent witness is not necessarily a reliable witness.
- Inaccuracies in testimony may have nothing to do with unreliability (lie-telling and therefore dishonesty), but with developmental immaturities or limitations concomitant to developmental disabilities, which are competency issues.
- Furthermore, the evidence of a child with limited competency is not necessarily characterised by limited reliability.

In this final chapter the outcome of the assessment research is translated into guidelines for determining the testimonial competency of children with developmental delays or disabilities in middle childhood. The discussion below deals with the assessment of testimonial competency, followed by that of the contents of the psycho-legal report subsequent to the competency determination. Finally, recommendations are made regarding the witness admission procedure before proceeding to the giving of evidence. In conclusion, these components are integrated into a proposed best practice forensic protocol that should be followed when children with developmental delays or disabilities are potential witnesses in criminal trials.

## **7.1 COMPETENCY ASSESSMENT OF THE POTENTIAL WITNESS**

There are various advantages in determining the testimonial competency of a potential witness with developmental challenges at the pre-trial stage and then making recommendations to the court. Mental health practitioners with suitable expertise should be assigned to apply research-based knowledge in the fields of developmental psychology and forensic interviewing during a relatively structured assessment procedure in order to inform the court of its outcome (paras 2.4.1 and 2.4.2). This would ensure a developmentally appropriate process which plays an important role where children, as well as persons with disabilities, are concerned (para 3.7.1). The assessment would be conducted in a witness-friendly environment under optimal conditions, in comparison to the circumstances in court. This assessment structure allows for adequate time to investigate thoroughly each

component of testimonial competency (para 3.6), which is not possible when the court is in session. Children who run the risk of exposure to trauma in the courtroom could be identified in advance and may consequently not be required to give evidence. In adopting this approach, the court is also alerted to the potential effect of contextual factors, such as a high level of anxiety, on the child's capacity as a witness (paras 3.7.1, 6.4.5 and 6.5.3). A formal competency assessment additionally provides the opportunity to plan and propose the necessary accommodation that would enable the child's optimal performance as a witness (para 3.6).

Therefore, when a child with a developmental delay or disability comes into contact with the legal system and the prospect exists that he or she will be called as a witness in a criminal trial, a multi-disciplinary approach to the assessment of his or her testimonial competency should be taken. This would require the appointment of a facilitator by the designated state prosecutor, but in liaison with the defence attorney of the case in order to establish facilitator neutrality and independence.<sup>1456</sup> The facilitator needs to be a professional with expertise and experience in the fields of childhood development and developmental disabilities as well as in forensic interviewing. The facilitator's function is to coordinate the process of competency determination and to liaise with all professional parties<sup>1457</sup> concerned, as well as the caregivers of the child.

The facilitator convenes a meeting with the appropriate professionals (current and recent) involved with the child. Should the child attend a special school, this would include his or her teacher(s) and, where applicable, the physiotherapist, occupational and/or speech and language therapists and psychologist. If the school does not enjoy the services of a resident psychologist, the departmental psychologist assigned to the school should be approached for assistance. If the child does not attend a

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<sup>1456</sup> L Meintjes-Van der Walt "Ethics and the expert: Some suggestions for South Africa" (2003) 4(2) *CARSA* 42 at 46; G Köhnken "A German Perspective on Children's Testimony" in HL Westcott *et al* (eds) *Children's Testimony A Handbook of Psychological Research and Forensic Practice* (2002) 239-240.

<sup>1457</sup> SN Sparta "Expert Mental Health Testimony in Child Abuse Cases" in PF Talley (ed) *Handbook for the Treatment of Abused and Neglected Children* (2005) 411.

special school, the facilitator would ensure that all therapists currently and recently involved with him or her attend the meeting. When the potential witness has LNFS and/or a diagnosed hearing impairment but does not receive specialised schooling, the facilitator should approach a suitably experienced LNFS speech and language therapist to collaborate. In the case of ASD, the facilitator should involve a psychologist with the necessary expertise for input.

The purpose of the meeting for the facilitator is to:

- be informed by the respective professionals about the child's developmental status at present;
- collect all relevant documentation and reports in clarification of the child's developmental challenges;
- determine the scope of the competency assessment;
- decide whether, in addition to the facilitator, other professionals should participate in the assessment of the child, and in which manner; and
- investigate whether a professional other than the facilitator would be better suited to be called as an expert witness to the court.<sup>1458</sup>

The facilitator conducts the basic competency assessment in which the primary focus is the child's cognitive (including memory), language and moral development. Due to the nature of the assessment, a psychologist or psychological counsellor with the necessary expertise and experience (see above) is well suited to the function of facilitator.

#### 7.1.1 Parents / caregivers

A consultation is arranged with the parent or caregiver of the child. The caregiver provides the facilitator with information on all aspects of the child regarding development, as well as developmental challenges. The caregiver completes the parent questionnaire (Appendix 7).

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<sup>1458</sup> In cases of LNFS or ASD, the facilitator is not necessarily the best-suited professional for the role of expert witness. See Sparta *Handbook for the Treatment of Abused Children* 398, 401; Meintjes-Van der Walt 2003 *CARSA* 45; A Allan "The Psychologist as Witness" para 5.1 <http://s3-ap-southeast-2.amazonaws.com/jigsydney/general/PDF/396100~expert.pdf> (accessed 20 October 2014).



The facilitator should take specific note of contextual factors, for example, the child's emotional development. Relationship dynamics will have to be considered, especially in those instances where the accused is a family member of the child.

#### 7.1.2 Teacher

The facilitator should regard the teacher of a child with special needs as an essential source of information to develop an understanding of his or her competency, and if applicable, accommodations required, with a view to establishing the child's optimal functioning as a witness.

During the multi-professional meeting the child's teacher contributes information on the child's developmental status. The teacher is furthermore requested to complete the teacher questionnaire in order to obtain specific information pertaining to aspects of testimonial competency (Appendix 7).

#### 7.1.3 Child

Children in South Africa are raised in a multilingual society. Of the eleven official languages, proficiency in English is considered to be the most useful in terms of equipping children to be active in the (inter)national work-force. Consequently, a number of parents opt for their children to receive educational instruction in English, even when English is not the vernacular. For a substantial number of children this decision leads to semilingualism, which is an "inadequate proficiency in both languages".<sup>1459</sup>

The outcome of this research has confirmed that command of second language could be a barrier to communication (paras 4.5 and 6.3.6). Consequently, care should be taken to do the assessment in the language in which the child is most

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<sup>1459</sup> Louw and Louw *Child and Adolescent Development* 108. The authors continue,

"[w]hen minority children gradually lose the first language as a result of being taught in the second, they end up limited in both languages for a time; a circumstance that leads to serious academic difficulties. Semilingualism [i.e. not being proficient in any language] is believed to contribute to high rates of school failure and school dropout."

proficient – which is usually his or her mother tongue.<sup>1460</sup> Walker provides six reasons in support of such an arrangement:<sup>1461</sup>

- Communication in a second language requires additional auditory decoding. Mother tongue speakers speak faster and may use accents and/or innuendos unfamiliar to the listener. Some idiomatic expressions will also be unknown to the child.
- The child’s vernacular may interfere with his or her communication in a second language and subsequently speech errors occur when questions are answered.
- “[N]on-native speakers of English are strangers in the questioners’ land, unfamiliar with the customs, culture and language of the law ....”<sup>1462</sup>
- Alternatively, all the more so when conversation is held with an adult mother tongue speaker, the latter converses “from a position of power”, and confidently because of familiarity.
- Generally legal officials are ignorant of how to speak in an age-appropriate manner to children, even in their mother tongue.
- The child’s verbalisations and accompanying nonverbal behaviour are judged according to a set of norms associated with the first language. This holds a significant risk for misinterpretation.

A minimum of two sessions are required to conduct a dynamic assessment of the child (para 3.1.4). The child’s ability to remain focused and sustain attention will determine the duration of the sessions (paras 3.2.3 and 6.3.2). During the competency assessment the following developmental aspects are examined: cognition, memory, language and morality. Excluding the sections devoted to

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<sup>1460</sup> APSAC *Practical Guidelines* 10.

<sup>1461</sup> Walker *Handbook on Questioning Children* 86-87.

<sup>1462</sup> Walker *Handbook on Questioning Children* 87.

standardised psychometric test administration,<sup>1463</sup> the sessions should be videotaped.

(a) Current cognitive functioning

If the results of a recently<sup>1464</sup> administered cognitive test are available, formal testing of intellectual functioning is unnecessary, unless the facilitator is advised to the contrary by therapists working with the child. Appropriate therapeutic interventions, applied consistently, can have a marked impact on the cognitive functioning of children (para 3.1.1), and re-testing may be necessary to ensure that the court is provided with a valid representation of the child's current cognitive abilities.

The test ages obtained in tests for perceptual and/or motor processing, such as the Bender Motor Visual Gestalt Test, are not sufficient (paras 3.1.2 and 5.1.1). The temptation to employ these test results to report on cognitive ability is understandable in light of the limited availability of psychological test norms standardised for the diversity of language groups in South Africa (para 3.1.4).<sup>1465</sup> However, the child's ability in visual-motor integration is an invalid measure of his or her actual cognitive capacity.

Where intellectual disability is concerned, the child's ability for adaptive functioning (rather than intellectual functioning) determines the degree of cognitive impairment and consequently guides decisions regarding witness competency (para 3.3). An alternative is therefore to utilise only developmental scales (para 3.1.4) of which the outcome reflects the measure of adaptive functioning in various life domains. For example, the Vineland Social Maturity Scales (paras 3.1.2 and 3.3) form a part of the battery of tests administered by the SAVE programme (para 3.7.3).

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<sup>1463</sup> The contents of standardised psychometric tests are confidential.

<sup>1464</sup> Less than 18 months ago.

<sup>1465</sup> Allan "The Psychologist as Witness" para 5.

## (b) Normative development

One of the original Lyon and Saywitz test forms (consisting of four items) can be administered in combination with the morality scale if the child has substantial delays in cognitive development. The simplicity and repetitive format of the questions facilitate the assessment of basic moral capacity. The four hypothetical questions<sup>1466</sup> can be used for older children and children with developmental disabilities that are not associated with cognitive limitations. In light of the research findings these tests can be regarded as valid measures to determine the understanding of truth and lies of children with special needs (para 5.2.8).

Children who obtain the maximum score can be described as having sufficient moral capacity, i.e., the cognitive ability to make a rudimentary distinction between truth and lie, and sufficient moral reasoning to comprehend the negative consequence of lying. Alternatively, no score, or a score of 1 or 2 on the form or the scale, is

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<sup>1466</sup>

Hypothetical question 1: What if Teacher told you she was very happy with your work. And what if you then told your mom "Today Teacher said I did my work very nicely". Are you telling the truth or a lie?

*Wat as Juffrou sê sy is baie gelukkig met jou werk. En wat as jy vir jou ma vertel, "Vandag het Juffrou gesê ek het my werk baie mooi gedoen". Vertel jy die waarheid of 'n leuen?*

Hypothetical question 2: What if your friend broke the classroom window. And then (he or she) told Teacher that you broke the window? Is your friend telling the truth or a lie?

*Wat as jou maat die venster van die klas breek. En dan sê hy of sy vir Juffrou dat jy die venster gebreek het. Vertel jou maat die waarheid of 'n leuen?*

Hypothetical question 3: What if your friend forgot (his or her) tuck shop money. And what if (he or she) then told Teacher you took (his or her) money from (his or her) bag? Is your friend telling the truth or a lie?

*Wat as jou maat sy of haar snoepiegeld vergeet. En wat as hy of sy vir Juffrou sê jy het jou maat se geld uit sy of haar sak gevat? Vertel jou maat die waarheid of 'n leuen?*

Hypothetical question 4: What if someone asked you the name of your school. You said, I am in [school of child]. Are you telling the truth or a lie?

*Wat as iemand jou die naam van jou skool vra en jy sê, Ek is in [skool van kind]. Vertel jy die waarheid of 'n leuen?*

respectively indicative of cognitive functioning that limits moral reasoning associated with “moral responsibility”. Children with scores in the average range can be described as having limited legal competency.

The following three questions are asked:

- What is the truth? ... When does a child tell the truth?  
*Wat is die waarheid? ... Wanneer vertel 'n kind die waarheid?*
- What is a lie? ... When does a child tell a lie?  
*Wat is 'n leuen? ... Wanneer jok (lieg) 'n kind?*
- What is a promise? ... When does a child make a promise?  
*Wat is 'n belofte? ... Wanneer belowe 'n kind iets?*

While it is anticipated that children who have marked cognitive challenges generally do not have the expressive vocabulary to enable extensive conversation in this regard, this part of the assessment serves a dual purpose. It creates an opportunity for a mediated learning experience: the interviewer guides the child to gain some understanding of the moral concepts (para 3.1.4). In the process the child’s moral competency is evaluated (*ibid*).

The kind of statement with which the child responds to a question, would provide an indication of his or her developmental stage of reasoning:

- Subjective definition<sup>1467</sup>

With an active ToM and the social skill of perspective shifting a child will be able to take into account the definition of a lie (para 2.7.1), resulting in advanced moral reasoning.

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<sup>1467</sup> A lie is a statement that a person uses to deliberately convey a false impression.

- Objective definition<sup>1468</sup>

An objective definition is a factual description of the meaning of truth or lie. The reasoning required to give such a response is a developmentally appropriate expectation for middle childhood (*ibid*).

- Example

The statement describes an instance of truth- or lie-telling in accordance with its objective definition. The child’s implicit understanding of the moral concepts allows an acceptable response.

The responses to the truth and lie questions are analysed in order to determine the level of the child’s comprehension of the meaning of the concepts. An example that clearly explains an instance of either the truth or a lie is sufficient to find that he or she has such an understanding. Table 7.1 contains the guidelines.

Table 7.1 Developmentally appropriate responses to truth and lie questions

	<b>TRUTH</b>	<b>LIE</b>
<b>Reference to reality</b>	The truth is when you tell what really happened. This is just how it happened. It is what you saw or heard.	A lie is when you say the opposite of what really happened. This is not how it happened.
<b>Reference to dichotomy</b>	The truth is not a lie. The truth is not bad. The truth will not get you into trouble.	A lie is not the truth. A lie is not good.  A lie is wrong, you must tell the truth.
<b>Confirmation of truth as</b>	You tell it in the right way. You like God / the church.	You tell it in the wrong way. You like the devil.

<sup>1468</sup> The truth is a statement that confirms fact or reality.

A lie is a statement that contradicts fact or reality.

A promise is a statement that gives the assurance that something will (or will not) be done.

An oath is a statement that expresses a solemn commitment to be truthful.

<b>"good" or lying as "bad"</b>	It is the same as (another good behaviour / virtue).	It is the same as (another bad behaviour / vice).
<b>Consequence</b>	You will not get punished.	You will get a hiding / a scolding / into trouble / go to jail. Other children will not like you.
<b>Example</b>		

The current research indicates that a conversation about lying (rather than the truth) is productive to evaluate conceptual understanding. This is because many children associate lying with its (potential) negative consequences (para 5.2.2) and do not try to avoid the subject (para 2.5). Children from compromised social environments initially make the link between lying and its negative consequences before they are able to make a clear distinction between truth and falsity (*ibid*).

If the child is able to give the correct responses to the hypothetical questions, it is an indication that he or she is able to employ his or her ToM for moral reasoning about a personal situation (paras 2.7.4, 3.2.3 and 3.4.5).

The question on the meaning of a promise is asked to establish what recommendation can be made with regard to the admission of evidence procedure to be followed in court before he or she proceeds to give evidence (para 2.7). The following guideline can be used to evaluate, during a brief conversation, whether the child has a conceptual understanding of a promise (para 2.5). The child's response should refer to one or more of the developmentally appropriate responses to demonstrate an understanding of its meaning (table 7.2).

Table 7.2 Developmentally appropriate responses to the promise question

	<b>PROMISE</b>
<b>Intent expressed in the present consistent with some action that happens in future</b>	It is when you say you are going to do something and then you do it.
<b>Judging the keeping or breaking of promise</b>	If you break a promise, you lie. If you keep a promise, it shows you speak the truth.

<b>Confirms credibility or reliability</b>	When you promise, others know they can believe you.
<b>Example</b>	

Statements containing explanations by means of examples are evaluated according to the following criteria:

- The child must be the actor. Therefore, the child has to make the promise. The child is not the actor if a parent promises the child something for good behaviour.
- It should be more than a “shallow” reference, i.e. where the child uses a promise as a means for personal gain. An example of this is where the child would benefit because he or she made a promise.

These interpretations of the promise question are not helpful in terms of determining the child’s sense of moral responsibility to honour a commitment associated with making a promise. Establishing that a child has a sense of moral responsibility is a prerequisite for a recommendation that the child is morally competent to make an affirmation.

Consistent with established practice, and irrespective of the quality of the child’s responses during the exchange subsequent to the promise question, he or she should be asked (to promise) to tell only about things that he or she knows happened at the end of this part of the procedure (paras 2.5 and 2.7.1).

(c) Memory

Both the child’s semantic memory and episodic memory play a role with regard to witness competency. It is by means of semantic memory that the child gains access to his or her personal knowledge base of concepts (paras 2.6.2 and 3.2.3). This form of memory is also required to recount an event (para 4.3.6), and in this particular instance, to narrate the course of events experienced and linked with the alleged crime that is in question. This form of memory is associated with the child’s language proficiency, which is discussed in the next paragraph.



Episodic memory enables the child to recollect personal experiences from the past (para 2.6.2). The impact of immaturity (*ibid.*) and/or developmental challenges (paras 3.2.3, 3.4.3 and 3.6.2) in the use of episodic memory needs to be recognised – the better the strategies that the child has mastered for retrieval, the more efficient episodic memory will be.

At least two sessions are required to assess the child's abilities in terms of memory. Retrieval from episodic memory is stimulated when the forensic interviewer scaffolds the child's recollection of events<sup>1469</sup> (paras 3.1.4, 3.2.3 and 3.6.2). When memory skills are mediated, the child is taught how to respond according to expectations, while episodic memory is evaluated. By the end of the assessment, the facilitator will have a clear impression of the modifiability of the child, that is how beneficial the training was to overcome the barriers related to the child's memory difficulties (paras 3.1.4 and 4.3.5).

Although intrusion errors, e.g. confabulation (paras 2.6.2 and 5.2.2), may not be easily recognised during the assessment, the interviewer should be alert for the possibility of their presence. According to this study, confabulation increased with age and decreased in relation to the level of cognitive functioning (para 5.2.2). The teacher of the child could be used as a source of information in this regard (*ibid.*).

#### (d) Communication proficiency

During communication with the child, the facilitator will be able to ascertain the general command of language structures and the scope of his or her receptive and expressive language abilities (paras 2.6.3, 3.2.4, 3.3, 3.4.3, 3.4.4, 3.4.5, 3.5.4 and 3.6.3). It is the child's narrative ability in relation to the former abilities that is of specific importance during the testimonial competency assessment (para 2.6.3).

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<sup>1469</sup> According to Louw 2004 *CARSA* 7-8, memory retrieval of a child witness who experiences difficulty can be scaffolded in the following three ways:

- Stimulating verbal recall by repeated open-ended questions about the event in question;
- Providing contextual aids that stimulate the reconstruction of events; and
- Using direct questions to cue recall.

A dynamic approach to assessing the child's communication proficiencies in the context of giving evidence entails that he or she will be assessed only after a learning experience related to the required skills. This is the norm internationally in the protocols adopted for forensic interviewing – narrative training forms part of the standard interviewing process (para 2.7). In a situation where the prospective witness is a child with a developmental delay or disability, this procedure is all the more essential.

Narrative training takes two forms. Firstly, a neutral event is employed to promote an awareness of sequencing and for the child to practise the presentation of details in an organised manner. Secondly, the interviewer is attuned to applying scaffolding (para 3.1.4) as a mediation technique after the child's free recall of the personal experience in question. Scaffolding requires that questions are planned in terms of content and timing. The prospective witness is assisted in a non-suggestive manner to organise personal experiences into a coherent account. The effect of mediation is related to the modifiability of the child (para 4.3.5).

This research confirmed that children with developmental delays or disabilities generally find it challenging to produce a spontaneous, coherent account of an event in response to a free recall prompt (para 5.2.2). However, they find open-ended focused questions helpful because they stimulate elaboration. After this section of the evaluation, the interviewer will be able to describe the child's narrative ability in terms of developmental expectations (para 2.6.3). A comparison of the child's final account of the events with the initial description can be informative. For example, when details are related logically, coherence is increased (paras 2.6.3 and 5.2.2). In this study it was found that the syncretic heaping up of narrative details decreases with age and increases in relation to the extent of the delay in terms of cognitive functioning (para 5.2.2).

## **7.2 TESTIMONIAL COMPETENCY REPORT**

The purpose of the involvement of professionals, and an expert witness in particular, is not to give the child an "unfair advantage" as a witness, neither is it for "oath

helping” or to boost his or her credibility.<sup>1470</sup> It is for the facilitator (or if required, an appointed professional better equipped with the expertise relevant to the child’s condition than the facilitator) to compile a comprehensive psycho-legal report on competency for the court.<sup>1471</sup> With a well-prepared report, the court has a vehicle at its disposal to serve its superordinate goal of justice. It is to the advantage of all parties, including the accused, when the child witness’s participation in the truth-seeking process is at optimal capacity.

If the report contains a systematic presentation of relevant information on the uniquely developing child, the court will find a discussion of the assessment findings in relation to empirical developmental research on the components of competency and resultant logical recommendations, useful. However, the compilation of a report of this nature requires skill – technical and scientific terminology needs to be communicated in a “translated” format in order to optimise legal professionals’ access to the relevant information contained in the deposition.<sup>1472</sup> Because the report is considered to be expert evidence in a written format,<sup>1473</sup> its layout should be complementary to the usual format of legal documentation, e.g. numbered paragraphs for easy referencing and wide margins for writing comments.<sup>1474</sup>

A template for the testimonial competency report appears in Appendix 8. The main sections of the report are:

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<sup>1470</sup> JR Spencer “The Role of Experts in the Common Law and the Civil Law: A Comparison” in SJ Ceci and H Hembrooke (ed) *Expert Witnesses in Child Abuse Cases: What Can and Should Be Said in Court* (1998) 37:

“In a recent case, the English Court of Appeal condemned the prosecution for calling an educational psychologist to inform the court about the mental abilities of a mentally handicapped teenager, allegedly the victim of a sexual assault, and in particular to say that she was not highly suggestible. Such evidence was to be rejected, said the court, because the common law does not allow ‘oath helping,’ that is, evidence that merely asserts that a witness is worthy of belief.”

