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Comprehension and production of figurative language by Afrikaans-speaking children with and without specific language impairment

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Abstract: This article reports on the comprehension and production of figurative language, namely idioms and similes, in first language Afrikaans-speaking (AFR) boys, ages eight to 10 years, and first language Afrikaans-speaking boys with specific language impairment (SLI), also ages eight to 10. It draws on a larger study by Van der Merwe (2007; see also Van der Merwe & Southwood, 2008). Testing of the comprehension and production abilities of the children was conducted verbally and individually and elicited their understanding of 25 idioms and 25 similes. The idioms were first presented without context; if the child gave an incorrect interpretation, the idiom was placed in context. Raw scores show that the SLI group performed marginally more poorly than the AFR group, but there was no statistically significant difference between the comprehension of idioms by the two groups. The same can be said for the number of literal interpretations provided by the groups. Placing the idioms in context was beneficial to both groups. The simile completion task required the children to provide the last word of each simile. For both groups, the similes task proved to be easier than the idioms task but there was again no statistically significant difference found between the two groups. The results seem to imply that children at this developmental phase, aged eight to 10, whether language impaired or not, have not yet fully grasped figurative language as a concept and need explicit instructions on figurative language. The article ends with a reflection on the suitability of idioms and similes as particular categories of figurative language in studies of this nature.

Introduction

This study reports on an assessment of the comprehension and production of figurative language in both typically developing boys and boys with specific language impairment (SLI) between the ages of eight and 10. Such abilities are an important aspect of language that researchers and speech-language therapists measure when assessing overall language competence in both typically developing as well as language-impaired children (Kerbel & Grunwell, 1998).

By way of overview, the article is organised as follows: first, the value and nature of idioms and similes as literary devices is addressed as well as the degrees of opaqueness of idioms. Thereafter, a literature review of figurative language processing in children is provided, with specific reference to the Global Elaboration Model (GEM). This model, proposed by Levorato and Cacciari (1995), stipulates at what ages and to what extent typically developing children are able to comprehend and produce figurative language. The article then presents findings on the comprehension of figurative language by atypically developing populations and discusses methodologies used in studies as a variable determining performance.

The five hypotheses for this study are then introduced, after which the methodology is presented. This account includes a discussion of the participants and their developmental histories where applicable, the experimental tasks used to test the children, the data collection procedure and the method used for scoring the responses.

The results of the responses to the idiomatic phrases and the idioms placed in context are then presented. These results also include the number of literal interpretations provided by the participants. Lastly the results for the similes tests are provided. Given that this study has a small sample size of 12 participants in total, notable performances of both the SLI and AFR participants are

highlighted. The role of context, recognition of incongruity, age and reading ability and the value of literal responses are then explored. The article ends with a consideration of methodological challenges for future research.

Literature review

The value and nature of idioms

Idioms are diverse in their etymological, syntactic and semantic make-up which makes them more or less ideal when testing children, depending on the children's developmental stage, as greater understanding of figurative language comes with maturity. Idioms typically find their etymological origins in happenings of a very practical nature. What can make them particularly abstract though is the fact that they may stem from practices no longer carried out yet their non-literal representations have lived on in the language (Nippold, 1991). An example is the phrase 'lock, stock and barrel' – which means 'everything'. This, according to Crighton (1998), originates from hunters who used muskets. The lock, stock and barrel refer to the different components of the weapon. When venturing out on a hunt, the hunters had to take all three components with them.

Idioms vary in terms of their semantic analysability (cf. Gibbs *et al.*, 1989; Cacciari & Glucksberg, 1991; Gibbs, 1991; Gibbs & Nayak, 1991). Gibbs (1991), for instance, states that the comprehension of idioms largely has to do with children's intuitions and the internal semantics of the expression, that is their ability to apply their ontological knowledge¹ and knowledge of language to make inferences. Comprehension will largely depend on how decomposable the idiom is² and how much context is supplied.

The term 'decomposable' refers to how transparent or opaque an idiom is deemed to be based on the components which contribute to its overall figurative meaning. Put differently, 'decomposable' refers to the extent to which an idiom can be 'broken down'. Gibbs (1991) suggests three categories of 'broken down ability': 'normally decomposable', 'abnormally decomposable,' and 'nondecomposable'. An example of a normally decomposable idiom would be 'a tough pill to swallow' as it is closely related to an unpleasant literal experience and the mental image is sufficient to convey the idea that someone is struggling to accept something (Abkarian *et al.*, 1992). Idioms which need more analysing, where obvious correlations are not evident without context, such as 'to carry a torch for somebody' (to have warm feelings for someone), would be abnormally decomposable (Gibbs *et al.*, 1989: 578). In the idiom 'to carry a torch for somebody', the 'torch' refers to warmth but nevertheless it is cryptic in its semantic relation and therefore requires context. Nondecomposable idioms in no way denote the phenomenon they refer to. For example the idiom 'kick the bucket' (to die) in no way denotes death. Such idioms are the most abstract of idioms as one would need to know the origins of the phrase in order to use it properly (Gibbs, 1991: 614; Swinney & Cutler, 1979: 523). In this case the theory is that the idiom 'kick the bucket' originates from hangings where the person being hanged would stand on a bucket and it was kicked out from under them (Gulland & Hinds-Howell, 1994: 155). There are, of course, no actual clear procedures for specifying whether – or rather to what degree – idioms are semantically decomposable as the opinions, knowledge and cultural backgrounds of those evaluating the idioms may differ.³