<sup>1471</sup> Sparta *Handbook for Treatment of Abused Children* 406-407.

<sup>1472</sup> Sparta *Handbook for Treatment of Abused Children* 399.

<sup>1473</sup> Allan “The Psychologist as Witness” para 5.1.4.

<sup>1474</sup> Meintjes-Van der Walt 2003 *CARSA* 52.

- Identifying particulars
- Reason for referral
- Assessment history
- Relevant background information
- Assessment of components of competency
- Developmental delay(s), disabilit(y)ies and/or related condition(s)
- Discussion
- Conclusion
- Recommendations
- Bibliography
- Appendices
- Abbreviated CV

The facilitator reports on the formal developmental assessment of those aspects pertaining to testimonial competency. Findings are integrated with theory and research on the specific child's developmental challenges and testimonial competency (para 3.6). This forms the basis of the conclusion reached. When applicable, facilitative actions are recommended to manage the restrictions associated with the developmental challenges of the witness.

### **7.3 EXPERT EVIDENCE**

It is advised that the prosecution and defence collaborate and that only one expert witness is appointed to assist the court on the question of the witness's competency.<sup>1475</sup> This can limit shortcomings associated with a number of professionals acting as expert witnesses in an adversarial system.<sup>1476</sup> It is likely that

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<sup>1475</sup> Pillay 2012 *SAJP* 314.

<sup>1476</sup> According to Spencer *Expert Witnesses* 40-45, the disadvantages of expert witnesses operating in an adversarial system are:

- If an expert witness is incompetent (i.e. not actually an expert), it is only revealed at the cross-examination stage of the court case.
- At 42, the prosecution or defence employs the expert witness as a "hired gun"; i.e. "he or she is willing to tell the court what the party in question wants the court to hear" and is therefore consciously biased.

a collaborative approach will pave the way for a different emphasis in the questioning of the professional as an expert witness and could be a more economical use of resources. Furthermore, except that it is usually not advisable for a child witness to be assessed by various unfamiliar professionals, the psychometric properties of psychological tests limit the frequency of re-administration.<sup>1477</sup> The same cognitive test cannot simply be repeated by another expert.

If the intention is to call the child to give testimony, it is recommended that the court receives the expert evidence of the facilitator and/or expert on the child witness's testimonial competency before the child is called. If specific accommodations are recommended to facilitate restrictions associated with the child's developmental challenges, this is discussed with the prosecutor and defence attorney during a pre-trial meeting. The proposed procedure to qualify the child's evidence as admissible will also be discussed.

#### **7.4 PROCEDURE FOR ADMISSION AS A WITNESS IN COURT**

The legal examination in court is replaced by the testimonial competency assessment prior to court, which includes the developmentally appropriate evaluation of the witness's moral capacity. The outcome of this evaluation will determine which procedure would be most meaningful for the particular child to qualify him or her as a witness. Truthfulness (and therefore reliability) is fostered when a witness makes a commitment to speak the truth (para 2.5).

The research revealed that only two of 142 participants were able to conceptualise "oath" (para 6.2.2). There is therefore no point to swearing in children with developmental delays and disabilities, and this is consistent with the guideline that

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- When the adversaries have access to the same resources and information, "inequality of arms" or unfairness is avoided.
  - It cannot be expected of an expert witness to rationally contemplate alternative findings and/or conclusions (those of another expert) and, if needs be, to make concessions during a legal confrontation – it should rather be expected that the expert witness makes sure he or she does not appear to be inept.

<sup>1477</sup> Spencer *Expert Witnesses* 43-44.

was found to be used in some of the court cases (para 2.3.3): a witness under eight years is assumed not to understand the import of the oath. In fact, in the child interviews it was demonstrated how children tended to use homophones or homonyms in an attempt to make sense of foreign words (para 6.2.2). The mere mention of a foreign word such as "oath" could thus create a substantial risk of the child witness being distracted unnecessarily while on the stand. In Canada, children of 14 years and younger give unsworn evidence (para 2.2).

The legal community is not in agreement whether a child witness promising to speak the truth is regarded as an affirmation (para 2.3.2). The current research indicates, however, that a limited number of children with disabilities understood the concept of a promise which is not the case with the concept of an oath (para 5.2.8). Moreover, only a very small number of children made reference to religion or belief in relation to the moral concept "to promise" (para 6.2.2) despite the finding that the majority of participants were raised in families that practiced religion (para 6.1.1). The child-friendly oath of Lyon and Matthews is based on the child promising to speak the truth and not to tell lies (para 2.2). Its linguistic simplicity has been approved by Walker (para 3.3.3), and Bala *et al* claim that it fosters honesty when evidence is given (para 2.2).

- **THE AFFIRMATION**

"It's really important that you tell us the truth.  
Do you promise that you will tell us the truth?"  
...  
"Will you tell us any lies?"  
...

*Dit is regtig belangrik dat jy vir ons die  
waarheid vertel.  
Belowe jy dat jy die waarheid sal praat?  
...  
Gaan jy vir ons jok?"  
...*

The Afrikaans version of the child-friendly oath uses a very basic, or informal, word for lying (*jok*) in order to avoid distractions which the homophones of *leuen*, as formal speech, can cause (para 6.2.2).

The research study identified three groups with regard to truth-lie competency. It is proposed that the group of child witnesses who have a conceptual understanding of making a promise give an affirmation<sup>1478</sup> in response to the child-friendly oath (see above). In the research study, this group consisted of older children, where, if cognitive limitations were present, it was in the milder range. In the second group of children, the extent of cognitive impairment did not allow for an understanding of the meaning of "to promise". It is suggested that this group of children, provided that they have an understanding of truth-telling or lying and the willingness of being truthful, be admonished to speak the truth when they proceed in giving unaffirmed evidence.<sup>1479</sup>

- **THE ADMONITION**

"It's really important that you tell us the truth.  
Will you tell us the truth?"  
...  
"Will you tell us any lies?"  
...

*Dit is regtig belangrik dat jy vir ons die  
waarheid vertel.  
Sal jy die waarheid praat?  
...  
Gaan jy vir ons jok?  
...*

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<sup>1478</sup> S 163 of Criminal Procedure Act 51 of 1977.

<sup>1479</sup> S 164.

For the third group – those witnesses who do not have a conceptual understanding of truth, an admonishment is given that does not refer to the concept of truth (para 3.7.4). Such alternative admonition would refer to the importance of relating from personal experience only.

- **THE ALTERNATIVE ADMONITION**

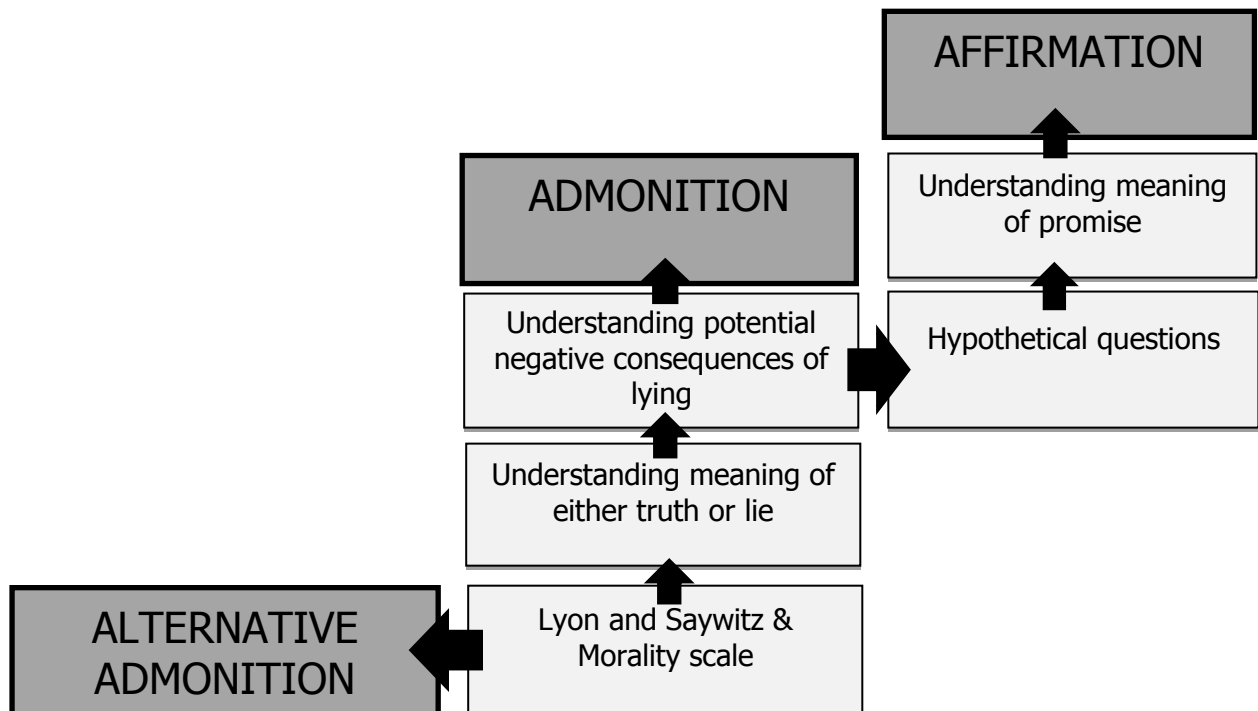
“It’s very important that you tell us everything about what really happened.  
Will you tell us everything that you remember about it?”  
...

*Dit is baie belangrik dat jy vir ons alles vertel van wat regtig gebeur het.  
Sal jy vir ons alles vertel wat jy daarvan onthou?*  
...

The testimonial competency report will contain a recommendation in terms of the section that is regarded applicable, and consequently, which procedure should be followed. The proposed steps of assessment to determine the admission procedure in court is represented in figure 7.1.



Figure 7.1 Schematic representation of the assessment of moral concepts to determine admission procedure in court



## 7.5 WITNESS WITH A DISABILITY PROTOCOL

A protocol for best practice is suggested when the potential witness is a child with a developmental disability.

1. The investigating officer should promptly notify the designated state prosecutor when a child involved in criminal allegations investigated by the SAPS attends a school for special educational needs, or whose caregivers claim his or her development is in some way atypical.
2. The state prosecutor, in liaison with the defence, appoints a facilitator to coordinate the testimonial competency assessment when the potential witness is a child with special needs. The facilitator should be a professional with expertise and experience in the fields of childhood development and developmental disabilities as well as forensic interviewing.
3. The SAPS (FCS) investigating officer assists the facilitator in making arrangements, if required. For example, if needed, the investigating officer

arranges transport for the parent and/or child to attend scheduled consultations.

4. The facilitator introduces him- or herself to the parent(s) and explains the protocol with a view to obtaining their informed consent<sup>1480</sup> and cooperation. The facilitator utilises the opportunity to get the contact details of the child's school and other professionals who are / were assisting the family with the child. The facilitator makes arrangements to obtain copies of all relevant documentation pertaining to the child.
5. The facilitator convenes a meeting with appropriate professionals (recently) involved with the child.
6. The investigating officer liaises with the facilitator before the child's statement is taken. If necessary, the child's statement is taken in the presence of the facilitator. A video recording is made.
7. The facilitator conducts the competency assessment. In some cases, for example with children with LNFS, a speech and language therapist will be responsible for (most) parts of the assessment.
8. The facilitator (and/or the appointed professional expert) compiles a comprehensive forensic report on the outcome of the competency assessment. If relevant, ways of facilitating restrictions associated with the developmental challenges of the witness are discussed in the competency report.
9. A pre-trial meeting is held by the prosecutor, defence attorney and facilitator.<sup>1481</sup> The facilitator's recommendations are discussed with a view to cost-effective planning of proceedings in court.

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<sup>1480</sup> Pillay and Kritzinger 2008 *Child & Adolescent Mental Health* 126.

<sup>1481</sup> L Meintjes-van der Walt "Experts testifying in matters of child abuse: The need for a code of ethics" (2002) 3(2) *CARSA* 24 at 32.

10. If the child is a competent witness, and the intention is to call the child to give testimony, the court should receive the testimony of the facilitator and/or expert on the child witness's specific disability before the child is called.
11. The witness should receive thorough court preparation, including narrative and moral competency training.<sup>1482</sup>
12. Evidence is received through an intermediary trained in working with persons with developmental disabilities.<sup>1483</sup> The intermediary has to be conversant in the child witness's mother tongue.
13. If the child is found to be competent to give evidence, the procedure most suited to his or her developmental status will be employed to qualify him or her as a witness in court.
14. Subsequent to his or her testimony, the court evaluates witness accuracy, i.e. reliability of evidence and witness credibility.

When testimonial competency determination is approached in this manner, the legal system is geared to offer child witnesses with developmental delays or disabilities access to justice. A thorough age-appropriate assessment of the components of competency precedes the decision whether the child should be called as a witness, and is a replacement for the random competency examination in court. On the basis of the recommendations made by the facilitator on behalf of the multi-disciplinary team, the court could make reasonable accommodations for those witnesses who have competency but whose disabilities impose limitations to their participation in the truth-seeking process. The court will also be guided to ensure that the admission of the child witness's evidence in court is a meaningful ceremony. The contents of

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<sup>1482</sup> Cunningham and Stevens "Helping a child to be a witness" 34-35; Müller *Preparing Children for Court* 163-184; Köhnken *Children's Testimony* 236-239.

<sup>1483</sup> S 170A (1), as amended by s 68 of the Criminal Law (Sexual Offences and Related Matters) Amendment Act 32 of 2007.

the procedure will not only be age-appropriate but also tailored to each child witness's personal attainments in terms of cognitive and moral development.

# BIBLIOGRAPHY

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## BOOKS

P Ainsworth and PC Baker *Understanding Mental Retardation. A resource for parents, caregivers, and counselors* (2004) University Press of Mississippi: Jackson.

A Allan "Intellectual disability" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) Oxford University Press: Cape Town.

A Allan and L Meintjes-Van der Walt "Expert evidence" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) Oxford University Press: Cape Town.

American Professional Society on the Abuse of Children (APSAC) *Forensic Interviewing in Cases of Suspected Child Abuse Practice Guidelines* (2012) APSAC: Columbus.

American Psychiatric Association (APA) *Diagnostic and Statistical Manual of Mental Disorders* 5 ed (DSM-5) (2013) APA: Arlington, VA.

V Anderson, E Northam, J Hendy and J Wrennall *Developmental Neuropsychology A Clinical Approach* (2001) Psychology Press: New York.

D Bennett-Gates and E Zigler "Resolving the developmental-difference debate: An evaluation of the triarchic and systems theory models" in JA Burack, RM Hodapp and E Zigler (eds) *Handbook of Mental Retardation and Development* (1998) Cambridge University Press: Cambridge, UK.

N BenZeev, N Lerner and Y Klein "A View for Israel" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

JG Borkowski, SS Carothers, K Howard, J Schatz and JR Farris "Intellectual Assessment and Intellectual Disability" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

J Bornman "Join the fight – as we pave the new way forward: A view from South Africa" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

PN Botha "Cerebral palsy" in JA Kapp (ed) *Children with Problems An Orthopedagogical Perspective* (1989) Serva: Sunnyside.

DN Bryen "Ending the Silence of Violence: A View from the United States and Canada" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

DN Bryen, S Reiter and J Bornman "Using Lessons Learned to Inform the Future" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

DN Bryen and CH Wickman "Testifying in Court in the USA" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

G Carlo "Care-based and Altruistically Based Morality" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

PM Crittenden *Raising Parents: Attachment, parenting and child safety* (2011) Taylor & Francis: Abingdon.

JP Das and JA Naglieri "Mental Retardation and Assessment of Cognitive Processes" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) APA: Washington, DC.

C Davies, C Foxcroft, L Griessel and N Tredoux "Computer-based and Internet-delivered assessment" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) Oxford University Press: Cape Town.

S Deb "Epilepsy in People With Mental Retardation" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

B Dickman *Access to Justice for People with Intellectual Disabilities. Guidelines for identification, interviewing and supporting complainants with intellectual disabilities in cases of sexual offences* (2013) Cape Mental Health: Cape Town.

B Dickman, A Roux, S Manson, G Douglas and N Shabalala "How could she possibly manage in court?" An intervention programme assisting complainants with intellectual disability in sexual assault cases in the Western Cape" in B Watermeyer, L Swartz, T Lorenzo, M Schneider and M Priestley (eds) *Disability and Social Change: A South African Agenda* (2006) HSRC: Pretoria.

K Durrheim "Basic quantitative analysis" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences 2 ed* (2006) UCT Press: Cape Town.

K Durrheim "Research design" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences 2 ed* (2006) UCT Press: Cape Town.

K Durrheim and D Painter "Collecting quantitative data: sampling and measuring" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences 2 ed* (2006) UCT Press: Cape Town.

L du Toit "The mentally handicapped" in JA Kapp (ed) *Children with Problems: An Orthopedagogical Perspective* (1989) Serva: Sunnyside.

Editorial Board "Definition of Mental Retardation" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) APA: Washington, DC.

N Eisenberg, TL Spinrad and A Sadovsky "Empathy-Related Responding in Children" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

R Feuerstein *The Dynamic Assessment of Retarded Performers The Learning Potential Assessment Device, Theory, Instruments, and Techniques* (1979) Scott, Foresman and Company: Glenview, Illinois.

R Feuerstein *Instrumental Enrichment: An Intervention Programme for Cognitive Modifiability* (1980) Scott, Foresman and Company: Glenview, Illinois.

R Feuerstein, Y Rand and JE Rynders *Don't accept me as I am. Helping "retarded" people to excel* (1988) Plenum Press: New York.

D Finkelhor *Childhood Victimization Violence, Crime, and Abuse in the Lives of Young People* (2008) Oxford University Press: New York.

JW Fowler *Stages of Faith The Psychology of Human Development and the Quest for Meaning* (1981) HarperCollins: New York.

C Foxcroft "Developing a psychological measure" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) Oxford University Press: Cape Town.

C Foxcroft and G Roodt "What the future holds for psychological assessment" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) Oxford University Press: Cape Town.

J Garbarino *Children and the Dark Side of Human Experience: Confronting Global Realities and Rethinking Child Development* (2008) Springer: New York.

BD Garber *Developmental Psychology for Family Law Professionals: Theory, Application, and the Best Interests of the Child* (2010) Springer: New York.

J Gerenser and B Forman "Speech and Language Deficits in Children with Developmental Disabilities" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

C Gillberg "The Autism Spectrum" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

M Goldman "Forensic and Psychosexual Assessment" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.



"Glossary" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) UCT Press: Cape Town.

L Griessel, J Jansen and L Stroud "Administering psychological assessment measures" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) Oxford University Press: Cape Town.

KW Grieve and C Foxcroft "Factors affecting assessment results" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) Oxford University Press: Cape Town.

JB Hale and CA Fiorello *School Neuropsychology A Practitioner's Handbook* (2004) Guilford Press: New York.

DP Hallahan and JM Kaufman *Exceptional Children: Introduction to Special Education* 4 ed (1988) Prentice Hall: Englewood Cliffs, NJ.

PD Hastings, C Zahn-Waxler and K McShane "We Are, By Nature, Moral Creatures: Biological Bases of Concern for Others" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

LA Henry, C Bettenay and DPJ Carney "Children with Intellectual Disabilities and Developmental Disorders" in ME Lamb, DJ la Rooy, LC Malloy and C Katz (eds) *Children's Testimony. A Handbook of Psychological Research and Forensic Practice* 2 ed (2011) Wiley-Blackwell: Chichester, UK.

SK Hewitt *Assessing Allegations of Sexual Abuse in Preschool Children. Understanding Small Voices* (1999) SAGE: London.

RM Hodapp and EM Dykens "Behavioral Effects of Genetic Mental Retardation Disorders" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

CB Hortons and KA Kochurka "The Assessment of Children with Disabilities Who Report Sexual Abuse: A Special Look at Those Most Vulnerable" in T Ney (ed) *True and false allegations of child sexual abuse: assessment and case management* (1995) Brunner-Mazel: New York.

ML Howe, SH Toth and D Cicchetti "Memory and Developmental Psychopathology" in D Cicchetti and D Cohen (eds) *Developmental Psychopathology 2* (2006) Wiley: New York.

S Human "The Theory of Children's Rights" in T Boezaart (ed) *Child Law in South Africa* (2009) JUTA: Landsdowne.

S Kaliski "Personality as a dimension of normality, and as a disorder" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) Oxford University Press: Cape Town.

S Kaliski, A Allan and L Meintjes-van der Walt "Writing a psycholegal report" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) Oxford University Press: Cape Town.

SZ Kaliski "The criminal defendant" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) Oxford University Press: Cape Town.

A Kanjee "Assessment research" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences 2 ed* (2006) UCT Press: Cape Town.

A Kanjee and C Foxcroft "Cross-cultural test adaptation, translation and tests in multiple languages" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context 3 ed* (2009) UCT Press: Cape Town.

JA Kapp "The aurally handicapped" in JA Kapp (ed) *Children with Problems An Orthopedagogical Perspective* (1989) Serva: Sunnyside.

D Katner and HJ Plum "Legal Issues" in AP Giardino and ER Giardino *Recognition of Child Abuse for the Mandated Reporter 3 ed* (2002) G.W. Medical Publishing: St Louis Missouri.

K Kelly "Calling it a day: reaching conclusions in qualitative research" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences 2 ed* (2006) UCT Press: Cape Town.

K Kelly "From encounter to text: collecting data in qualitative research" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences* 2 ed (2006) UCT Press: Cape Town.

J Kenniston "Color" in AG Walker *Handbook on Questioning Children: A Linguistic Perspective* 3 ed (2013) ABA Centre on Children and the Law: Washington.

J Kenniston "Interviewing Persons with Disabilities" in AG Walker *Handbook on Questioning Children: A Linguistic Perspective* 3 ed (2013) ABA Centre on Children and the Law: Washington.

J Kenniston "Using Narratives and Narrative Event Practices in Interviews with Children" in AG Walker *Handbook on Questioning Children: A Linguistic Perspective* 3 ed (2013) ABA Centre on Children and the Law: Washington.

J Kenniston and TD Lyon "Assessing Children's Competency to Testify" in AG Walker *Handbook on Questioning Children: A Linguistic Perspective* 3 ed (2013) ABA Centre on Children and the Law: Washington.

J Kenniston and TD Lyon "Questions Designed to Assess Competency" in AG Walker *Handbook on Questioning Children: A Linguistic Perspective* 3 ed (2013) ABA Centre on Children and the Law: Washington.

G Köhnken "A German Perspective on Children's Testimony" in HL Westcott, GM Davies and RHC Bull (eds) *Children's Testimony. A Handbook of Psychological Research and Forensic Practice* (2002) John Wiley: Chichester, UK.

L Kuczynski and GS Navara "Sources of Innovation and Change in Socialization, Internalization and Acculturation" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

WA Landman *Navorsingsmetodologiese grondbegrippe / Basic Concepts in Research Methodology* (1988) Serva: Pretoria.

DK Lapsley "Moral Stage Theory" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

J Larcher "Crime against Persons with Little or No Functional Speech: A UK Perspective" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

J le Roux and J Engelbrecht "The Sexually Abused Child as a Witness" in CJ Davel (ed) *Introduction to Child Law in South Africa* (2000) JUTA: Landsdowne.

A Louw and D Louw "Early Childhood" in D Louw and A Louw (eds) *Child and Adolescent Development* (2007) UFS Press: Bloemfontein.

A Louw and D Louw "Middle Childhood" in D Louw and A Louw (eds) *Child and Adolescent Development* (2007) UFS Press: Bloemfontein.

A Louw, D Louw and I Ferns "Adolescence" in D Louw and A Louw (eds) *Child and Adolescent Development* (2007) UFS Press: Bloemfontein.

D Louw and R Kail "Basic Concepts of Child and Adolescent Development" in D Louw and A Louw (eds) *Child and Adolescent Development* (2007) UFS Press: Bloemfontein.

D Louw and A Louw "The Neonatal phase and infancy" *Child and Adolescent Development* (2007) UFS Press: Bloemfontein.

R Louw "Principles of criminal law: Pathological and non-pathological criminal incapacity" in S Kaliski (ed) *Psycholegal Assessment in South Africa* (2006) Oxford University Press: Cape Town.

TD Lyon "Assessing the Competency of Child Witnesses: Best Practice Informed by Psychology and Law" in ME Lamb, DJ la Rooy, LC Malloy and C Katz (eds) *Children's Testimony. A Handbook of Psychological Research and Forensic Practice* 2 ed (2011) Wiley-Blackwell: Chichester, UK.

TD Lyon "Child Witnesses and the Oath" in HL Westcott, GM Davies and RHC Bull (eds) *Children's Testimony. A Handbook of Psychological Research and Forensic Practice* (2002) John Wiley: Chichester, UK.

EM Madge *Manual for the Junior South African Individual Scales (JSAIS) Part I Development and Standardization* (1981) HSRC: Pretoria.

CI Magyar, V Pandolfi and CR Peterson "Psychoeducational Assessment" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

S Manson *Sexual Abuse Victim Empowerment Programme Cape Mental Health Outreach Programme* (2009) Cape Mental Health: Cape Town.

EJ Mash and DA Wolfe *Abnormal Child Psychology* 4 ed (2010) Wadsworth: Belmont.

S McDermott, MS Durkin, N Schupf and ZA Stein "Epidemiology and Etiology of Mental Retardation" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

GB Melton, J Petrila, NG Poythress and C Slobogin *Psychological Evaluations for the Courts. A Handbook for Mental Health Professionals and Lawyers* 3 ed (2007) Guilford: New York.

DC Miller *Essentials of School Neuropsychological Assessment* (2007) John Wiley: Hoboken, NJ.

K Müller *Preparing Children for Court. A Handbook for Practitioners* (2004) The Author: Port Elizabeth.

K Müller "The Competency examination and the child witness" in K Müller (ed) *The Judicial Officer and the Child Witness* (2002) The Author: Port Elizabeth.

K Müller and K Hollely *Introducing the Child Witness* (2000) The Authors: Port Elizabeth.

D Narvaez "Integrative Ethical Education" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

V Naylor, C Vorster, P Cronjé and B Donaldson "Forensic Assessment" in V Roos and C Vorster (eds) *Introduction to Forensic Psychology* (2003) Verbum: Wingate Park.

HJM Nouwen *A Cry of Mercy: Prayers from the Genesee* (1981) Gill and Macmillan: Dublin.

IL Ochs "Securing Freedom from Fear and Injustice within the Justice System" in DN Bryen and J Bornman (eds) *Stop Violence against People with Disabilities! An International Resource* (2014) e-book.

KJ O'Connor and S Ammen *Play Therapy – Treatment Planning and Interventions: The Ecosystemic Model and Workbook* (1997) Academic Press: San Diego.

RE Owens *Language Development An Introduction* 4 ed (1996) Allyn & Bacon: Needham Heights, MA.

M Page and G Precey "Child Protection Concerns When Questioning Children" in HL Westcott, GM Davies and RHC Bull (eds) *Children's Testimony. A Handbook of Psychological Research and Forensic Practice* (2002) John Wiley: Chichester, UK.

T Pauw "The visually handicapped" in JA Kapp (ed) *Children with Problems An Orthopedagogical Perspective* (1989) Serva: Sunnyside.

J Piaget *The Child's Conception of the World. A 20<sup>th</sup> Century Classic in Child Psychology* 2 ed (2007) Rowan and Littlefield: Washington.

M Powell and D Thomson "Children's Memories for Repeated Events" in HL Westcott, GM Davies and RHC Bull (eds) *Children's Testimony. A Handbook of Psychological Research and Forensic Practice* (2002) John Wiley: Chichester, UK.

AC Repp, J Favell and D Munk "Cognitive and Vocational Interventions for School-Age Children and Adolescents with Mental Retardation" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) APA: Washington, DC.

M Robinson *Manual for the Individual Scale for General Scholastic Aptitude (ISGSA) Part I Background and standardization* (1998) HSRC: Pretoria.

M Robinson *Manual for the Individual Scale for General Scholastic Aptitude (ISGSA) Part III: Norm Tables* (1998) HSRC: Pretoria.

G Roodt "Reliability: Basic concepts and measures" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) Oxford University Press: Cape Town.

G Roodt, L Stroud, C Foxcroft and D Elkonin "The use of assessment measures in various applied contexts" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) Oxford University Press: Cape Town.

DK Routh "Intellectual Development" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) APA: Washington, DC.

DC Russo, E Dunn, G Pace and RS Coddling "Pediatric Brain Injury" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

M Schachter and R Demerath "Neuropsychology and Mental Retardation" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) APA: Washington, DC.

D Schacter *The Seven Sins of Memory {How the Mind Forgets and Remembers}* (2001) Houghton Mifflin Company: New York.

J Smetana "Social-cognitive Domain Theory: Consistencies and Variations in Children's Moral and Social Judgments" in J Smetana and M Killen (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

SS Sparrow, DV Cicchetti and DA Balla *Vineland-II Vineland Adaptive Behavior Scales Survey Forms Manual* 2 ed (2005) Pearson: Minneapolis.

SN Sparta "Expert Mental Health Testimony in Child Abuse Cases" in PF Talley (ed) *Handbook for the Treatment of Abused and Neglected Children* (2005) Haworth Press: New York.

JR Spencer "The Role of Experts in the Common Law and the Civil Law: A Comparison" in SJ Ceci and H Hembrooke (eds) *Expert Witnesses in Child Abuse Cases: What Can and Should Be Said in Court* (1998) APA: Washington DC.

MB Tappan "Mediated Moralities: Sociocultural Approaches to Moral Development" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

C Thompson *Psychoanalysis: Evolution and Development A Review of Theory and Therapy* (1950) Evergreen Press: Stonehouse, UK.

RA Thompson, S Meyer and M McGinley "Understanding Values in Relationships: The Development of Conscience" in J Smetana and M Killen (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

C Tredoux and M Smith "Evaluating research design" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences 2* ed (2006) UCT Press: Cape Town.

C Tredoux and M Smith "Jumping to conclusions: an overview of inferential statistical methods" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences 2* ed (2006) UCT Press: Cape Town.

E Turiel "Thought, Emotions, and Social Interactional Processes in Moral Development" in M Killen and J Smetana (eds) *Handbook of Moral Development* (2006) Lawrence Erlbaum: Mahwah, NJ.

A van der Merwe "Children as Victims and Witnesses" in T Boezaart (ed) *Child Law in South Africa* (2009) JUTA: Landsdowne.

M van der Riet and K Durrheim "Putting design into practice: writing and evaluating research proposals" in M Terre Blanche, K Durrheim and D Painter (eds) *Research in Practice Applied Methods for the Social Sciences 2* ed (2006) UCT Press: Cape Town.

R van Eeden *Manual for the Senior South African Individual Scale – Revised (SSAIS-R) Part I Background and standardization* (1991) HSRC: Pretoria.



R van Eeden and M de Beer "Assessment of cognitive functioning" in C Foxcroft and G Roodt (eds) *Introduction to Psychological Assessment in the South African context* 3 ed (2009) Oxford University Press: Cape Town.

A Vrij "Deception in Children: A Literature Review and Implications for Children's Testimony" in HL Westcott, GM Davies and RHC Bull (eds) *Children's Testimony. A Handbook of Psychological Research and Forensic Practice* (2002) John Wiley: Chichester, UK.

AG Walker *Handbook on Questioning Children: A Linguistic Perspective* 3 ed (2013) ABA Centre on Children and the Law: Washington.

L Walker-Hirsch "Foundations in Social Development Education and Sexuality Education Techniques" in L Walker-Hirsch (ed) *The Facts of Life ... and More. Sexuality and Intimacy for People with Intellectual Disabilities* (2007) Paul H. Brookes: Baltimore.

KW Widaman and KS McGrew "The Structure of Adaptive Behavior" in JW Jacobson and JA Mulick (eds) *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996) APA: Washington, DC.

M Wilkinson *Changing Minds in Therapy Emotion, Attachment, Trauma & Neurobiology* (2010) W.W. Norton: New York.

S Winter "Cerebral Palsy" in JW Jacobson, JA Mulick and J Rojahn (eds) *Handbook of Intellectual and Developmental Disabilities* (2009) Springer: New York.

N Zaal "Hearing the voices of children in court: a field study and evaluation" in S Burman (ed) *The fate of the child. Legal Decisions on Children in the New South Africa* (2003) JUTA: Landsdowne.

E Zigler and D Balla "Introduction: Developmental Approach to Mental Retardation" in E Zigler and D Balla (eds) *Mental Retardation: The Developmental-difference Controversy* (1982) Lawrence Erlbaum: Hillsdale.

## **JOURNAL ARTICLES**

CSH Aarnoudse-Moens, N Weisglas-Kuperus, JB van Goudoever and J Oosterlaan "Meta-Analysis of Neurobehavioral Outcomes in Very Preterm and/or Very Low Birth Weight Children" (2009) 124(2) *Pediatrics* 717.

NM Aarons and MB Powell "Issues related to interviewer's ability to elicit reports of abuse from children with an intellectual disability: A review" (2003) 14(3) *Current Issues in Criminal Justice* 257.

CM Adnams, PW Kodituwakku, A Hay, CD Molteno, D Viljoen and PA May "Patterns of Cognitive-Motor Development in Children with Fetal Alcohol Syndrome From a Community in South Africa" (2001) 25(4) *Alcoholism: Clinical and Experimental Research* 557.

SE Agnew and MB Powell "The Effect of Intellectual Disability on Children's Recall of an Event Across Different Question Types" (2004) 28(3) *Law and Human Behavior* 273.

EC Ahern, TD Lyon and JA Quas "Young Children's Emerging Ability to Make False Statements" (2011) 47(1) *Developmental Psychology* 61.

FS Ahmed and LS Miller "Executive Function Mechanisms of Theory of Mind" (2011) 41 *Journal of Autism and Developmental Disorders* 667.

JN Anderson "The CornerHouse Forensic Interview Protocol: An Evolution in Practice for almost 25 Years" (2013) 25(4) *APSAC Advisor* 2.

N Archer and EA Hurley "A justice system failing the autistic community" (2013) 4 *Journal of Intellectual Disabilities and Offending Behaviour* 53.

LMD Archibald, M Joanisse and A Edmunds "Specific language or working memory impairments: A small scale observational study" (2011) 27(3) *Child Language Teaching and Therapy* 295.

C Arpino, E Compagnone, ML Montanaro, D Cacciatore, A de Luca, A Cerulli, S di Girolamo and P Curatolo "Preterm birth and neurodevelopmental outcome: a review" (2010) 26 *Child's Nervous System* 1139.

AN Asad, L Hand, L Fairgray and SC Purdysxx "The use of dynamic assessment to evaluate narrative language learning in children with hearing loss: Three case studies" (2013) 29(3) *Child Language Teaching and Therapy* 319.

N Bala, K Lee, RCL Lindsay and V Talwar "The Competency of Children to Testify: Psychological Research Informing Canadian Law Reform" (2010) 18 *International Journal of Children's Rights* 53.

PJ Bauer, AO Doydum, T Pathman, M Larkina, OE Güler and M Burch "It's all about location, location, location: Children's memory for the 'where' of personally experienced events" (2012) 113 *Journal of Experimental Child Psychology* 510.

R Berman "Psycholinguistics of Text Construction" (2008) 35(4) *Journal of Child Language* 735.

DVM Bishop and C Donlan "The role of syntax in encoding and recall of pictorial narratives: Evidence from specific language impairment" (2005) 23 *British Journal of Developmental Psychology* 25.

DVM Bishop and CF Norbury "Executive functions in children with communication impairments, in relation to autistic symptomology: I: Generativity" (2005) 9 *Autism* 7.

GA Bowen "Document Analysis as a Qualitative Research Method" (2009) 9(2) *Qualitative Research Journal* 27.

S Bourg Carter "Challenges of Child Witnesses in Family Law Proceedings" (2005) 19(3) *American Journal of Family Law* 165.

V Braun and V Clarke "Using thematic analysis in psychology" (2006) 3 *Qualitative Research in Psychology* 77.

A Bright-Paul, C Jarrold and DB Wright "Theory-of-Mind Development Influences Suggestibility and Source Memory" (2008) 44(4) *Developmental Psychology* 1055.

R Bull "The investigative interviewing of children and other vulnerable witnesses: Psychological research and working in professional practice" (2010) 15 *Legal and Criminological Psychology* 5.

A-C Cederborg, H Danielsson, D la Rooy and ME Lamb "Repetition of contaminating question types when children and youths with intellectual disabilities are interviewed" (2009) 53(5) *Journal of Intellectual Disability Research* 440.

A-C Cederborg and M Lamb "Interviewing alleged victims with intellectual disabilities" (2008) 52(1) *Journal of Intellectual Disability Research* 49.

TE Coggins, GR Timler and LB Olswang "A State of Double Jeopardy: Impact of Prenatal Alcohol Exposure and Adverse Environments on the Social Communicative Abilities of School-Age Children With Fetal Alcohol Spectrum Disorder" (2007) 38 *Language, Speech, and Hearing Services in Schools* 117.

P Cooke and G Davies "Achieving best evidence for witnesses with learning disabilities: new guidance" (2001) 29 *British Journal of Learning Disabilities* 84.

JS DeLoache "Becoming symbol-minded" (2004) 8(2) *Trends in Cognitive Science* 66.

RT Devine and C Hughes "Silent Films and Strange Stories: Theory of Mind, Gender, and Social Experiences in Middle Childhood" (2013) 84(3) *Child Development* 989.

J Dion and M Cyr "The Use of the NICHD Protocol to Enhance the Quantity of Details Obtained from Children with Low Verbal Abilities in Investigative Interviews: A Pilot Study" (2008) 17(2) *Journal of Sexual Abuse* 144.

RS Edelstein, TL Luten, P Ekman and GS Goodman "Detecting Lies in Children and Adults" (2008) 30(1) *Law and Human Behavior* 1.

AD Evans and TD Lyon "Assessing Children's Competency to Take the Oath in Court: The Influence of Question Type on Children's Accuracy" (2012) 26(3) *Law and Human Behavior* 195.

CM Fahie and DK Symons "Executive functioning and theory of mind in children clinically referred for attention and behavior problems" (2003) 24 *Applied Developmental Psychology* 51.

DK Fast and J Conry "Fetal Alcohol Spectrum Disorders and the Criminal Justice System" (2009) 15 *Developmental Disabilities Research Reviews* 250.

L Flobbe, R Verbrugge, P Hendriks and I Krämer "Children's Application of Theory of Mind in Reasoning and Language" (2008) 17 *Journal of Logic, Language and Information* 417.

G Fu, AD Evans, Fen Xu and K Lee "Young children can tell strategic lies after committing a transgression" (2012) 113 *Journal of Experimental Child Psychology* 147.

A Gopnik and JW Astington "Children's Understanding of Representational Change and Its Relation to the Understanding of False Belief and the Appearance-Reality Distinction" (1988) 59 *Child Development* 26.

LB Green and JS Klecan-Aker "Teaching story grammar components to increase oral narrative ability: A group intervention study" (2011) 28(3) *Child Language Teaching and Therapy* 263.

GH Gudjonsson and L Henry "Child and adult witnesses with intellectual disability: The importance of suggestibility" (2003) 8 *Legal and Criminological Psychology* 241.

FGE Happé "An Advanced Test of Theory of Mind: Understanding of Story Characters' Thoughts and Feelings by Able Autistic, Mentally Handicapped and Normal Children and Adults" (1994) 24(2) *Journal of Autism and Developmental Disorders* 129.

JJ Haugaard, ND Reppucci, J Laird and T Nauful "Children's Definitions of the Truth and Their Competency as Witnesses in Legal Proceedings" (1991) 15(3) *Law and Human Behavior* 253.

ME Hayiou-Thomas, PS Dale and R Plomin "The etiology of variation in language skills changes with development: a longitudinal twin study of language from 2 to 12 years" (2012) 15(2) *Developmental Science* 233.

V Hazlitt "Children's Thinking" (1930) 20(4) *British Journal of Psychology* 354.

LA Henry and GH Gudjonsson "Eyewitness Memory and Suggestibility in Children with Mental Retardation" (1999) 104(6) *American Journal on Mental Retardation* 491.

LA Henry and GH Gudjonsson "Eyewitness Memory, Suggestibility, and Repeated Recall Sessions in Children with Mild and Moderate Intellectual Disabilities" (2003) 27(5) *Law and Human Behavior* 481.

TL Hutchins, LA Bonazinga, PA Prelock and RS Taylor "Beyond False Beliefs: the Development and Psychometric Evaluation of the Perceptions of Children's Theory of Mind Measure – Experimental Version (PCToMM-E)" (2008) 38 *Journal of Autism and Developmental Disorders* 143.

EB Isaacs, CJ Edmonds, A Lucas and DG Gadian "Calculation difficulties in children of very low birthweight: A neural correlate" (2001) 124 *Brain* 1701.

MR Kebbell, C Hatton, SD Johnson and CME O'Kelly "People with learning disabilities as witnesses in court: What questions should lawyers ask?" (2001) 29 *British Journal of Learning Disabilities* 98.

J Keilty and G Connelly "Making a Statement: An exploratory study of barriers facing women with an intellectual disability when making a statement about sexual assault to police" (2001) 16(2) *Disability & Society* 273.

S Kerr and K Durkin "Understanding of Thought Bubbles as Mental Representations in Children with Autism: Implications for Theory of Mind" (2004) 34(6) *Journal of Autism and Developmental Disorders* 637.

PW Kodituwakku "Neurocognitive Profile in Children with Fetal Alcohol Spectrum Disorders" (2009) 15 *Developmental Disabilities Research Reviews* 218.

PW Kodituwakku, CM Adnams, A Hay, AE Kitching, E Burger, WO Kalberg, DL Viljoen and PA May "Letter and Category Fluency in Children with Fetal Alcohol Syndrome From a Community in South Africa" (2006) 67 *Journal of Studies on Alcohol* 502.

PW Kodituwakku and EL Kodituwakku "From Research to Practice: An Integrative Framework for the Development of Interventions for Children with Fetal Alcohol Spectrum Disorders" (2011) 21 *Neuropsychological Review* 204.

S Kulkofsky, Q Wang and SJ Ceci "Do Better Stories Make Better Memories? Narrative Quality and Memory Accuracy in Preschool Children" (2008) 22 *Applied Cognitive Psychology* 21.

ME Lamb and DA Brown "Conversational apprentices: Helping children become competent informants about their own experiences" (2006) 24 *British Journal of Developmental Psychology* 215.

ME Lamb, I Hershkowitz and TD Lyon "Interviewing Victims and Suspected Victims Who Are Reluctant to Talk" (2013) 25(4) *APSAC Advisor* 16.

K London and N Nunez "Examining the efficacy of truth/lie discussions in predicting and increasing the veracity of children's reports" (2002) 83 *Journal of Experimental Child Psychology* 131.

AE Louw "Die bevoegdheid van kinders as getuies I: Die rol van ouderdom en ontwikkelingsvlak in geheue" (2004) 5(2) *CARSA* 3.

AE Louw "Die bevoegdheid van kinders as getuies II: Die rol van sosiaal-emosionele kontekste in geheue" (2004) 5(2) *CARSA* 16.

AE Louw "Die bevoegdheid van kinders as getuies: Die rol van kognitiewe faktore in die vatbaarheid van suggestie" (2005) 6(1) *CARSA* 18.

AE Louw "Die bevoegdheid van kinders as getuies: Die rol van taalvaardigheid" (2005) 6(2) *CARSA* 19.

SB Lovett and BH Pillow "Age-related Changes in Children's and Adults' Explanations of Interpersonal Actions" (2010) 171(2) *The Journal of Genetic Psychology* 139.

TD Lyon "Child Witnesses and the Oath: Empirical Evidence" (2000) 73 *Southern California Law Review* 1017.

TD Lyon, EC Ahern, LC Malloy and JA Quas "Children's Reasoning About Disclosing Adult Transgressions: Effects of Maltreatment, Child Age, and Adult Identity" (2010) 81(6) *Child Development* 1714.

TD Lyon, N Carrick and JA Quas "Young Children's Competency to take the Oath: Effects of Task, Maltreatment, and Age" (2010) 34 *Law and Human Behavior* 141.

TD Lyon, LC Malloy, JA Quas and VA Talwar "Coaching, Truth Induction, and Young Maltreated Children's False Allegations and False Denials" (2008) 79(4) *Child Development* 914.

TD Lyon and KJ Saywitz "Young Maltreated Children's Competence to Take the Oath" (1999) 3 *Applied Developmental Science* 16.

M Manolitsi and N Botting "Language abilities in children with autism and language impairment: using narrative as a (sic) additional source of clinical information" (2011) 27(1) *Child Language Teaching and Therapy* 39.

S Mattson, N Crocker and TT Nguyen "Fetal Alcohol Spectrum Disorders: Neuropsychological and Behavioral Features" (2011) 21 *Neuropsychological Review* 81.

PA May, JP Gossage, LE Brooke, CL Snell, A-S Marais, LS Hendricks, JA Croxford and DL Viljoen "Maternal Risk Factors for Fetal Alcohol Syndrome in the Western Cape Province of South Africa: A Population-Based Study" (2005) 95(7) *American Journal of Public Health* 1190.

PA May, JP Gossage, A-S Marais, CM Adnams, HE Hoyme, KL Jones, LK Robinson, NCO Khaole, C Snell, WO Kalberg, L Hendricks, L Brooke, C Stellavato and DL Viljoen "The epidemiology of fetal alcohol syndrome and partial FAS in a South African community" (2007) 88 *Drug and Alcohol Dependence* 259.

A McCabe and PR Rollins "Assessment of Preschool Narrative Skills" (1994) 3 *American Journal of Speech and Language Pathology* 45.



AL McCarron, S Ridgway and A Williams "The Truth and Lie Story: Developing a Tool for Assessing Child Witnesses' Ability to Differentiate between Truth and Lies" (2004) 13 *Child Abuse Review* 42.

E McCrory, LA Henry and F Happé "Eye-witness memory and suggestibility in children with Asperger syndrome" (2007) 48(5) *Journal of Child Psychology and Psychiatry* 482.

L McLain "Sweet Childish Days': Using developmental psychology research in evaluating the admissibility of out-of-court statements by young children" (2011) 64(1) *Maine Law Review* 77.

R Meintjes and SJ Collings "Issues raised by Judge Bertelsmann in connection with child sexual abuse victims and witnesses: The role and submission of the South African Professional Society on the Abuse of Children" (2008) 9(2) *CARSA* 1.

L Meintjes-Van der Walt "Ethics and the expert: Some suggestions for South Africa" (2003) 4(2) *CARSA* 42.

L Meintjes-Van der Walt "Experts testifying in matters of child abuse: The need for a code of ethics" (2002) 3(2) *CARSA* 24.

GB Melton "Children's Competency to Testify" (1981) 5(1) *Law and Human Behavior* 73.

GB Melton "Children, Ecology, and Legal Contexts: Reply to Haugaard" (1988) 19(1) *Professional Psychology: Research and Practice* 108.

MK Michel, BN Gordon, PA Ornstein and MA Simpson "The Abilities of Children with Mental Retardation to Remember Personal Experiences: Implications for Testimony" (2000) 29(3) *Journal of Clinical Psychology* 453.

R Milne and R Bull "Interviewing witnesses with learning disabilities for legal purposes" (2001) 29 *British Journal of Learning Disabilities* 93.

R Murfett, MB Powell and PC Snow "The effect of intellectual disability on the adherence of child witnesses to a 'story grammar' framework" (2008) 33(1) *Journal of Intellectual and Developmental Disability* 2.

J Murray and J Goldbart "Cognitive and language acquisition in typical and aided language learning: A review of recent evidence from an aided communication perspective" (2009) 25(1) *Child Language Teaching and Therapy* 31.

JEB Myers "The Competence of Young Children to Testify in Legal Proceedings" (1993) 11 *Behavioral Sciences and the Law* 121.

JEB Myers, KJ Saywitz and GS Goodman "Psychological Research on Children as Witnesses: Practical Implications for Forensic Interviews and Courtroom Testimony" (1996) 28 *Pacific Law Journal* 3.

SA Norris, LM Richter and SA Fleetwood "Panel Studies in Developing Countries: Case Analysis of Sample Attrition Over the Past 16 Years Within the Birth to Twenty Cohort in Johannesburg, South Africa" (2007) 19 *Journal of International Development* 1143.

CME O'Kelly, MR Kebbell, C Hatton and SD Johnson "Judicial intervention in court cases involving witnesses with and without learning disabilities" (2003) 8 *Legal and Criminological Psychology* 229.

BM O'Mahony "The emerging role of the Registered Intermediary with the vulnerable witness and offender: facilitating communication with the police and members of the judiciary" (2010) 38 *British Journal of Learning Disabilities* 232.

J Perner "Children's Competency in Understanding the Role of a Witness: Truth, Lies and Moral Ties" (1997) 11 *Applied Cognitive Psychology* s21.

J Perner, D Kloo and E Gornik "Episodic Memory Development: Theory of Mind is Part of Re-experiencing Experienced Events" (2007) 16 *Infant and Child Development* 471.

J Perner and H Wimmer "John *Thinks* That Mary *Thinks* That ...' Attribution of Second Order Beliefs by 5- to 10-Year-Old Children" (1985) 39 *Journal of Experimental Child Psychology* 437.

C Peterson, KL Warren and AH Hayes "Revisiting Narrative Elaboration Training with an Ecologically Relevant Event" (2013) 14(1) *Journal of Cognition and Development* 154.

CC Peterson "Mind and Body: Concepts of Human Cognition, Physiology and False Belief in Children with Autism or Typical Development" (2005) 35(4) *Journal of Autism and Developmental Disorders* 487.

AL Pillay "The rape survivor with an intellectual disability vs. the court" (2012) 42(3) *South African Journal of Psychology* 312.

AL Pillay and AM Kritzinger "Psycho-legal issues surrounding the rape of children and adolescents with mental retardation" (2008) 20(2) *Journal of Child & Adolescent Mental Health* 123.

J Prinsloo "In the best interest of the child: The protection of child victims and witnesses in the South African Criminal Justice System" (2008) 9(2) *CARSA* 49.

J Prinsloo "The constitutional right to protection of child victims and witnesses in the South African criminal justice system: Director of Public Prosecutions, Transvaal v Minister of Justice and Constitutional Development, and others" (2010) 11(1) *CARSA* 1.

C Rainville "Prosecuting Cases for Children with Intellectual Disabilities" (2012) 31(12) *Child Law Practice* 145.

C Rasmussen, V Talwar, C Loomes and G Andrew "Brief Report: Lie-telling in Children with Fetal Alcohol Spectrum Disorder" (2008) 33(2) *Journal of Pediatric Psychology* 220.

PM Richards and JW Kirk "Traumatic Brain Injury Across the Lifespan: A Neuropsychological Tutorial for Attorneys" (2010) 3 *Psychological Injury and Law* 2.

CM Roebbers and W Schneider "Individual Differences in Children's Eyewitness Recall: the Influence of Intelligence and Shyness" (2001) 5(1) *Applied Developmental Science* 9.

KJ Saywitz, L Snyder and R Nathanson "Facilitating the Communicative Competence of the Child Witness" (1999) 3(1) *Applied Developmental Science* 58.

R Smith and PJ LaFreniere "Development of Children's Ability to Infer Intentions from Nonverbal Cues" (2009) 3(4) *Journal of Social, Evolutionary, and Cultural Psychology* 315.

SM Snider and MD Everson "What Is My Next Question? Using Question Frameworks to Improve Children's Narrative Accounts of Abuse" (2011) 11(4) *APSAC Alert* 1.

B Sodian and U Frith "Deception and Sabotage in Autistic, Retarded and Normal Children" (1992) 33(3) *Journal of Child Psychology and Psychiatry* 591.

M Sprung "Clinically Relevant Measures of Children's Theory of Mind and Knowledge about Thinking: Non-Standard and Advanced Measures" (2010) 15(4) *Child and Adolescent Mental Health* 204.

V Talwar, HM Gordon and K Lee "Lying in the Elementary School Years: Verbal Deception and Its Relation to Second-Order Belief Understanding" (2007) 43(3) *Developmental Psychology* 804.

V Talwar and K Lee "Development of lying to conceal a transgression: Children's control of expressive behaviour during verbal deception" (2002) 26(5) *International Journal of Behavioral Development* 436.

V Talwar and K Lee "Social and Cognitive Correlates of Children's Lying Behavior" (2008) 79(4) *Child Development* 866.

V Talwar, K Lee, N Bala and RCL Lindsay "Children's Conceptual Knowledge of Lying and its Relation to Their Actual Behaviors: Implications for Court Competence Examinations" (2002) 26(4) *Law and Human Behavior* 395.

LM Templeton and SA Wilcox "A Tale of Two Representations: The Misinformation Effect and Children's Developing Theory of Mind" (2000) 71(2) *Child Development* 402.

E Tulving "Memory and Consciousness" (1985) 26(1) *Canadian Psychology* 1.

E Tulving "Episodic Memory: From Mind to Brain" (2002) 53 *Annual Review of Psychology* 1.

M Vaismoradi, H Turenen and T Bondas "Context analysis and thematic analysis: Implications for conducting a qualitative descriptive study" (2013) 15 *Nursing & Health Sciences* 398.

DC Valenti-Hein and LD Schwartz "Witness Competency in People with Mental Retardation: Implications for Prosecution of Sexual Abuse" (1993) 11(4) *Sexuality and Disability* 287.

MJ van der Molen, JEH van Luit, MJ Jongmans and MW van der Molen "Verbal working memory in children with mild intellectual disabilities" (2007) 51(2) *Journal of Intellectual Disabilities Research* 162.

R Vanderplank "The Significance of First Language Development in Five to Nine Year Old Children for Second and Foreign Language Learning" (2008) 29(4) *Applied Linguistics* 717.

D Viljoen, JP Gossage, L Brooke, CM Adnams, KL Jones, LK Robinson, HE Hoyme, C Snell, NCO Khaole, P Kodituwakku, KO Asante, R Findlay, B Quinton, A-S Marais, WO Kalberg and PA May "Fetal Alcohol Syndrome Epidemiology in a South African Community: A Second Study of a Very High Prevalence Area" (2005) 66 *Journal of Studies on Alcohol* 593.

VH Wacha and JE Obrzut "Effects of Fetal Alcohol Syndrome on Neuropsychological Function" (2007) 19 *Journal of Developmental and Physical Disabilities* 217.

AG Walker "Questioning Young Children in Court: A Linguistic Case Study" (1993) 17(1) *Law and Human Behavior* 59.

NE Walker "Forensic Interviews of Children: The Components of Scientific Validity and Legal Admissibility" (2002) 65 *Law and Contemporary Problems* 149.

L Wandrey, JA Quas and TD Lyon "Does valence matter? Effects of negativity on children's early understanding of truth and lies" (2012) 113 *Journal of Experimental Child Psychology* 295.

N Yirmiya, D Solomonica-Levi and C Shulman "The Ability to Manipulate Behavior and to Understand Manipulation of Beliefs: A Comparison of Individuals with Autism, Mental Retardation, and Normal Development" (1996) 32(1) *Developmental Psychology* 62.

N Yuill, J Perner, A Pearson, D Peerbhoy and J van den Ende "Children's changing understanding of wicked desires: From objective to subjective and moral" (1996) 14 *British Journal of Developmental Psychology* 457.

R Zajac, S O'Neill and H Hayne "Disorder in the Courtroom? Child witnesses under cross-examination" (2012) 32 *Developmental Review* 181.

AV Zaporozhets and UD Lukov "The Development of Reasoning in Young Children" (2002) 40(4) *Journal of Russian and East European Psychology* 30.

### **INTERNET SOURCES, THESES AND NEWSPAPER ARTICLES**

Advocacy Training Council of the Bar of England & Wales "Task Report on Vulnerable Witnesses and Defendants Handling" (2011)

<http://www.advocacytrainingcouncil.org/images/word/raisingthebar.pdf> (accessed 12 July 2014).

A Allan "The Psychologist as Witness" <http://s3-ap-southeast-2.amazonaws.com/jigsydney/general/PDF/396100~expert.pdf> (accessed 20 October 2014).

J Anderson, J Ellefson, J Lashley, AL Miller, S Olinger, A Russell, J Stauffer and J Weigman "The Cornerhouse Forensic Interview Protocol: RATAc" (2010) 12 *T.M. Cooley Journal of Practical and Clinical Law* 193.

[http://www.cornerhousemn.org/images/CornerHouse\\_RATAC\\_Protocol.pdf](http://www.cornerhousemn.org/images/CornerHouse_RATAC_Protocol.pdf)

(accessed 26 July 2013).

S Bourg Carter "Child Witness Competency: When Should the Issue be Raised?"

[http://nmvictimsrights.org/wp-content/uploads/2012/11/Child-Competency-to-](http://nmvictimsrights.org/wp-content/uploads/2012/11/Child-Competency-to-Testify.pdf)

[Testify.pdf](http://nmvictimsrights.org/wp-content/uploads/2012/11/Child-Competency-to-Testify.pdf) (accessed 22 October 2014).

DN Bryen and DH Wickman "Ending the Silence of People with Little or No Functional Speech: Testifying in Court" (2011) *Disability Studies Quarterly* [http://dsq-](http://dsq-sds.org/article/view/1711/1759)

[sds.org/article/view/1711/1759](http://dsq-sds.org/article/view/1711/1759) (accessed 14 June 2014).

C Charles "Special measures for vulnerable and intimidated witnesses: research exploring the decisions and actions taken by prosecutors in a sample of CPS case files" (2012) 34

[www.cps.gov.uk/publications/research/cps\\_research\\_on\\_special\\_measures.pdf](http://www.cps.gov.uk/publications/research/cps_research_on_special_measures.pdf)

(accessed 12 July 2014).

"Cohen's Kappa Index of Inter-rater Reliability"

[www.psych.unl.edu/psycrs/handcomp/hckappa.PDF](http://www.psych.unl.edu/psycrs/handcomp/hckappa.PDF) (accessed 17 November 2014).

"Cops have twice failed rape teen's family" *Sunday Times* 22 April 2012.

LV Cox, D Clairmont and S Cox "Knowledge and Attitudes of Criminal Justice Professionals in Relation to Fetal Alcohol Spectrum Disorder" (2008) *Canadian Journal of Clinical Pharmacology* e306

<http://fascets.org/justice%20and%20FASD%20cdn%202008.pdf> (accessed 01

November 2008).

A Cunningham and L Stevens "Helping a child to be a witness in court: 101 things to know, say and do" (2011) [http://www.lfcc.on.ca.CCFJS\\_trainingmaterial.html](http://www.lfcc.on.ca.CCFJS_trainingmaterial.html)

(accessed 01 June 2013).

Department of Justice and Constitutional Development "*Batho pele*"

<http://www.justice.gov.za/paja/about/terms.htm> (accessed 01 September 2014).

Department of Justice and Constitutional Development "Service Charter for Victims of Crime in South Africa" (2004)

<http://www.doj.gov.za/2004dojsite/policy/vc/2004vc.pdf> (accessed 12 August 2005).

"Foetal Alcohol Syndrome (FAS) / Unborn Child"

[http://www.alcohol.co.za/foetal\\_alcohol\\_syndrom.htm](http://www.alcohol.co.za/foetal_alcohol_syndrom.htm) (accessed 07 May 2006).

C Fraser and S McDonald "Identifying the Issues: Victim Services' Experiences Working with Victims with Fetal Alcohol Spectrum Disorder (2009) [www.justice.gc.ca/eng/rp-pr/cj-jp/victim/rr09\\_4/rr09\\_4.pdf](http://www.justice.gc.ca/eng/rp-pr/cj-jp/victim/rr09_4/rr09_4.pdf) (accessed 12 July 2014).

SA Goodman, M Loftin and CA Evans "Position Paper: Intelligence Testing of Individuals Who Are Blind or Visually Impaired"

<http://www.aph.org/tests/intelligencetesting.html> (accessed 15 November 2013).

"In a Nutshell: The Principle Features of Child Logic: Excerpts from the work of Jean Piaget Judgement and Reasoning in the Child"

[www.telacomunications.com/nutshell/principlefeatures.htm](http://www.telacomunications.com/nutshell/principlefeatures.htm)

(accessed 11 September 2013).

"Interrater Reliability: Encyclopedia of Research Design"

[http://www.bibb.k12.ga.us/cms/lib01/GA01000598/Centricity/Domain/105/Interrater%20Reliability%20Article\\_1.pdf](http://www.bibb.k12.ga.us/cms/lib01/GA01000598/Centricity/Domain/105/Interrater%20Reliability%20Article_1.pdf) (accessed 16 November 2014).

JZ Klemfuss and SJ Ceci "Legal and psychological perspectives on children's competence to testify in court" (2012) *Developmental Review*

<http://dx.doi.org/10.1016/j.dr.2012.06.005> (accessed 14 June 2012).

K Krippendorff "Content analysis" in E Barnouw, G Gerbner, W Schramm, TL Worth and L Gross (eds) *International Encyclopedia of Communication* 1 (1989) 406-407

[http://repository.upenn.edu/asc\\_papers/226](http://repository.upenn.edu/asc_papers/226) (accessed 25 August 2014).

TD Lyon "Child witnesses and imagination: Lying, hypothetical reasoning, and referential ambiguity" to appear in M Taylor (ed) *The Oxford Handbook of the Development of Imagination* <http://works.bepress.com/thomaslyon/77>

(accessed 03 July 2012).



TD Lyon, N Carrick and JA Quas "Right and Righteous: Children's Incipient Understanding of True and False Statements" (2012) *Selected Works of Thomas D. Lyon* <http://works.bepress.com/thomaslyon/81> (accessed 14 June 2012).

TD Lyon and M Matthews "Model Brief. Questioning of Child Witnesses" (2006) *Selected Works of Thomas D. Lyon* <http://works.bepress.com/thomaslyon/38> (accessed 28 November 2012).

TD Lyon and KJ Saywitz "Qualifying Children to take the Oath: Materials for Interviewing Professionals" (2000) <http://works.bepress.com/thomaslyon/9/> (accessed 25 March 2012).

Ministerial Advisory Task Team on the Adjudication of Sexual Offence Matters, Department of Justice and Constitutional Development "Report on the Re-establishment of Sexual Offences Courts" <http://www.justice.gov.za/reportfiles/other/2013-sxo-courts-report-aug2013.pdf> (accessed 26 April 2014).

JR Pei, CR Rinaldi, C Rasmussen, V Massey and D Massey "Memory Patterns of Acquisition and Retention of Verbal and Nonverbal Information in Children with Fetal Alcohol Spectrum Disorders" (2008) 15(1) *Canadian Journal of Clinical Pharmacology* e44 [http://www.researchgate.net/publication/5658270\\_Memory\\_patterns\\_of\\_acquisition\\_and\\_retention\\_of\\_verbal\\_and\\_nonverbal\\_information\\_in\\_children\\_with\\_fetal\\_alcohol\\_spectrum\\_disorders/file/32bfe5126418c2b6de.pdf](http://www.researchgate.net/publication/5658270_Memory_patterns_of_acquisition_and_retention_of_verbal_and_nonverbal_information_in_children_with_fetal_alcohol_spectrum_disorders/file/32bfe5126418c2b6de.pdf) (accessed 01 November 2008).

C Rainville "Best Practices for Interviewing Children with Disabilities" [www.americanbar.org/child](http://www.americanbar.org/child) (accessed 15 August 2013).

L Shanks "Evaluating Children's Competency to Testify: Developing a Rational Method to Assess a Young Child's Capacity to Offer Reliable Testimony in Cases Alleging Child Sex Abuse" (2009) *Selected Works of Laurie Shanks* [http://works.bepress.com/laurie\\_shanks/3](http://works.bepress.com/laurie_shanks/3) (accessed 14 June 2012).

Statistics South Africa "Census 2011 Provinces at a glance" Report no.: 03-01-43 (2012)

<http://www.statssa.gov.za/Census2011/Products/Provinces%20at%20a%20glance%2016%20Nov%202012%20corrected.pdf> (accessed 18 August 2014).

Statistics South Africa "Statistical release (Revised) Census 2011 P0301.4" (2012) <http://beta2.statssa.gov.za/publications/P03014/P030142011.pdf> (accessed 18 August 2014).

Statistics South Africa "Mid-year population estimates 2013" Statistical release P0302 <http://www.statssa.gov.za/publications/statsdownload.asp?PPN=p0302&SCH=5500> (accessed 17 August 2014).

Statistics South Africa "Statistical release P0318 General household survey 2013" (2014) <http://beta2.statssa.gov.za/publications/P0318/P03182013.pdf> (accessed 18 August 2014).

RMJ Todd *Sexual Abuse Victim Empowerment Programme: An archival study assessing the relationship between demographics and level of intellectual functioning* (MA Psychology, US, 2005).

United Nations "Convention on the Rights of Persons with Disabilities and Optional Protocol" (2006) <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf> (accessed 01 November 2008).

D Whitcomb, ER Shapiro and LD Stellwagen "When the Victim Is a Child: Issues for Judges and Prosecutors" (1985) 33 <http://files.eric.ed.gov/fulltext/ED271684.pdf> (accessed 31 August 2014).

World Health Organisation *International Classification of Functioning, Disability and Health (ICF)* (2001) [http://apps.who.int/iris/bitstream/10665/42407/7/9241545429\\_tha%2Beng.pdf](http://apps.who.int/iris/bitstream/10665/42407/7/9241545429_tha%2Beng.pdf) (accessed 31 July 2014).

MA Woythaler, MC McCormick and VC Smith "Late Preterm Infants Have Worse 24-Month Neurodevelopmental Outcomes Than Term Infants" (2011) 127(3) *Pediatrics* [www.pediatrics.aappublications.org/content/127/3/e622.full.html](http://www.pediatrics.aappublications.org/content/127/3/e622.full.html) (accessed 02 October 2013).

## **PERSONAL COMMUNICATIONS, PAPERS AND WORKSHOPS**

C Bosch *SAVE Access to justice for people with intellectual disability who have been sexually abused* SAPSAC 15<sup>th</sup> Annual Conference Pretoria 12 November 2014.

B Dickman clinical psychologist SAVE programme Cape Mental Health Personal communication 27 November 2013.

J Forrester *Working with Children on the Autism Spectrum: Challenges Facing Professionals* Knysna 10 October 2009.

N Karriem Principal of Dominican School for the Deaf Wittebome Personal communication 16 September 2013.

S Kruger *Competency testing for children: A proposed framework* 15<sup>th</sup> Annual SAPSAC conference Pretoria 11 November 2014.

G Malherbe *Developmental Disorders: Latest Research Workshop* Somerset West 23 May 2012.

G Malherbe *Autistic Spectrum Disorders Workshop* Somerset West 24 April 2013.

M Meiring educational psychologist Pioneer School for the Blind Worcester Personal communication 12 June 2014.

N Nel *How to empower children with disabilities to safeguard themselves and to set boundaries* SAPSAC 15<sup>th</sup> Annual Conference Pretoria 11 November 2014.

M van der Westhuizen, B Venter, R Krause, J Bornman, R White, E Johnson, and K Tönsing *A Multi-disciplinary case presentation of a speech impaired victim of child abuse* 15<sup>th</sup> Annual SAPSAC conference Pretoria 10 November 2014.

L van Niekerk speech and language therapist George Personal communication 30 July 2014.

# APPENDIX 1

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## **Take Care**<sup>1484</sup>

**(Jessie Wee)**

### **1.**

“Look out for the traffic! Be careful! Don’t fall into the drain!”

“Oh, Mum! I’m only going to the shop to buy a loaf of bread. You know there’s little traffic on our quiet road ... and anyway, the drains are not even big enough to fall into!”

Sipho’s mother sighed as she called after him, “Look out for the cars! Be careful! Take care!”

Shaking his head, Sipho cycled past their row of houses to the bakery. What could happen to him during such a short trip? His mother was making a big fuss over nothing!

### **2.**

Sipho sighed, left his bicycle on the road and walked up some steps towards the bakery. He bought a loaf of bread after arguing with the baker’s boy over the shrinking size of the loaf and the extra ten cents he had to pay for it.

When he left the shop, two men jumped out of a van and pushed him back into the bakery.

### **3.**

One man pointed a gun at his head. “Keep quiet if you don’t want a hole right through your head!” the gunman growled.

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<sup>1484</sup> [www.pitara.com/talespin/stories/online.asp?story=27](http://www.pitara.com/talespin/stories/online.asp?story=27)

#### **4.**

The other man ran into the shop and held a knife under the chin of the baker's boy. The boy turned white. His knees shook and his teeth chattered.

"Give me the keys to the till! Hurry up or I'll cut your throat!"

The gunman pushed Siphon up against the counter, next to the baker's boy who was struggling to get the keys out of his pocket. The boy's hands shook so much that the keys fell at Siphon's feet.

Siphon held his breath as the gunman bent down to snatch up the keys. "Here, quick! Empty the till!" cried the gunman as he threw the keys to his friend. The gunman's friend shoved the baker's boy towards Siphon, unlocked the till and crammed all the money into his pocket. The baker's boy collapsed into Siphon's arms, knocking his loaf of bread out of his hand. The loaf of bread fell on the floor.

#### **5.**

"Hey! What's going on in here! Who are you two men?" shouted the baker. He had just come out from a room at the back of the shop.

BANG! went the gun as the startled gunman pressed the trigger. The bullet slammed into the floor near Siphon's feet. His loaf of bread jumped up into the air as the bullet went through it.

Siphon and the baker's boy jumped with fright.

The baker fled back into the room and slammed the door shut.

#### **6.**

The gunman and his friend ran out of the shop, jumped into the van, knocked down Siphon's bicycle, ran over his front wheel and then moved off.

Siphon picked up his loaf of bread, and ran out of the shop to his bicycle. Then Siphon gave an angry yell when he saw his flattened wheel. The van had run over it. What was he going to tell his mother? She would be horrified if she were to see him carrying his bicycle home.

His mother was very upset. "Oh, Siphon, you were knocked down by a car! You fell off your bicycle! You fell into the drain! You ...!"

"Mum ... please, Mum! Let me explain! No ... no ... don't say anything! I was very careful! I took great care of myself ... but then I got a gun against my head in the bakery!"

"Oh Siphon, my dear boy! My poor boy!" his mother cried.

## **7.**

Glumly, Siphon held out the loaf of bread. His mother took it. And then she gasped. One of her fingers had slipped into a hole in the middle of the loaf.

"What's this?" she cried in amazement.

Siphon stared at the loaf of bread. A bullet. A bullet hole! The gunman's bullet must have hit the loaf of bread when his gun shot accidentally!

"That's a bullet hole! The gunman ..."

## **8.**

But before Siphon could finish his sentence, his mother had fainted.

"Mum... Mum ... you haven't heard the whole story yet! You ..." Siphon broke off abruptly to stare at his unconscious mother.

"Oh me, oh my! What am I going to do now?" he thought frantically.

Siphon pulled the loaf of bread off his mother's finger and slipped it under her head. That would cushion her head while he ran over to Grandma's house. She would know what to do!

## **9.**

Their next-door neighbours came running.

"What happened, Siphon?"

"What's wrong with your mother," cried the two neighbours, horrified at the sight of Siphó's mother stretched out on the porch.

"Oh Auntie Gwen ... Aunt Sarie! Please stay with my mother for a while. I'm going to call my grandma!"

"All right, boy! All right ... but what happened? What happened?"

"There's a bullet hole in the bread. The gun went off! The gunman escaped. My bicycle was run over. Please stay with my mother. I must call my grandma," cried Siphó as he ran off.

The two neighbours stared at one another in shock. Soon they were joined by more neighbours who came rushing in through the open gate.

Auntie Gwen blurted out in shock, "Siphó's mother has a bullet hole in her head!"

"A gunman shot her," wailed Aunt Sarie.

"He ran over Siphó's bicycle," wept Auntie Gwen.

## **10.**

Meanwhile Siphó's mother came back to her senses. "What ... what ... what's wrong. Where ... where ... where am I?" she cried.

"Don't move, Lerato. Don't move, there's a bullet hole in your head!"

"No ... keep still, please, Lerato."

"Aunt Lynn has gone to ring up the police."

"The ambulance is on its way."

"Be careful of the bullet hole in your head! Don't move. Keep still." cried the excited neighbours.

"I don't need the police! I don't need the ambulance! The bullet is not in my head! It is in the bread!" cried Lerato. She pushed away the hands holding her down and stood up. The women were surprised. They picked up the bread and examined it.

Yes, there was a bullet hole right through the loaf of bread. Their fingers probed the hole. Yes, it was a hole all right. A real bullet hole.

“But who shot the bread?”

“Why did he shoot the bread?” asked several voices.

“Excuse me! Excuse me! Oh, Mum! You’re all right! Grandma is not in – the house is all locked up.”

“What happened, Siphó? What happened?” cried his mother.

“You sit down, Mum. You sit down and I’ll tell you,” sighed Siphó.

Everyone listened as Siphó told his story. His mother and the other ladies were so surprised. Finally, the police arrived.

Siphó told his story all over again. The people gathered to discuss the bread that was shot in the head.

## **11.**

Then everyone followed the police to the bakery. The baker’s boy told his story, the baker told his story, and Siphó told his story all over again. The police took the bread with the bullet hole in it with them, when they left.

## **12.**

Siphó sighed, bought another loaf of bread and walked home with his mother. It was getting dark.

“Are you all right, Mum?” asked Siphó.

His mother nodded. She put her arms round him, thankful that he was safe.



## **Wees versigtig!**

**(Jessie Wee)**

### **1.**

“Kyk tog vir die verkeer! Wees versigtig! Moenie in die drein val nie!”

“Ag Ma! Ek gaan net winkel toe om `n brood te koop. Ma weet tog daar’s baie min verkeer op ons stil pad ... en in elk geval, die drein is nie groot genoeg om in te val nie!”

Sipho se ma sug terwyl sy agterna roep, “Kyk vir die karre! Pas op! Wees versigtig!”

Terwyl hy sy kop skud, ry Sipho verby die huise na die bakkery. Wat kan met hom gebeur in so `n kort tydjie? Sy ma maak `n bohaai oor niks nie!

### **2.**

Sipho sug, los sy fiets teen die pad en stap op met die trappe na die bakkery. Hy koop `n brood nadat hy by die bakker se seun gekla het oor die brood wat al kleiner word en dat hy tien sent ekstra daarvoor moet betaal.

Toe hy uit die winkel gaan, spring twee mans uit `n bakkie en stoot hom terug in die bakkery in.

### **3.**

Een man druk `n geweer teen sy kop. “Bly stil as jy nie `n gat in jou kop wil hê nie!” grom die man met die geweer.

### **4.**

Die ander man hardloop die winkel in en hou `n mes onder die ken van die bakker se seun. Die seun word wit. Sy knieë bewe en sy tande klap.

“Gee my die sleutel van die till! Maak gou of ek sny jou keel!”

Die man met die geweer druk Sipho teen die toonbank vas, langs die seun wat sukkel om die sleutel uit sy sak te kry. Die seun se hande bewe so erg dat die sleutel by Sipho se voete val.

Sipho hou sy asem op toe die man buk om die sleutel te gryp. "Hier, gou! Maak die till leeg!" roep die man terwyl hy die sleutel vir sy vriend gooi. Sy vriend druk die seun teenaan Sipho, sluit die till oop en druk al die geld in sy sak.

Die seun sak in Sipho se arms in, en die brood val uit Sipho se hand. Die brood val op die vloer.

## 5.

"Haai, wat gaan hier aan! Wie's julle twee manne?" skree die bakker. Hy het nou net uit 'n kamer gekom aan die agterkant van die winkel.

KLAP! maak die geweer toe die verskrikte man die sneller trek. Die koeël skiet in die vloer langs Sipho se voete. Die brood spring in die lug op soos die koeël deur dit gaan.

Sipho en die bakker se seun hop van die skrik.

Die bakker vlug terug in die kamer agter en klap die deur toe.

## 6.

Die man met die geweer en sy vriend hardloop uit die winkel uit, spring in hulle bakkie, laat val Sipho se fiets om en ry bo-oor sy voorwiel. Dan jaag julle weg.

Sipho tel die brood op en hardloop uit die winkel uit na sy fiets. Sipho gee 'n kwaai skree toe hy sy pap wiel sien. Die bakkie het oor dit gery! Wat gaan hy nou vir sy ma sê? Sy sal so ontsteld wees as sy sien hy kom aangeloop huis toe terwyl hy sy fiets dra.

Sy ma is baie ontsteld. "Ag Sipho, jy's deur 'n kar omgery! Jy't van jou fiets afgeval! Jy't in die drein geval! Jy ..."

"Ma ... asseblief, Ma! Laat ek verduidelik. Nee ... nee ... moenie iets sê nie! Ek was baie versigtig! Ek het myself baie goed opgepas ... maar toe hou iemand 'n geweer teen my kop in die bakkery!"

"Ag Sipho, my liewe kind! My arme kind!" roep sy ma uit.

## 7.

Moedeloos hou Siphó die brood uit. Sy ma neem dit. Dan val haar mond oop. Een van haar vingers glip in 'n gat in die middel van die brood.

“Wat’s dit?” roep sy verbaas.

Siphó staar na die brood. 'n Koeël. 'n Koeëlgat! Die man moes die brood getref het toe sy geweer per ongeluk geskiet het!

“Daardie is 'n koeëlgat. Die man met die geweer ...”

## 8.

Maar voordat Siphó sy sin klaarmaak, het sy ma flou geword.

“Ma ... Ma ... Ma het nog nie die hele storie gehoor nie. Ma ...” Siphó bly skielik stil en staar na sy bewustelose ma.

“O my tyd, wat gaan ek nou doen?” dink hy angstig.

Siphó trek die brood van sy ma se vinger af en sit dit onder haar kop. Dit kan 'n kussing vir haar kop wees terwyl hy gou na Ouma se huis toe hardloop. Sy ouma sal weet wat om te doen!

## 9.

Hulle bure kom aangehardloop.

“Wat het gebeur, Siphó?”

“Wat’s verkeerd met jou ma,” roep die twee buurvrouens uit, baie ontsteld toe hulle Siphó se ma op die stoepie sien lê.

“O antie Gwen ... tannie Sarie! Bly asseblief by my ma vir 'n rukkie. Ek gaan roep my ouma!”

“Reg so, Seun! Reg so ... maar wat het gebeur? Wat het gebeur?”

“Daar’s `n koeëlgat in die brood. Die geweer het afgegaan! Die man het weggekom. My fiets is omgery. Bly asseblief by my ma. Ek moet my ouma gaan roep,” roep Siphso soos hy hardloop.

Die twee buurvrouens staar geskok na mekaar. Nie lank nie of nog van die bure kom haastig deur die oop hek in.

Antie Gwen roep van skrik uit, “Siphso se ma het `n koeël in haar kop!”

“`n Man met `n geweer het haar geskiet,” huil tannie Sarie.

“Hy’t oor Siphso se fiets gery,” huil antie Gwen.

## **10.**

Intussen het Siphso se ma bygekom. “Wat ... wat ... wat is verkeerd. Waar ... waar ... waar is ek?” roep sy.

“Moenie beweeg nie, Lerato. Moenie beweeg nie, daar’s `n koeël in jou kop!”

“Nee ... asseblief lê stil, Lerato.”

“Ant Lynn het die polisie gaan bel.”

“Die ambulans is op pad.”

“Wees versigtig met die koeël in jou kop! Moenie beweeg nie. Lê stil.” roep die angstige bure uit.

“Ek het nie die polisie nodig nie! Ek het ook nie die ambulans nodig nie! Die koeël is nie in my kop nie! Dis in die brood!” sê Lerato. Sy druk die hande weg wat haar vashou en staan op. Die vrouens is verbaas. Hulle tel die brood op en ondersoek dit. Ja, daar was `n koeëlgat reg deur die brood. Hulle vingers voel die gat. Ja, dis definitief `n gat. `n Regte koeëlgat.

“Maar wie’t die brood geskiet?”

“Hoekom skiet hy die brood?” vra verskillende stemme.

“Verskoon my, verskoon my! O Ma, Ma is okei! Ouma is nie daar nie, haar huis is gesluit.”

“Wat het gebeur, Siphó? Wat het gebeur?” roep sy ma uit.

“Ma sit eers. Sit Ma eers en dan vertel ek,” sug Siphó.

Almal luister soos Siphó sy storie vertel. Sy ma en die ander vrouens is so verbaas oor wat hulle hoor. Uiteindelik kom die polisie.

Siphó vertel sy storie van voor af. Die mense drom saam om te praat oor die brood wat in die kop geskiet is.

### **11.**

Toe gaan almal agter die polisie aan bakkerij toe. Die bakker se seun vertel sy storie. Die bakker vertel sy storie en Siphó vertel ook sy storie weer van voor af. Die polisie neem die brood met die koeëlgat saam met hulle, toe hulle gaan.

### **12.**

Siphó sug, koop nog `n brood en stap saam met sy ma huis toe. Dit is aan die donker word.

“Is Ma okei?” vra Siphó.

Sy ma knik. Sy sit haar arm om hom, dankbaar dat hy veilig is.

## APPENDIX 2

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### **EXPLANATION OF RATIONALE OF THE STUDY**

The following explanation was given while the PowerPoint slides were projected:

“Sipho told his story to different adults. Some of them understood him and others had not listened well to what had happened. He even had to tell the police about what the baddies had done in the bakery! Only when the police knew what exactly happened, they went to look for the baddies.

There are also other children like Sipho with whom bad things happened. And because the police or other adults were not there while these bad things happened, the child has to tell the police everything that happened. When adults understand well what happened to the child, it helps a lot.

You children have been chosen to help that adults understand well when something bad happened to a child and he has to tell about it. We shall be coming to the school again and each of you is going to have a turn. Then you are going to speak again about the story of Sipho and you are going to answer some other questions. Your answers will help that adults listen better to children like you.”

# APPENDIX 3

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## CHILD INTERVIEW

### NARRATIVE

The participant was requested to tell "everything that happened to Siphso, from the beginning to the end". Five focused questions followed on presentation of his or her picture:

- "Look, here is the picture that you coloured in after you listened to the story of Siphso. What (else) do you remember about what happened when you look at your picture?"
- "Okay, so tell me (again) what happened when Siphso was at the bakery?"
- "Yes, and tell me (again) everything about the bread Siphso bought?"
- "And what happened to Siphso's mother (again)? Please tell me everything you remember about Siphso's mother?"
- "You can tell me now if you remember anything more about what happened to Siphso."

The narrative given by a participant by means of free recall was analysed in terms of:

- Chronology: The sequence of events was correct.
- Details (number): The participant recounted 8 or more of the 12 story scenes.
- Details (accuracy): Only correct information was related.
- Syncretic thinking: The links made between details were consistent with the events of the story.
- Confabulation: No fabricated details were added.
- Gist: The participant mentioned the point of the story.

The participant's responses to focused questions were analysed according to:

- Information (new): he or she provided new details that were not mentioned before (i.e. during free recall).
- Confabulation: no fabricated details were given.
- Details (accuracy): only correct information was related.

### **TRICK**

A description of the meaning of "secret" was given by way of an illustration of a boy who bought his mother a present and kept it a secret until it was her birthday (or Mother's Day).



And then a suggestion followed that the test-taker could demonstrate what playing a trick means, by hiding the tester's apple (in the gift box).





## QUESTIONS ON MORAL CONCEPTS<sup>1485</sup>

The questions that were asked to all participants were:

- "What is the truth?" ... "When does a child speak the truth?"<sup>1486</sup>
- "What is a lie?" ... "When does a child tell a lie?"
- "What happens when a child told a lie?"
- "Have you ever told a lie?"<sup>1487</sup>
- "What is a promise?" ... "When does a child promise something?"
- "What is an oath?" ... "When does a child swear an oath?"

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<sup>1485</sup> The following definitions served as guidelines:

- The truth is a statement that confirms fact or reality.
- A lie is a statement that deliberately conveys a false impression.
- A promise is a statement that gives the assurance that something will (or will not) be done.
- An oath is a statement that expresses a solemn commitment to speak the truth.

<sup>1486</sup> If the participant had not responded within five seconds, the tester followed it up with the second alternative question.

<sup>1487</sup> If yes, "What made you tell a lie?" and "What happened when someone found out you lied?"

Also see Talwar *et al* 2002 *Law and Human Behavior* 413.

Additional question for seven- to nine-year-olds:

“What is a mistake?” ... “When does a child make a mistake?”

The four hypothetical questions for the 9- and 10-year-olds were:

- “What if Teacher told you she was very happy with your work. And what if you then told your mom ‘Today Teacher said I did my work very nicely’. Are you telling the truth or a lie?”
- “What if your friend broke the classroom window. And then (he or she) told Teacher that you broke the window? Is your friend telling the truth or a lie?”
- “What if your friend forgot (his or her) tuck shop money. And what if (he or she) then told Teacher you took (his or her) money from (his or her) bag? Is your friend telling the truth or a lie?”
- “What if someone asked you the name of your school. You said, ‘I am in [school of participant]’. Are you telling the truth or a lie?”

## **TESTING VARIABLES**

Ten variables were coded immediately after conducting each individual interview.

- Condition: NC (narrative) or NNC (non-narrative)
- Speech and language: speech and language problems, language as cognitive tool<sup>1488</sup>
- Features of free recall narrative: chronology, details, confabulation, syncretic thinking, gist
- Effect of visual stimulus on recall: yes, no<sup>1489</sup>
- Response to focused questions: information, confabulation, accuracy
- Behaviours during Lyon and Saywitz: labels, response bias, repetition<sup>1490</sup>

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<sup>1488</sup> Speech and language problems were coded, as well as when language was effectively used to give expression to concrete or logical thinking.

<sup>1489</sup> When the participant was presented with his or her picture, whether it stimulated the recall of new story information or not.

<sup>1490</sup> If the participant gave unexpected or strange labels for the visual stimuli of the Lyon and Saywitz tasks, it was recorded. It was also recorded when response bias occurred, i.e., that the participant favoured one option (Roodt *Psychological Assessment in the SA context* 50). And lastly, if a

- Behaviours during trick: comprehension, initiative, enjoyment<sup>1491</sup>
- Conceptual understanding: truth, lie, promise, oath
- Difficulty of assessment: easy, difficult, very difficult or completion impossible<sup>1492</sup>
- Observation checklist: fidgety, impulsive, uncooperative, stereotypical behaviours, slow, distractible, disinterested, unresponsive, emotional<sup>1493</sup>

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participant was negatively affected by the repetition of tasks, e.g. becoming overhasty or annoyed, it was also noted.

<sup>1491</sup> If a participant had not followed the suggestion to play the trick, he or she had not understood the instruction. When the participant hid the apple in a different way than was suggested (in the gift box), his or her initiative was coded. When it was obvious that the participant enjoyed the activity, it was also coded.

<sup>1492</sup> The tester gave a subjective impression of how difficult it was to conduct the semi-structured interview, unless it was impossible to complete it as a result of LNFS or major limitations regarding comprehension.

<sup>1493</sup> Stereotypical behaviours refer to behaviours associated with particular conditions, e.g. children with ASD may rock or flap their limbs. Emotional was ticked when a participant became upset during testing.

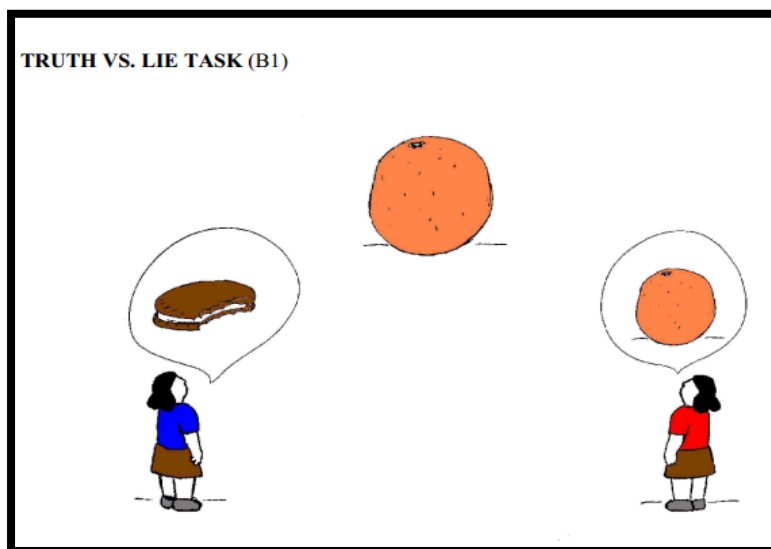
## APPENDIX 4

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### **LYON AND SAYWITZ TEST FORM B ADAPTATIONS**

Whatever the label the participant came up with after having explored the object by means of touch was accepted and used. Furthermore, instead of the tester pointing to the object on the test page in front of the test-taker, the tester put the object or figure in his or her hand to explore. Two trays, one on the left and the other to the right, were placed in front of the participant. After exploration, the object was placed either in the left or the right tray by guiding the test-taker's hand, and in that way the spatial orientation of the original visual format was maintained.

## B1



Here's another picture. Look at this food--what kind of food is this?

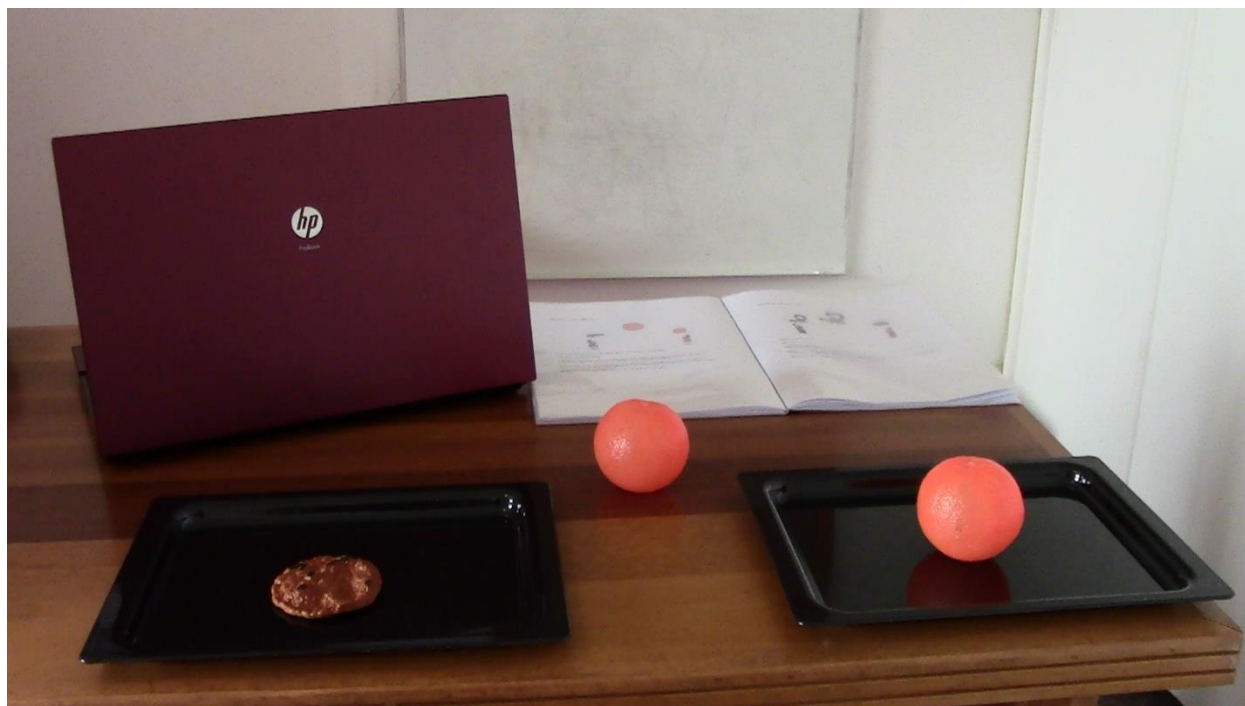
OK, that's a [child's label].

LISTEN to what these girls say about the [child's label]. One of them will tell a LIE and one will tell the TRUTH, and YOU'LL tell ME which boy tells the TRUTH.

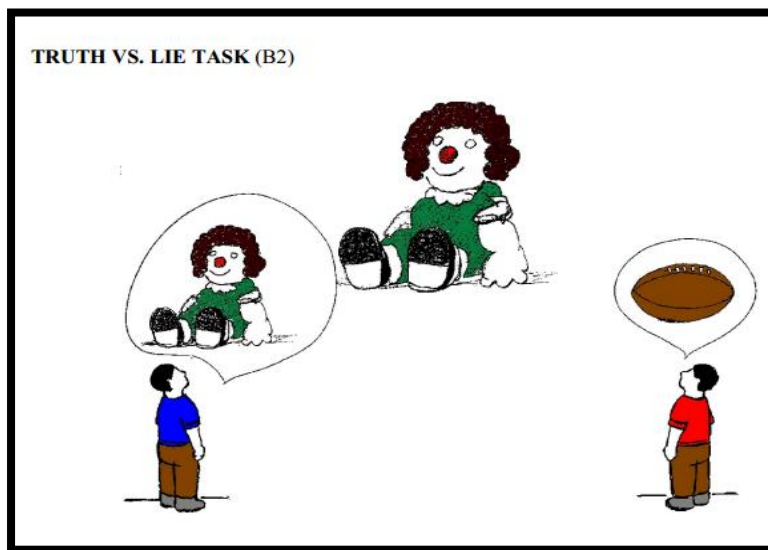
*(point to girl on the left)* THIS girl looks at the [child's label] and says "IT'S a COOKIE."

*(point to girl on the right)* THIS girl looks at the [child's label] and says "IT'S a [child's label]."

Which girl told the TRUTH? *(correct answer is girl on the right)*



## B2



Here's another picture. Look at this toy--what kind of toy is this?

OK, that's a [child's label].

LISTEN to what these boys say about the [child's label]. One of them will tell a LIE, and one will tell the TRUTH.

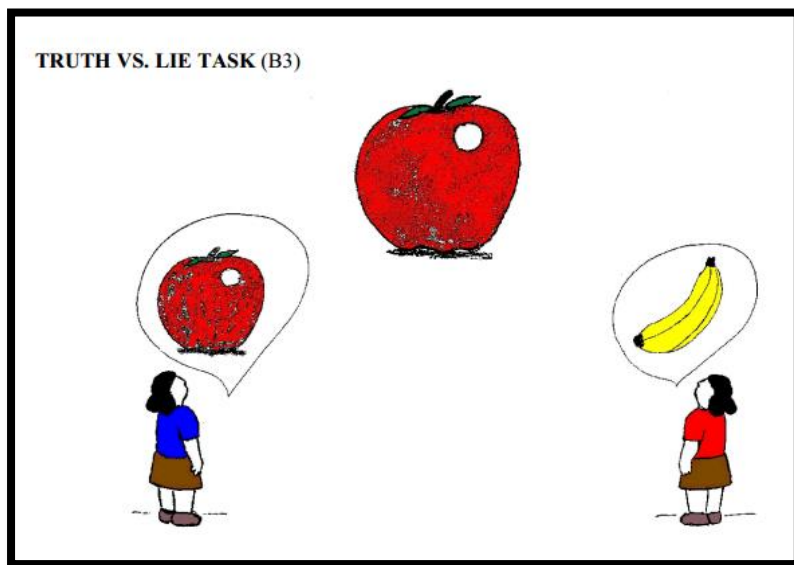
*(point to boy on the left)* THIS boy looks at the [child's label] and says "IT'S a [child's label]."

*(point to boy on the right)* THIS boy looks at the [child's label] and says "IT'S a FOOTBALL."

Which boy told a LIE? *(correct answer is boy on the left)*



## B3



Here's another picture. Look at this food--what kind of food is this?

OK, that's a [child's label].

LISTEN to what these girls say about the [child's label]. One of them will tell a LIE, and one will tell the TRUTH.

*(point to girl on the left)* THIS girl looks at the [child's label] and says "IT'S a [child's label]."

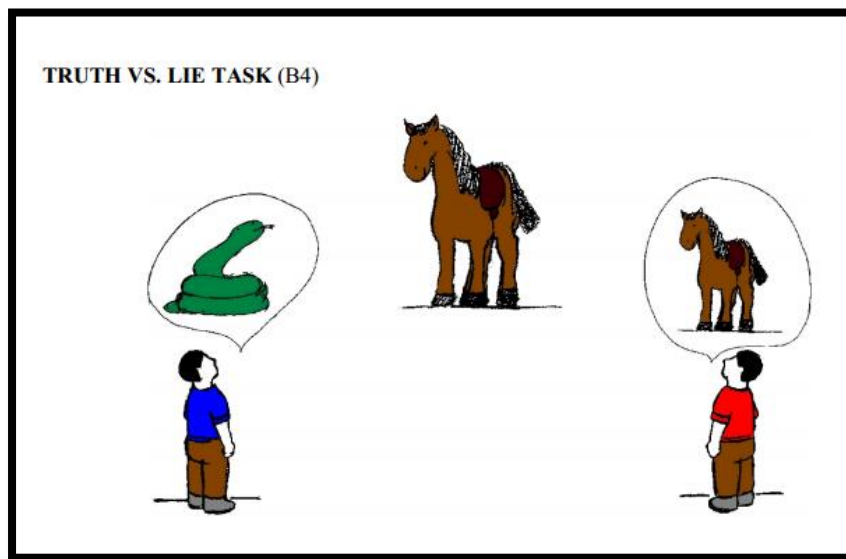
*(point to girl on the right)* THIS girl looks at the [child's label] and says "IT'S a BANANA."

Which girl told the TRUTH? *(correct answer is girl on the left)*





## B4



Here's another picture. Look at this animal--what kind of animal is this?

OK, that's a [child's label].

LISTEN to what these boys say about the [child's label]. One of them will tell a LIE and one will tell the TRUTH.

*(point to left boy)* THIS boy looks at the [child's label] and says "IT'S a SNAKE."

*(point to right boy)* THIS girl looks at the [child's label] and says "IT'S a [child's label]."

Which boy told a LIE? *(correct answer is boy on the left)*





The instructions of the morality scale was also followed exactly, but instead of pointing to the figures on the page, each figure was put in the participant's hand for tactile exploration. As soon as the figure was explored, the participant's hand was guided to place it on a round tray in relation to one another, corresponding to the visual version.

## Morality 1



Here's a Judge. She wants to know what happened to these boys.  
Well, ONE of these boys is GONNA GET IN TROUBLE for what he says, and YOU'LL tell ME which boy is GONNA GET IN TROUBLE.

LOOK [child's name],

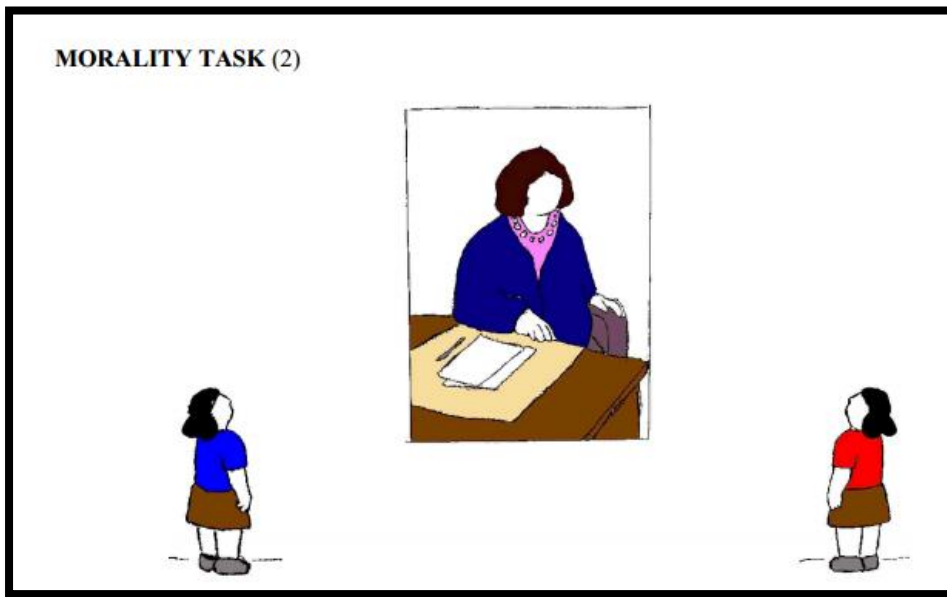
*(point to left boy)* This boy tells the TRUTH.

*(point to right boy)* This boy tells a LIE.

Which boy is GONNA GET IN TROUBLE? *(correct answer is boy on the right)*



## Morality 2



Here's a Lady who comes to visit these girls at home. She wants to know what happened to these girls.

Well, ONE of these girls is GONNA GET IN TROUBLE for what she says.

LOOK [child's name],

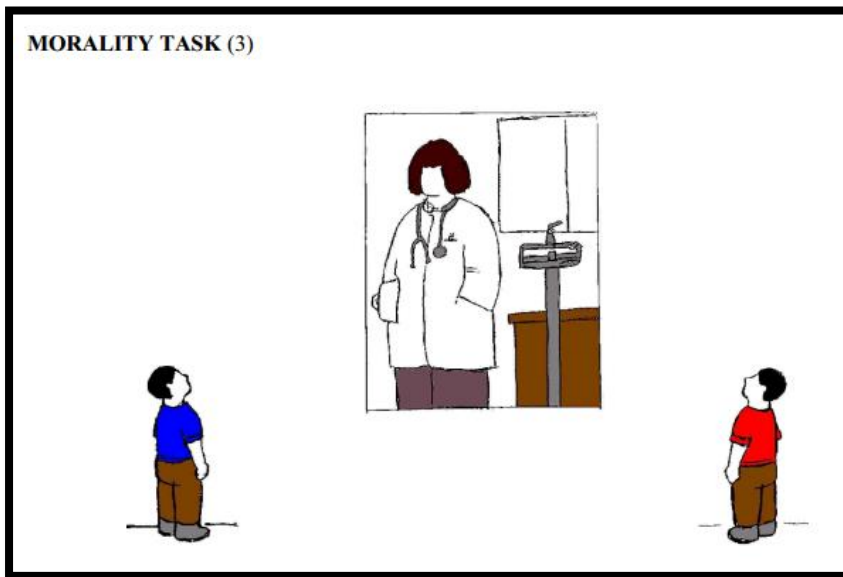
*(point to left girl)* This girl tells a LIE.

*(point to right girl)* This girl tells the TRUTH.

Which girl is GONNA GET IN TROUBLE? *(correct answer is girl on the left)*



## Morality 3



Here's a Doctor. She wants to know what happened to these boys. Well, ONE of these boys is GONNA GET IN TROUBLE for what he says.

LOOK [child's name],

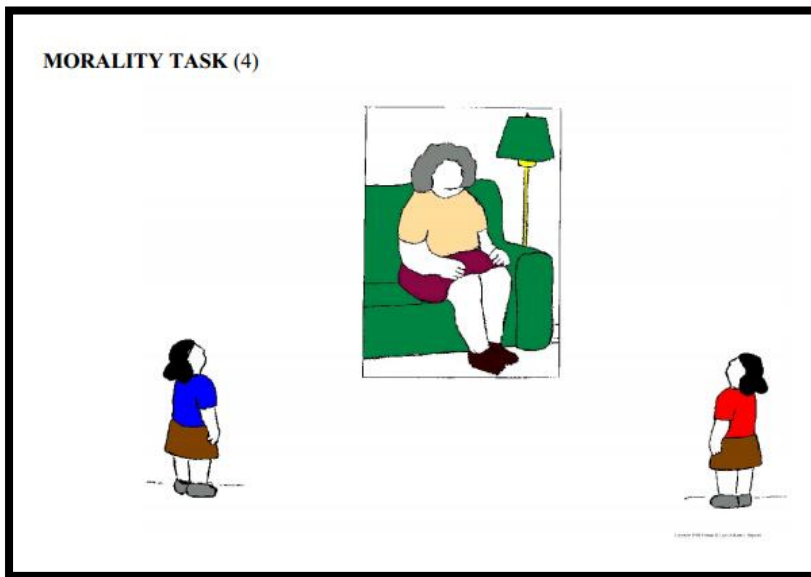
*(point to left boy)* This boy tells a LIE.

*(point to right boy)* This boy tells the TRUTH.

Which boy is GONNA GET IN TROUBLE? *(correct answer is boy on the left)*



## Morality 4



Here's a Grandma. She wants to know what happened to these girls. Well, ONE of these girls is GONNA GET IN TROUBLE for what she says.

LOOK, [child's name],

(*point to left girl*) This girl tells the TRUTH.

(*point to right girl*) This girl tells a LIE.

Which girl is GONNA GET IN TROUBLE? (*correct answer is girl on the right*)



## APPENDIX 5

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### **NARRATIVE TRAINING**

Narrative training was structured as follows:

- The researcher or assistant made a specific comment to the participant, relating his or her picture to the scene it represented.
- Each participant matched his or her picture with the identical picture in the story line of 12 pictures. The researcher or assistant accompanied the child in order to make sure that he or she placed it correctly in terms of order. The story was retold by way of briefly describing each picture in the series.
- The NC group heard a summarised version of the story for a third time when they looked at the pictures projected on a screen while the researcher or assistant recapped the gist of each scene. These descriptions were clearly numbered from 1 to 12 according to the story line.

## APPENDIX 6

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### CHI-SQUARE TEST TABLES

Table 1 Effect of age on giving a detailed account (free recall)

	Free recall: number of details			
	YES	NO	NOT APPLICABLE	TOTAL
6 years	0	4	16	20 (11%)
	0%	20%	80%	100%
7 years	0	24	16	40 (22%)
	0%	60%	40%	100%
8 years	6	35	20	61 (33%)
	10%	57%	33%	100%
9 years	4	21	21	46 (25%)
	8%	46%	46%	100%
10 years	2	8	7	17 (9%)
	11%	47%	41%	100%
<b>TOTAL</b>	12 (7%)	92 (50%)	80 (43%)	184 (100%)

$p = 0.014^{1494}$

---

<sup>1494</sup> The level of statistical significance is reported below each of the tables.

According to "Glossary" *Research in Practice* 564, level of significance is defined as "a conventionally agreed level of improbability, denoted by the symbol  $\alpha$ , and typically having the values 0.05, 0.01 or 0.001".



Table 2 Effect of age on accuracy of details (free recall)

	Free recall: detail accuracy			
	YES	NO	NOT APPLICABLE	TOTAL
6 years	1	3	16	20 (11%)
	5%	15%	80%	100%
7 years	13	11	16	40 (22%)
	32%	28%	40%	100%
8 years	17	23	21	61 (33%)
	28%	38%	34%	100%
9 years	10	15	21	46 (25%)
	22%	32%	46%	100%
10 years	2	8	7	17 (9%)
	12%	47%	41%	100%
<b>TOTAL</b>	43 (23 %)	60 (33%)	81 (44%)	184 (100%)

$p = 0.030$

Table 3 Effect of level of intellectual functioning on detail accuracy (free recall)

	Free recall: detail accuracy			
	YES	NO	NOT APPLICABLE	TOTAL
Borderline	4	3	3	10 (7%)
	40%	30%	30%	100%
Mild	14	17	15	46 (33%)
	30%	37%	33%	100%
Moderate	3	19	27	49 (36%)
	6%	39%	55%	100%
Severe	1	6	16	23 (17%)
	4%	26%	70%	100%
Untestable	1	1	6	8 (6%)
	13%	13%	75%	100%
<b>TOTAL</b>	23 (17%)	46 (34%)	67 (49%)	136 (100%)

$p = 0.004$



Table 4 Effect of age on relating in chronological order (free recall)

	Free recall: chronological order			
	YES	NO	NOT APPLICABLE	TOTAL
6 years	1	0	19	20 (11%)
	5%	0%	95%	100%
7 years	9	12	19	40 (22%)
	23%	30%	47%	100%
8 years	17	19	25	61 (33%)
	28%	31%	41%	100%
9 years	9	17	20	46 (25%)
	20%	37%	43%	100%
10 years	5	4	8	17 (9%)
	29%	24%	47%	100%
<b>TOTAL</b>	41 (22%)	52 (28%)	91 (50%)	184 (100%)

$p = 0.007$

Table 5 Effect of age on syncretic thinking (free recall)

	Free recall: syncretic thinking			
	NO	YES	NOT APPLICABLE	TOTAL
6 years	4	0	16	20 (11%)
	20%	0%	80%	100%
7 years	16	8	16	40 (22%)
	40%	20%	40%	100%
8 years	20	21	20	61 (33%)
	33%	34%	33%	100%
9 years	15	10	21	46 (25%)
	33%	22%	46%	100%
10 years	7	3	7	17 (9%)
	41%	18%	41%	100%
<b>TOTAL</b>	62 (34%)	42 (23%)	80 (44%)	184 (100%)

$p = 0.019$

Table 6 Correlation between intellectual disability and syncretism (free recall)

	Free recall: syncretic thinking			
	NO	YES	NOT APPLICABLE	TOTAL
No intellectual disability	22	9	11	42 (23%)
	52%	21%	26%	100%
Intellectual disability	40	33	68	141 (77%)
	28%	24%	48%	100%
<b>TOTAL</b>	62 (34%)	42 (23%)	79 (43%)	183 (100%)

$p = 0.010$

	Free recall: syncretic thinking			
	NO	YES	NOT APPLICABLE	TOTAL
Borderline	6	1	3	10 (7%)
	60%	10%	30%	100%
Mild	18	13	15	46 (33%)
	39%	28%	33%	100%
Moderate	8	14	27	49 (36%)
	16%	29%	55%	100%
Severe	5	3	15	23 (17%)
	22%	13%	65%	100%
Untestable	1	1	6	8 (6%)
	25%	25%	75%	100%
<b>TOTAL</b>	38 (28%)	32 (24%)	66 (49%)	136 (100%)

$p = 0.019$

Table 7 Correlation between syncretism (free recall) and certain developmental disability conditions

	Free recall: syncretic thinking			
	NO	YES	NOT APPLICABLE	TOTAL
No communication delays	59 35%	41 25%	67 40%	167 (91%) 100%
Communication delays	3 18%	1 6%	13 77%	17 (9%) 100%
<b>TOTAL</b>	62 (34%)	42 (23%)	80 (43%)	184 (100%)

$p = 0.014$

	Free recall: syncretic thinking			
	NO	YES	NOT APPLICABLE	TOTAL
No Down syndrome	62 37%	41 25%	63 38%	166 (90%) 100%
Down syndrome	0 0%	1 6%	17 94%	18 (10%) 100%
<b>TOTAL</b>	62 (34%)	42 (23%)	80 (43%)	184 (100%)

$p < 0.001$

	Free recall: syncretic thinking			
	NO	YES	NOT APPLICABLE	TOTAL
No Autism Spectrum Disorder	62 38%	38 23%	64 39%	164 (89%) 100%
Autism Spectrum Disorder	0 0%	4 20%	16 80%	20 (11%) 100%
<b>TOTAL</b>	62 (34%)	42 (23%)	80 (43%)	184 (100%)

$p = 0.001$

	Free recall: syncretic thinking			TOTAL
	NO	YES	NOT APPLICABLE	
Vision	52	38	79	169 (92%)
	31%	22%	47%	100%
No vision	10	4	1	15 (8%)
	67%	27%	6%	100%
<b>TOTAL</b>	62 (34%)	42 (23%)	80 (43%)	184 (100%)

$p = 0.005$

Table 8 Effect of age on confabulation (free recall)

	Free recall: confabulation			TOTAL
	NO	YES	NOT APPLICABLE	
6 years	1	3	16	20 (11%)
	5%	15%	80%	100%
7 years	16	9	15	40 (22%)
	40%	23%	37%	100%
8 years	25	16	20	61 (33%)
	41%	26%	33%	100%
9 years	12	13	21	46 (25%)
	26%	28%	46%	100%
10 years	3	7	7	17 (9%)
	18%	41%	41%	100%
<b>TOTAL</b>	57 (31%)	48 (26%)	79 (43%)	184 (100%)

$p = 0.012$

Table 9 Correlation between confabulation (free recall) and certain developmental disabilities

	Free recall: confabulation			
	NO	YES	NOT APPLICABLE	TOTAL
No communication delays	53	48	66	167 (91%)
	32%	29%	39%	100%
Communication delays	4	0	13	17 (9%)
	23%	0%	77%	100%
<b>TOTAL</b>	57 (31%)	48 (26%)	79 (43%)	184 (100%)

$p = 0.006$

	Free recall: confabulation			
	NO	YES	NOT APPLICABLE	TOTAL
No Down syndrome	57	46	63	166 (90%)
	34%	28%	38%	100%
Down syndrome	0	2	16	18 (10%)
	0%	11%	89%	100%
<b>TOTAL</b>	57 (31%)	48 (26%)	79 (43%)	184 (100%)

$p < 0.001$

	Free recall: confabulation			
	NO	YES	NOT APPLICABLE	TOTAL
No Autism Spectrum Disorder	56	45	63	164 (89%)
	34%	28%	38%	100%
Autism Spectrum Disorder	1	3	16	20 (11%)
	5%	15%	80%	100%
<b>TOTAL</b>	57 (31%)	48 (26%)	79 (43%)	184 (100%)

$p = 0.001$

	<b>Free recall: confabulation</b>			
	<b>NO</b>	<b>YES</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Vision	47	44	78	169 (92%)
	28%	26%	46%	100%
No vision	10	4	1	15 (8%)
	67%	27%	6%	100%
<b>TOTAL</b>	57 (31%)	48 (26%)	79 (43%)	184 (100%)

$p = 0.003$

Table 10 Effect of age on providing gist of story (free recall)

	<b>Free recall: gist of story</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
6 years	0	4	16	20 (11%)
	0%	20%	80%	100%
7 years	9	15	16	40 (22%)
	23%	38%	40%	100%
8 years	14	27	20	61 (33%)
	23%	44%	33%	100%
9 years	8	17	21	46 (25%)
	17%	37%	46%	100%
10 years	2	8	7	17 (9%)
	12%	47%	41%	100%
<b>TOTAL</b>	33 (18%)	71 (39%)	80 (43%)	184 (100%)

$p = 0.044$

Table 11 Effect of level of intellectual functioning on providing gist of story (free recall)

	<b>Free recall: gist of story</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Borderline	5	2	3	10 (7%)
	50%	20%	30%	100%
Mild	9	22	15	46 (34%)
	20%	48%	33%	100%
Moderate	5	17	27	49 (36%)
	10%	35%	55%	100%
Severe	1	7	15	23 (17%)
	4%	30%	65%	100%
Untestable	0	2	6	8 (6%)
	0%	25%	75%	100%
<b>TOTAL</b>	20 (15%)	50 (37%)	66 (49%)	136 (100%)

$p = 0.006$

Table 12 Effect of age on recall when presented with a visual stimulus

	<b>Picture of episode: stimulate recall</b>		
	<b>YES</b>	<b>NO</b>	<b>TOTAL</b>
6 years	6	13	19 (12%)
	32%	68%	100%
7 years	18	14	32 (20%)
	56%	44%	100%
8 years	34	16	50 (31%)
	68%	32%	100%
9 years	21	21	42 (26%)
	50%	50%	100%
10 years	14	3	17 (11%)
	82%	18%	100%
<b>TOTAL</b>	93 (58%)	67 (42%)	160 (100%)

$p = 0.012$

Table 13 Effect of level of cognitive functioning on stimulating recall by visual cue

	Picture of episode: stimulate recall		
	YES	NO	TOTAL
Borderline	8	2	10 ( 7%)
	80%	20%	100%
Mild	33	13	46 (34%)
	72%	28%	100%
Moderate	29	20	49 (36%)
	59%	41%	100%
Severe	8	15	23 (17%)
	35%	55%	100%
Untestable	1	7	8 ( 6%)
	12%	88%	100%
<b>TOTAL</b>	79 (58%)	57 (42%)	136 (100%)

$p = 0.002$

Table 14 Effect of age on providing new information (focused questions)

	Focused questions: new information			TOTAL
	YES	NO	NOT APPLICABLE	
6 years	7	0	13	20 (11%)
	35%	0%	65%	100%
7 years	26	1	13	40 (22%)
	65%	3%	33%	100%
8 years	47	2	12	61 (33%)
	77%	3%	20%	100%
9 years	24	7	15	46 (25%)
	52%	15%	33%	100%
10 years	15	0	2	17 ( 9%)
	88%	0%	12%	100%
<b>TOTAL</b>	119 (65%)	10 ( 5%)	55 (30%)	184 (100%)

$p < 0.001$



Table 15 Effect of cognitive functioning on provision of new information (focused questions)

	<b>Focused questions: new information</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Borderline	9	1	0	10 (7%)
	90%	10%	0%	100%
Mild	34	2	10	46 (34%)
	74%	4%	22%	100%
Moderate	28	4	17	49 (36%)
	57%	8%	35%	100%
Severe	10	1	12	23 (17%)
	44%	4%	52%	100%
Untestable	2	1	5	8 (6%)
	25%	13%	62%	100%
<b>TOTAL</b>	83 (61%)	9 (7%)	44 (32%)	136 (100%)

$p = 0.031$

Table 16 Effect of age on provision of only correct information (focused questions)

	<b>Focused questions: correct details</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
6 years	0	6	14	20 (11%)
	0%	30%	70%	100%
7 years	10	16	14	40 (22%)
	25%	40%	35%	100%
8 years	20	29	12	61 (33%)
	33%	47%	20%	100%
9 years	11	16	19	46 (25%)
	24%	35%	41%	100%
10 years	7	8	2	17 (9%)
	41%	47%	12%	100%
<b>TOTAL</b>	48 (26%)	75 (41%)	61 (33%)	184 (100%)

$p = 0.002$

Table 17 Effect of intellectual functioning on provision of only correct information (focused questions)

	<b>Focused questions: correct details</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Borderline	5	4	1	10 (7%)
	50%	40%	10%	100%
Mild	14	21	11	46 (34%)
	30%	46%	24%	100%
Moderate	11	19	19	49 (36%)
	21%	39%	39%	100%
Severe	5	6	12	23 (17%)
	22%	26%	52%	100%
Untestable	0	2	6	8 (6%)
	0%	25%	75%	100%
<b>TOTAL</b>	35 (26%)	52 (38%)	49 (36%)	136 (100%)

$p = 0.044$

Table 18 Effect of age on provision of only incorrect information (focused questions)

	<b>Focused questions: incorrect details</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
6 years	1	5	14	20 (11%)
	5%	25%	70%	100%
7 years	3	23	14	40 (22%)
	8%	57%	35%	100%
8 years	6	43	12	61 (33%)
	10%	70%	20%	100%
9 years	3	24	19	46 (25%)
	7%	52%	41%	100%
10 years	0	15	2	17 (9%)
	0%	88%	12%	100%
<b>TOTAL</b>	13 (7%)	110 (60%)	61 (33%)	184 (100%)

$p = 0.002$

Table 19 Effect of level of cognitive functioning on provision of only incorrect details (focused questions)

	<b>Focused questions: incorrect details</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Borderline	1	8	1	10 ( 7%)
	10%	80%	10%	100%
Mild	6	29	11	46 (34%)
	13%	63%	24%	100%
Moderate	1	29	19	49 (36%)
	2%	59%	39%	100%
Severe	3	8	12	23 (17%)
	13%	35%	52%	100%
Untestable	1	1	6	8 ( 6%)
	13%	13%	74%	100%
<b>TOTAL</b>	12 ( 9%)	75 (55%)	49 (36%)	136 (100%)

$p = 0.014$

Table 20 Effect of age on confabulation (focused questions)

	<b>Focused questions: confabulation</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
6 years	6	0	14	20 (11%)
	30%	0%	70%	100%
7 years	14	12	14	40 (22%)
	35%	30%	35%	100%
8 years	26	22	13	61 (33%)
	43%	36%	21%	100%
9 years	15	14	17	46 (25%)
	33%	30%	37%	100%
10 years	8	7	2	17 ( 9%)
	47%	41%	12%	100%
<b>TOTAL</b>	69 (37%)	55 (30%)	60 (33%)	184 (100%)

$p = 0.004$

Table 21 Effect of level of cognitive functioning on confabulation (focused questions)

	<b>Focused questions: confabulation</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Borderline	5	4	1	10 ( 7%)
	50%	40%	10%	100%
Mild	21	15	10	46 (34%)
	46%	32%	22%	100%
Moderate	17	14	18	49 (36%)
	35%	28%	37%	100%
Severe	5	5	13	23 (17%)
	22%	22%	56%	100%
Untestable	1	1	6	8 ( 6%)
	13%	13%	74%	100%
<b>TOTAL</b>	49 (36%)	39 (29%)	48 (35%)	136 (100%)

$p = 0.032$

Table 22 Effect of age on participants' conceptual understanding of truth

	<b>Conceptual understanding: truth</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
6 years	0	7	13	20 (11%)
	0%	35%	65%	100%
7 years	6	25	9	40 (22%)
	15%	62%	23%	100%
8 years	15	33	13	61 (33%)
	25%	54%	21%	100%
9 years	14	23	9	46 (25%)
	30%	50%	20%	100%
10 years	7	8	2	17 ( 9%)
	41%	47%	12%	100%
<b>TOTAL</b>	42 (23%)	96 (52%)	46 (25%)	184 (100%)

$p = 0.001$

Table 23 Effect of age on participants' understanding of lies

	<b>Conceptual understanding: falsehood</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
6 years	0	7	13	20 (11%)
	0%	35%	65%	100%
7 years	13	18	9	40 (22%)
	33%	45%	22%	100%
8 years	30	20	11	61 (33%)
	49%	33%	18%	100%
9 years	20	17	9	46 (25%)
	43%	37%	20%	100%
10 years	8	8	1	17 (9%)
	47%	47%	6%	100%
<b>TOTAL</b>	71 (39%)	70 (38%)	43 (23%)	184 (100%)

$p < 0.001$

Table 24 Effect of level of cognitive functioning on understanding of truth

	Conceptual understanding: truth			TOTAL
	YES	NO	NOT APPLICABLE	
No intellectual disability	15	15	12	42 (23%)
	36%	36%	28%	100%
Intellectual disability	27	81	33	141 (77%)
	19%	57%	23%	100%
<b>TOTAL</b>	42 (23%)	96 (52%)	45 (25%)	183 (100%)

$p = 0.028$

	Conceptual understanding: truth			TOTAL
	YES	NO	NOT APPLICABLE	
Borderline	6	4	0	10 ( 7%)
	60%	40%	0%	100%
Mild	9	32	5	46 (34%)
	19%	70%	11%	100%
Moderate	8	24	17	49 (36%)
	16%	49%	35%	100%
Severe	3	12	8	23 (17%)
	13%	52%	35%	100%
Untestable	0	2	6	8 ( 6%)
	0%	25%	75%	100%
<b>TOTAL</b>	26 (19%)	74 (54%)	36 (27%)	136 (100%)

$p < 0.001$

Table 25 Effect of level of cognitive functioning on understanding of lies

	<b>Conceptual understanding: falsity</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
No intellectual disability	25	7	10	42 (23%)
	60%	17%	24%	100%
Intellectual disability	46	63	32	141 (77%)
	33%	45%	22%	100%
<b>TOTAL</b>	71 (39%)	70 (38%)	42 (23%)	183 (100%)

$p = 0.002$

	<b>Conceptual understanding: falsehood</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Borderline	8	2	0	10 (7%)
	80%	20%	0%	100%
Mild	22	20	4	46 (34%)
	48%	43%	9%	100%
Moderate	11	21	17	49 (36%)
	22%	43%	35%	100%
Severe	4	11	8	23 (17%)
	17%	48%	35%	100%
Untestable	0	2	6	8 (6%)
	0%	25%	75%	100%
<b>TOTAL</b>	45 (33%)	56 (41%)	35 (26%)	136 (100%)

$p < 0.001$

Table 26 Correlation between certain developmental disabilities and conceptual understanding of truth

	<b>Conceptual understanding: truth</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
No Communication delays	42	86	39	167 (91%)
	25%	52%	23%	100%
Communication delays	0	10	7	17 (9%)
	0%	59%	41%	100%
<b>TOTAL</b>	42 (23%)	96 (52%)	46 (25%)	184 (100%)

$p = 0.041$

	<b>Conceptual understanding: truth</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
No Down syndrome	42	87	37	166 (90%)
	26%	52%	22%	100%
Down syndrome	0	9	9	18 (10%)
	0%	50%	50%	100%
<b>TOTAL</b>	42 (23%)	96 (52%)	46 (25%)	184 (100%)

$p = 0.008$

	<b>Conceptual understanding: truth</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
No Autism Spectrum Disorder	42	90	32	164 (89%)
	26%	55%	19%	100%
Autism Spectrum Disorder	0	6	14	20 (11%)
	0%	30%	70%	100%
<b>TOTAL</b>	42 (23%)	96 (52%)	46 (25%)	184 (100%)

$p < 0.001$



Table 27 Correlation of certain developmental disabilities and conceptual understanding of lies

	<b>Conceptual understanding: falsehood</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
No Down syndrome	71	61	34	166 (90%)
	43%	37%	20%	100%
Down syndrome	0	9	9	18 (10%)
	0%	50%	50%	100%
<b>TOTAL</b>	71 (39%)	70 (38%)	43 (23%)	184 (100%)

$p = 0.001$

	<b>Conceptual understanding: falsehood</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
No Autism Spectrum Disorder	68	66	30	164 (89%)
	42%	40%	18%	100%
Autism Spectrum Disorder	3	4	13	20 (11%)
	15%	20%	65%	100%
<b>TOTAL</b>	71 39%	70 38%	43 23%	184 100%

$p < 0.001$

Table 28 Conceptual understanding of truth and falsity by participants with legal blindness

	<b>Conceptual understanding: truth</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Vision	33	91	45	169 (92%)
	19%	54%	27%	100%
No vision	9	5	1	15 ( 8%)
	60%	33%	7%	100%
<b>TOTAL</b>	42 (23%)	96 (52%)	46 (25%)	184 (100%)

$p = 0.001$

	<b>Conceptual understanding: falsity</b>			
	<b>YES</b>	<b>NO</b>	<b>NOT APPLICABLE</b>	<b>TOTAL</b>
Vision	59	68	42	169 (92%)
	35%	40%	25%	100%
No vision	12	2	1	15 ( 8%)
	80%	13%	7%	100%
<b>TOTAL</b>	71 (39%)	70 (38%)	43 (23%)	184 (100%)

$p = 0.003$

Table 29 Effect of level of cognitive functioning on answer to "Have you ever told a lie?"

	<b>Have you ever told a lie?</b>			
	<b>YES</b>	<b>NO</b>	<b>NO RESPONSE</b>	<b>TOTAL</b>
Borderline	0	10	0	10 ( 7%)
	0%	100%	0%	100%
Mild	8	33	5	46 (34%)
	17%	72%	11%	100%
Moderate	6	27	16	49 (36%)
	12%	55%	33%	100%
Severe	10	7	6	23 (17%)
	44%	30%	26%	100%
Untestable	1	2	5	8 ( 6%)
	13%	25%	62%	100%
<b>TOTAL</b>	25 (18%)	79 (58%)	32 (24%)	136 (100%)

$p < 0.001$

Table 30 Response pattern of DS and ASD respectively on "Have you ever told a lie?"

	Have you ever told a lie?			
	YES	NO	NO RESPONSE	TOTAL
No Down syndrome	35	102	29	166 (90%)
	21%	61%	18%	100%
Down syndrome	6	2	10	18 (10%)
	33%	11%	56%	100%
<b>TOTAL</b>	41 (22%)	104 (57%)	39 (21%)	184 (100%)

$p < 0.001$

	Have you ever told a lie?			
	YES	NO	NO RESPONSE	TOTAL
No Autism Spectrum Disorder	38	99	27	164 (89%)
	23%	60%	17%	100%
Autism Spectrum Disorder	3	5	12	20 (11%)
	15%	25%	60%	100%
<b>TOTAL</b>	41 22%	104 57%	39 21%	184 100%

$p < 0.001$

Table 31 Response pattern of participants with legal blindness to "Have you ever told a lie?"

	Have you ever told a lie?			
	YES	NO	NO RESPONSE	TOTAL
Vision	33	97	39	169 (92%)
	20%	57%	23%	100%
No vision	8	7	0	15 (8%)
	53%	47%	0%	100%
<b>TOTAL</b>	41 (22%)	104 (57%)	39 (21%)	184 (100%)

$p = 0.004$

Table 32 Effect of age on response to "Have you ever told a lie?"

	Have you ever told a lie?			
	YES	NO	NO RESPONSE	TOTAL
6 years	4	5	11	20 (11%)
	20%	25%	55%	100%
7 years	6	25	9	40 (22%)
	15%	63%	23%	100%
8 years	10	40	11	61 (33%)
	16%	66%	18%	100%
9 years	17	21	8	46 (25%)
	37%	46%	17%	100%
10 years	4	13	0	17 (9%)
	24%	77%	0%	100%
<b>TOTAL</b>	41 (22%)	104 (57%)	39 (21%)	184 (100%)

$p < 0.001$

Table 33 Correlation between free recall: gist of story and response to "Have you ever told a lie?"

Free recall: gist of story	Have you ever told a lie?			
	YES	NO	NO RESPONSE	TOTAL
<b>YES</b>	7	26	0	33 (18%)
	21%	79%	0%	100%
<b>NO</b>	12	59	0	71 (39%)
	17%	83%	0%	100%
<b>NOT APPLICABLE</b>	22	19	39	80 (43%)
	28%	24%	49%	100%
<b>TOTAL</b>	41 (22%)	104 (57%)	39 (21%)	184 (100%)

$p < 0.001$

Table 34 Correlation between answer to "Have you ever told a lie?" and conceptual understanding of truth and lies respectively

Have you ever told a lie?	Conceptual understanding: truth			TOTAL
	YES	NO	NOT APPLICABLE	
YES	9	26	6	41 (22%)
	22%	63%	15%	100%
NO	33	62	9	104 (57%)
	31%	60%	9%	100%
NO RESPONSE	0	8	31	39 (21%)
	0%	21%	79%	100%
<b>TOTAL</b>	42 (23%)	96 (52%)	46 (25%)	184 (100%)

$p < 0.001$

Have you ever told a lie?	Conceptual understanding: falsity			TOTAL
	YES	NO	NOT APPLICABLE	
YES	15	20	6	41 (22%)
	37%	49%	14%	100%
NO	56	42	6	104 (57%)
	54%	40%	6%	100%
NO RESPONSE	0	8	31	39 (21%)
	0%	21%	79%	100%
<b>TOTAL</b>	71 (39%)	70 (38%)	43 (23%)	184 (100%)

$p < 0.001$

## APPENDIX 7

---

### **PARENT AND TEACHER QUESTIONNAIRES OUER EN ONDERWYSER VRAELYTE**

## PARENT QUESTIONNAIRE

### IDENTIFICATION DETAILS

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1. Child name & surname

.....

2. Child date of birth

.....

### CAREGIVER DETAILS

---

3. Caregiver name and surname

.....

4. Caregiver contact number

.....

5. RELATIONSHIP TO PARTICIPANT

*Mark only one oval.*

- parent (own / step)
- foster parent
- relative (grandparent / aunt / adult sibling)
- Other: .....

### DEVELOPMENTAL HISTORY

---

6. BIRTH

Please tick the applicable option(s).

*Tick all that apply.*

- Full-term pregnancy
- Premature birth
- Emergency / complications
- Unknown

---

<sup>1495</sup> <https://drive.google.com/file/d/0B89sOjYKFAaFZDR2aEFPaXpMZmM/view?usp=sharing>



## 7. DEVELOPMENTAL MILESTONES

Expected milestones: Crawling (approximately 6-11 months); Walking (approximately 10-16 months); Speaking (few words at 1 year; by 2 years short sentences); Toilet-training (bladder and bowel control by 30-36 months)

Mark only one oval per row.

	AS EXPECTED	DELAYED	UNKNOWN
Crawling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Walking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speaking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Toilet-training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## MORAL DEVELOPMENT

---

### Values

---

#### 8. Which value is most important to you to teach your child?

A value is a belief or an idea that has intrinsic worth, or is very important to a person

.....

.....

.....

.....

.....

#### 9. Generally speaking, do you consider your child to be honest?

Mark only one oval.

- Yes
- No

#### 10. Do you think your child tells more lies than other children of his / her age?

Mark only one oval.

- No
- Yes

#### 11. What kind of lies would your child tell?

Tick all that apply.

- In an attempt to get himself / herself out of trouble.
- In an attempt to protect someone.
- With the idea to get someone else in trouble.
- Other: .....

**12. Can you usually detect that your child is lying?**

Do you usually know that your child is lying?

Mark only one oval.

Yes

No

**13. How can you detect that your child is lying?**

How do you know your child is lying?

Tick all that apply.

The claim cannot be true because it goes against the rules of reality, i.e. what is possible.

My child looks "guilty".

It becomes clear from questioning him / her.

Other: .....

**14. How does your child usually react when he / she is caught out?**

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

**15. What do you do when your child has lied?**

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

**16. How would you describe your child while he / she plays games?**

Mark only one oval.

My child does not play games.

He / she tends to cheat in order to win.

He / she tends to play fair.

My child does not understand rules.

My child plays alone.

Other: .....

**17. How does your child usually react when he / she is in trouble?**

*Tick all that apply.*

- He / she admits the fault quite easily.
- He / she denies any wrongdoing.
- He / she blames others.
- He / she becomes fearful and quiet.
- He / she becomes angry or aggressive.
- Other: .....

**18. Please describe how you discipline your child.**

What do you do when your child did something wrong or you were unhappy with his / her behaviour?

.....

.....

.....

.....

.....

## LANGUAGE DEVELOPMENT

---

**19. LANGUAGE**

*Mark only one oval per row.*

	USUALLY	SOMETIMES	SELDOM
My child understands the meaning of words spoken to him / her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child uses language to express (tell about) his / her thoughts, feelings or memories.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**20. Does your child USE basic "feeling words" like happy, sad, cross and scared?**

The emphasis is on usage and not whether the child knows the meaning of these words.

*Mark only one oval.*

- Yes
- No

21. **How does your child usually give an account of some event, i.e. an outing or something that happened to him / her?**

How does your child tell about something that happened, i.e., when he / she returns from an outing?

*Tick all that apply.*

- He / she tells a "story" with a beginning, middle and an end.
- He / she gives an account in a haphazard (disorganised) way.
- He / she gives lots of detail.
- He / she gives little detail.
- Other: .....

## **COGNITIVE DEVELOPMENT**

---

22. **How would you describe your child's memory for events that happened to him / her?**

How well does your child remember things that happened to him / her?

*Mark only one oval.*

- He / she has a good memory about events that happened in the past.
- There are some events that my child has memories of, but there are also some significant (remarkable) incidents that my child has forgotten about.
- Because he / she easily forgets, my child does not recall much of past events.
- Other: .....

23. **How gullible is your child?**

Gullible means to be easily tricked or manipulated to the advantage of someone else.

*Mark only one oval.*

- Not at all
- Somewhat
- Very

24. **Does your child make up stories, i.e. tell something he / she imagined as if it really happened?**

*Mark only one oval.*

- Yes
- No

25. **If yes, how frequently does it happen that he / she makes up stories?**

*Mark only one oval.*

- Sometimes
- Often

## WITNESS COMPETENCY

---

26. **Do you think your child will be able to go to court and give evidence?**

*Mark only one oval.*

Yes

No

27. **Please explain your opinion regarding your child's ability to give evidence in court.**

Why do you say your child will be able to testify in court?

.....

.....

.....

.....

.....

## OUEVRAELYS

### IDENTIFIKASIEBESONDERHEDE

---

1. Kind naam en van

.....

2. Kind geboortedatum

.....

### VERSORGER BESONDERHEDE

---

3. Versorger naam en van

.....

4. Versorger kontaknommer

.....

5. VERWANTSKAP AAN DEELNEMER

*Merk slegs een ovaal.*

- ouer (eie / stief)
- pleegouer
- familielid (bv. grootouer / tante / volwasse broer of suster)
- Ander: .....

### ONTWIKKELINGSGESKIEDENIS

---

6. GEBOORTE

*Merk asseblief die toepaslike opsie(s).*

*Merk alles wat van toepassing is:*

- Volle termyn swangerskap
- Premature geboorte
- Noodgeval / komplikasies
- Onbekend

---

<sup>1496</sup> <https://drive.google.com/file/d/0B89sOjYKFAaFS3NIWkRaeXUxd0k/view?usp=sharing>

## 7. ONTWIKKELINGSMYLPALE

Verwagte mylpale: Kruip (ongeveer 6-11 maande); Loop (ongeveer 10-16 maande); Praat (paar woorde teen 1 jaar, teen 2 jaar kort sinne); Toiletonderrig (blaas en stoelgang beheer teen 30-36 maande)

*Merk slegs een ovaal per ry.*

	SOOS VERWAG	AGTERSTAND	ONBEKEND
Kruip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Praat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toiletonderrig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## MORELE ONTWIKKELING

---

### Waardes

---

#### 8. Wat is vir u die belangrikste waarde om u kind te leer?

'n Waarde is 'n geloof of 'n idee met intrinsieke waarde, of met baie betekenis vir die persoon.

.....

.....

.....

.....

.....

#### 9. Meen u dat u kind in die algemeen eerlik is?

*Merk slegs een ovaal.*

- Ja
- Nee

#### 10. Dink u dat u kind meer leuens vertel as ander kinders van sy / haar ouderdom?

*Merk slegs een ovaal.*

- Nee
- Ja

#### 11. Watter soort leuens sal u kind vertel?

*Merk alles wat van toepassing is:*

- In 'n poging om homself / haarself uit die moeilikheid te kry.
- In 'n poging om iemand anders te beskerm.
- Met die idee om iemand anders in die moeilikheid te bring.
- Ander: .....

12. **Kan u gewoonlik agterkom dat u kind besig is om te jok?**

*Merk slegs een ovaal.*

- Ja  
 Nee

13. **Hoe kan u agterkom dat u kind besig is om te jok?**

*Merk alles wat van toepassing is:*

- Die bewering kan nie waar wees nie want dit gaan teen die reëls van die werklikheid, d.w.s. van wat moontlik is.
- My kind lyk "skuldig".
- Dit word duidelik sodra hy / sy daarvoor uitgevra word.
- Ander: .....

14. **Hoe reageer u kind gewoonlik wanneer hy / sy uitgevang word?**

.....

.....

.....

.....

.....

15. **Wat doen u wanneer u kind 'n leuen vertel het?**

.....

.....

.....

.....

.....

16. **Hoe sal u die kind beskryf wanneer hy / sy speletjies speel?**

*Merk slegs een ovaal.*

- My kind speel nie speletjies nie.
- Hy / sy is geneig om te kul sodat hy / sy kan wen.
- Hy / sy speel gewoonlik regverdig.
- My kind verstaan nie reëls nie.
- My kind speel alleen.
- Ander: .....



17. **Hoe reageer u kind gewoonlik wanneer hy / sy in die moeilikheid is?**

*Merk alles wat van toepassing is:*

- Hy / sy erken maklik 'n fout.
- Hy / sy ontken dat hy / sy enigiets verkeerd gedoen het.
- Hy / sy blameer ander.
- Hy / sy word stil en bang.
- Hy / sy word kwaad of aggressief.
- Ander: .....

18. **Beskryf asseblief hoe u u kind dissiplineer.**

Wat doen u wanneer u kind iets verkeerd gedoen het of u ontevrede is met sy / haar gedrag?

.....

.....

.....

.....

.....

## TAALONTWIKKELING

---

19. **TAAL**

*Merk slegs een ovaal per ry.*

	GEWOONLIK	SOMTYDS	SELDE
My kind verstaan die betekenis van woorde wat met hom / haar gepraat word.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My kind gebruik woorde om sy / haar gedagtes, gevoelens of herinneringe uit te druk (te sê).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. **GEBRUIK u kind basiese "gevoel" woorde soos bly, hartseer, kwaad en bang?**

Die klem is op die gebruik daarvan en nie of die kind die woordbetekenisse ken nie.  
*Merk slegs een ovaal.*

- Ja
- Nee

**21. Hoe vertel die kind gewoonlik van 'n gebeurtenis, bv. 'n uitstappie of iets wat met hom / haar gebeur het?**

Hoe vertel u kind van iets wat gebeur het, bv. wanneer hy / sy terugkom van 'n uitstappie?

*Merk alles wat van toepassing is:*

- Hy / sy vertel 'n "storie" met 'n begin, middel en einde.
- Die vertelling is deurmekaar (ongeorganiseerd).
- Hy / sy gee baie besonderhede.
- Hy / sy gee min besonderhede.
- Ander: .....

## **KOGNITIEWE ONTWIKKELING**

---

**22. Hoe sal u die kind se geheue beskryf vir gebeure wat met hom / haar gebeur het?**

Hoe goed onthou u kind dinge wat met hom / haar gebeur het?

*Merk slegs een ovaal.*

- Sy / hy het 'n goeie geheue vir gebeurtenisse wat in die verlede gebeur het.
- Daar is sekere gebeurtenisse wat my kind onthou, maar daar is ook party betekenisvolle (opmerklike) insidente waarvan my kind vergeet het.
- Omdat hy / sy maklik vergeet, herroep my kind nie eintlik gebeure van die verlede op nie.
- Ander: .....

**23. Hoe liggelowig is u kind?**

Liggelowig word in Engels met "gullible" vertaal. Dit beteken om maklik gekul te word of tot ander se voordeel gemanipuleer te word.

*Merk slegs een ovaal.*

- Glad nie
- Tot 'n mate
- Baie

**24. Gebruik u kind sy / haar verbeelding om stories op te maak, bv. deur iets uit sy / haar verbeelding te vertel asof dit regtig gebeur het?**

*Merk slegs een ovaal.*

- Ja
- Nee

**25. Indien ja, hoe gereeld gebeur dit dat hy / sy stories opmaak?**

*Merk slegs een ovaal.*

- Somtyds
- Dikwels

## GETUIEBEVOEGDHEID

---

26. **Is u van mening dat u kind in staat is om in 'n hof te getuig?**

*Merk slegs een ovaal.*

Ja

Nee

27. **Verduidelik asseblief u antwoord.**

Hoekom se u u kind sal in die hof kan getuig / nie getuig nie?

---

---

---

---

---

Aangedryf deur



## TEACHER QUESTIONNAIRE

### IDENTIFICATION DETAILS

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1. Teacher name and surname

.....

2. Teacher contact number

.....

3. School

.....

4. Child Name and Surname

.....

5. Level / Grade

.....

### BASIC COMPETENCY

---

6. Does this learner have a diagnosed hearing impairment?

e.g. does he / she wear a hearing aid?

Mark only one oval.

Yes

No

7. Does this learner have a diagnosed visual impairment?

e.g. does he / she wear spectacles?

Mark only one oval.

Yes

No

8. Have specific adaptations been made for this learner in order to ensure optimal learning in the classroom?

Mark only one oval.

No

Yes

---

<sup>1497</sup> <https://drive.google.com/file/d/0B89sOjYKFAaFZ3RJTWttRIZVRXc/view?usp=sharing>

9. If yes, please explain the adaptations that were made for him or her.

.....

.....

.....

.....

.....

## COGNITIVE SKILLS

---

Please evaluate the following skills of the learner. To determine the rating, please compare him / her to the rest of the learners in your class.

### Attention and concentration

10. **Attention and concentration**

*Mark only one oval.*

- Good
- Average
- Poor

11. If poor, please give a reason for your choice.

.....

.....

.....

.....

.....

### Visual perception

12. **Visual perceptual skills**

e.g. visual discrimination or visual sequencing

*Mark only one oval.*

- Good
- Average
- Poor

13. If poor, please give a reason for your choice.

.....

.....

.....

.....

.....

## Visual memory

14. **Visual memory skills**

i.e., ability to recall visual information

*Mark only one oval.*

- Good
- Average
- Poor

15. If poor, please give a reason for your choice.

.....

.....

.....

.....

.....

## Auditory perception

16. **Auditory perceptual skills**

e.g. auditory discrimination or auditory sequencing

*Mark only one oval.*

- Good
- Average
- Poor

17. If poor, please give a reason for your choice.

.....

.....

.....

.....

.....

## Auditory memory

**18. Auditory memory skills**

i.e., ability to recall auditory information  
*Mark only one oval.*

- Good  
 Average  
 Poor

**19. If poor, please give a reason for your choice.**

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

## LANGUAGE SKILLS

---

### Expressive language

**20. Expressive language**

i.e. the learner's spoken vocabulary and the way he / she uses language to express himself / herself  
*Mark only one oval.*

- Good  
 Average  
 Poor

**21. If poor, please give a reason for your choice.**

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

### Receptive language

**22. Receptive language**

i.e. the learner's comprehension of words and language  
*Mark only one oval.*

- Good  
 Average  
 Poor

23. If poor, please give a reason for your choice.

.....

.....

.....

.....

.....

### Temporal concepts

24. **Comprehension of temporal concepts**  
i.e. his / her understanding of time concepts  
*Mark only one oval.*

- Good
- Average
- Poor

25. If poor, please give a reason for your choice.

.....

.....

.....

.....

.....

### Narrative skills

26. **When this learner recalls from memory, how often would he or she (also) give information that is not part of the actual event or story?**  
*Mark only one oval.*

- Cannot say
- Never
- Sometimes
- Usually

27. **Please select options descriptive of this learner's narrative ability (ability to relate an event or story).**

*Tick all that apply.*

- The narration usually has a beginning, middle and end.
- He / she will relate an incident in a haphazard (disorganised) way.
- He / she gives much detail.
- He / she gives little detail.
- Other: .....



## MORALITY

---

### Honesty

28. Does this learner understand the moral importance of being honest, e.g. telling the truth?

*Mark only one oval.*

- Cannot say  
 Yes  
 No

29. Please motivate your answer.

.....

.....

.....

.....

.....

### Lying

30. Do you have knowledge of a lie or lies that this learner has told before?

*Mark only one oval.*

- Yes  
 No

31. If yes, please give more information on the learner's lying behaviour.

.....

.....

.....

.....

.....

## WITNESS COMPETENCY

---

32. In your opinion, will this learner be able to give evidence in court?

*Mark only one oval.*

- Cannot say     *After the last question in this section, skip to question 34.*  
 Yes  
 No

33. Please motivate your opinion.

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## **ADDITIONAL COMMENTS**

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34. Please feel free to provide any further information on the learner or related to the questions that you regard as important in the space provided below.

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## ONDERWYSER-VRAELYS

### IDENTIFIKASIEBESONDERHEDE

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1. Onderwyser naam en van

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2. Onderwyser kontak nommer

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3. Skool

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4. Kind naam en van

.....

5. Vlak / Graad

.....

### BASIESE BEVOEGDHEID

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6. Het hierdie leerder 'n gediagnoseerde gehoorgestremdheid?

bv, dra hy / sy 'n gehoorapparaat?

*Merk slegs een ovaal.*

- Ja  
 Nee

7. Het hierdie leerder 'n gediagnoseerde visuele gestremdheid?

bv, dra hy / sy 'n bril?

*Merk slegs een ovaal.*

- Ja  
 Nee

8. Is spesifieke aanpassings vir hierdie leerder gemaak ten einde optimale leer in die klaskamer te verseker?

*Merk slegs een ovaal.*

- Nee  
 Ja

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<sup>1498</sup> <https://drive.google.com/file/d/0B89sOjYKFAaFSmZkREJMaE5KOGM/view?usp=sharing>

9. Indien ja, verduidelik asseblief watter aanpassings vir hierdie leerder gemaak is.

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## KOGNITIEWE VAARDIGHEDE

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Evalueer asseblief die volgende vaardighede van die leerder. Vergelyk hom / haar met die res van die leerders in u klas om die beoordeling te doen.

### Aandag en konsentrasie

10. Aandag en konsentrasie

*Merk slegs een ovaal.*

- Goed
- Gemiddeld
- Swak

11. Indien swak, gee asseblief 'n rede hiervoor.

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### Visuele waarneming

12. Visuele perseptuele vaardighede

bv. visuele diskriminasie of visuele opeenvolging

*Merk slegs een ovaal.*

- Goed
- Gemiddeld
- Swak

13. Indien swak, gee asseblief 'n rede hiervoor.

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## Visuele geheue

14. Visuele geheuevaardighede

d.w.s. vermoë om visuele inligting te herroep  
*Merk slegs een ovaal.*

- Goed
- Gemiddeld
- Swak

15. Indien swak, gee asseblief 'n rede hiervoor.

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## Ouditiewe waarneming

16. Ouditiewe perseptuele vaardighede

bv. ouditiewe diskriminasie of ouditiewe opeenvolging  
*Merk slegs een ovaal.*

- Goed
- Gemiddeld
- Swak

17. Indien swak, gee asseblief 'n rede hiervoor.

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## Ouditiewe geheue

**18. Ouditiewe geheuevaardighede**

d.w.s. vermoë om ouditiewe inligting te herroep  
*Merk slegs een ovaal.*

- Goed  
 Gemiddeld  
 Swak

**19. Indien swak, gee asseblief 'n rede hiervoor.**

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## TAALVAARDIGHEDE

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20.

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## Ekspressiewe taal

**21. Ekspressiewe taal**

bv. gesproke woordeskat en die wyse wat die leerder taal gebruik om homself / haarself uit te druk.

*Merk slegs een ovaal.*

- Goed  
 Gemiddeld  
 Swak

**22. Indien swak, gee asseblief 'n rede hiervoor.**

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## Reseptiewe taal

**23. Reseptiewe taal**

bv. die leerder se begrip van woorde en taal  
*Merk slegs een ovaal.*

- Goed  
 Gemiddeld  
 Swak

**24. Indien swak, gee asseblief 'n rede hiervoor.**

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## Temporale konsepte

**25. Begrip van temporale konsepte**

bv. sy / haar begrip van tydskonsepte  
*Merk slegs een ovaal.*

- Goed  
 Gemiddeld  
 Swak

**26. Indien swak, gee asseblief 'n rede hiervoor.**

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## Narratiewe vaardighede

**27. Wanneer hierdie leerder inligting uit sy / haar geheue herroep, hoe gereeld sou hy / sy (ook) inligting gee wat nie deel vorm van die gebeurtenis of storie nie?**

*Merk slegs een ovaal.*

- Kan nie se nie  
 Nooit  
 Soms  
 Gewoonlik

28. **Merk asseblief die opsies wat van toepassing is op hierdie leerder se narratiewe vermoë (vermoë om 'n gebeurtenis of storie te vertel).**

*Merk alles wat van toepassing is:*

- Die vertelling het gewoonlik 'n begin, middel en einde.
- Hy / sy gee 'n gebeurtenis weer op 'n "deurmekaar" (ongeorganiseerde) manier.
- Hy / sy gee baie besonderhede.
- Hy / sy gee min besonderhede.
- Ander: .....

## MORALITEIT

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### Eerlikheid

29. **Verstaan hierdie leerder die morele belangrikheid om eerlik te wees, d.w.s. om die waarheid te praat?**

*Merk slegs een ovaal.*

- Kan nie se nie
- Ja
- Nee

30. **Indien nee, motiveer asseblief u antwoord.**

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### Leuens

31. **Dra u kennis van 'n leuen of leuens wat hierdie leerder vertel het?**

*Merk slegs een ovaal.*

- Ja
- Nee

32. **Indien ja, gee asseblief verdere inligting oor die leerder se leuengedrag.**

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## GETUIEBEVOEGDHEID

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33. Volgens u opinie, sal hierdie leerder in staat wees om in 'n hof te getuig?

*Merk slegs een ovaal.*

- Kan nie se nie  
 Ja  
 Nee

34. Motiveer asseblief u antwoord.

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## VERDERE KOMMENTAAR

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35. Neem asseblief die vrymoedigheid om verdere kommentaar oor die leerder of die vrae te gee. Gebruik die spasie hieronder.

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Aangedryf deur



# APPENDIX 8

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## TESTIMONIAL COMPETENCY REPORT TEMPLATE

### LETTER HEAD

name and surname – address – contact numbers – qualifications – professional registration

### CONFIDENTIAL

## TESTIMONIAL COMPETENCY REPORT

Date

### 1. IDENTIFYING PARTICULARS

Name and surname

Date of birth

Date of assessment

Chronological age

Grade / Level

School

Accused

Charge

Case number

Investigating officer

### 2. REASON FOR REFERRAL

The source of the referral is given. The purpose of the referral, as well as any specific referral questions posed, is stated.

### **3. ASSESSMENT HISTORY**

- Collateral consultations

Provide a chronological list of (telephonic) consultations:

name and surname – reason for consultation – date

- Perusal of documentation

Provide a list of documentation perused:

name and surname of compiler of report – date

- Assessment sessions

Report on the assessment sessions pertaining to the child in chronological order:

name and surname – purpose of session – date

### **4. RELEVANT BACKGROUND INFORMATION**

Give a concise description of the general aspects of development from birth to the present. Specific attention is given to the witness's educational and health history, and adaptive functioning at home and in the peer group. If applicable, special mention is made of the child's current emotional status and relationship dynamics.

### **5. COMPETENCY EVALUATION<sup>1499</sup>**

#### 5.1 Approach

The evaluation model and its rationale are provided. The method of evaluation of the components is described.

#### 5.2 Observations

Relevant behavioural observations made of the child during the course of the assessment are noted.

#### 5.3 Cognitive functioning

A report is given on the child's cognitive functioning at present. The results obtained by psychometric testing should be interpreted and explained in colloquial language.

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<sup>1499</sup> Ch 2, 5-7.

#### 5.4 Moral capacity

The outcome of the moral capacity evaluation is described.

#### 5.5 Narrative ability

The child's response to the narrative practice (and episodic memory training) is reported. An informed opinion on his or her general proficiency in communication should be given.

### **6. DEVELOPMENTAL DELAY, DISABILITY AND/OR RELATED CONDITION(S)<sup>1500</sup>**

In this section the developmental challenge(s) of the child is clarified. With a view to the purpose of the report, the court is also informed of research relevant to issues of competency and/or giving evidence, if this is available. If other professionals are involved with the child, their input is of major importance and value. The information can be arranged under the following headings:

#### 6.1 (Name of developmental disability or condition)

A description of the condition is given. If diagnostic criteria exist, they are described in relation to the specific course of the child's development.

#### 6.2 Competency issues

Competency restrictions known from theory and practice and associated with the condition of the child are described, if their relevance is anticipated.

#### 6.3 Accommodations

Measures to facilitate the limitations associated with the developmental challenges are discussed.

### **7. DISCUSSION**

In this section a systematic integration of all relevant information (professional reports, collateral and other consultations, evaluation, completed parent and

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<sup>1500</sup> Ch 3.

teacher questionnaires) is done. The following points of discussion can guide the exposition:

- Developmental challenges of the child
- Family environment in which child is raised and if relevant, how it relates to developmental aspects
- Current cognitive functioning and if applicable, implications for giving evidence
- Adaptive functioning (school, home and peer group)
- Testimonial competency: abilities of perception, memory, communication (including narrative ability) and, moral reasoning
- If applicable, contextual factors that need to be considered

## **8. CONCLUSION**

A professional opinion with regard to the level of testimonial competency of the child is expressed.

## **9. RECOMMENDATION(S)<sup>1501</sup>**

- A child without basic testimonial competency should not be called to give evidence.
- Whether the child has limited or full competency to give evidence, an intermediary trained in working with persons with developmental challenges must be appointed.
- The restrictions that require facilitation will determine if other recommendations – accommodating the limitations associated with the developmental challenge(s) – are made.
- Section 163 applies to child witnesses who have an understanding of what it means to make a promise. The child-friendly oath is recommended for the affirmation procedure. Section 164 applies to child witnesses who do not have a conceptual understanding of “to promise”. It is recommended

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<sup>1501</sup> Ch 7.

that these witnesses be admonished to speak the truth before they proceed to give evidence. The alternative admonishment applies to those children who do not have a conceptual understanding of the truth. They are admonished to relate their personal knowledge only.

## **10. BIBLIOGRAPHY**

This section reflects the "body of knowledge"<sup>1502</sup> on which the conclusion and recommendations are based.

## **11. APPENDICES**

Brief descriptions of the various psychometric tests and/or questionnaires that were used during the assessment are attached to the report.

## **12. ABBREVIATED CURRICULUM VITAE**

The contents of the CV confirms the qualification as "expert witness" by placing academic qualifications, expertise and experience on record.

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<sup>1502</sup> Meintjes-Van der Walt 2003 *CARSA* 46.