The value and nature of similes

Similes, for example, 'as smooth as ice', have greater explicitness than idioms and are generally far less syntactically and semantically complex than idioms and are therefore far easier to comprehend. Reynolds and Ortony (1980) and Seidenberg and Bernstein's (1986) studies, for example, found that similes were more easily comprehended than other forms of figurative language. The authors of these studies concluded that this was due to the greater linguistic explicitness and more obvious referential domains of similes.

Figurative language processing in children

For the purposes of this study it is important to establish the prerequisites needed for the comprehension of figurative language in children, whether typically or atypically developing. Theories

which address figurative language processing in children are similar to those used to explain adult comprehension of figurative language, but are justifiably simplified by the lesser occurrence of developmental, cognitive and linguistic maturity (Vance & Wells, 1994: 27).

There are three fundamental prerequisites concerning the comprehension of figurative language, viz. cognitive, linguistic and pragmatic, which are arguably contingent on one another and develop with age. The cognitive prerequisite warrants the recognition of common properties between objects, feelings or textures under comparison, for example the comparisons of textures and descriptions in the simile 'as smooth as ice'. The linguistic prerequisite requires children to be in possession of the semantic and syntactic knowledge to process and communicate their understanding (Gentner, 1977). Simply put, this means that the child needs to have a basic understanding of semantics and syntax. The child needs to understand that the double use of the word 'as' warrants a comparison, while the words 'smooth' and 'ice' are collocations. The pragmatic prerequisite requires the child to recognise speaker intention (Demorest *et al.*, 1983). For example, a child needs to recognise the implausibility of a sentence such as 'the cat's got your tongue'. Recognising such an implausibility – and thus realising that the sentence might be an idiom – will help the child in establishing the speaker's intention. It is however crucial to acknowledge the role of literal meanings in the interpretation of the abstract, as it is necessary for the transfer of knowledge by drawing comparisons (Gibbs, 1984, 2001; Vosniadou, 1987; Nippold & Taylor, 1995, 2002). For example, the idiom 'a tough pill to swallow' can be very literally realised as a difficult action to perform physically. Thus it is not demanding to transpose the analogy to a situation in which the delivery of some news might be hard to 'ingest'. Similarly, the idiom 'treading on thin ice' provides a vivid depiction of a precarious situation which one can picture very literally. This analogy can then be transposed rather straightforwardly to a situation in which one gets the feeling that someone is pushing their luck and the situation might end badly for them.

In atypically developing children, depending on the diagnosis of the impairment, one or more of the three prerequisites may best explain their deficits (Vance & Wells, 1994; Kerbel & Grunwell, 1998), that is a lack of conceptual understanding, a semantic problem or a pragmatic one. For example, a child identified as having a pragmatic disorder may have complete understanding of the semantic meaning of the words in the sentence, but fail to interpret the context. Failure to understand the idiom in this child's case could then be attributed to a pragmatic problem.

Global Elaboration Model (GEM)

Developmental milestones of typically developing children concerning the comprehension and production of figurative language are provided by Levorato and Cacciari (1995). Based on their extensive work on idiom/figurative language comprehension and production in children, Levorato and Cacciari devised a model called the Global Elaboration Model (GEM). It is so named because it refers to the developmental process by which a child obtains a 'global' or holistic understanding of figurative language. It provides a basis by which to compare the performance of the typically and atypically developing children in this study and was instrumental in the formulation of the hypotheses for this study.

The GEM suggests five developmental phases. Phase one includes children below the age of eight. Prior to age eight, figurative language is said to be interpreted literally, regardless of context. In phase two, between the ages of eight and nine, sensitivity for context develops. In other words, the child begins to display an ability to infer meaning from a situation. In phase three, between the ages of 10 and 12, the child develops an awareness that meaning can be conveyed both literally or figuratively, and begins to grasp and be able to classify types of figurative language, such as metaphor, similes, metonymy, and so on. It becomes evident that at this stage the child is able to consider the internal state of speakers in order to understand the speaker's intentions. Children also experience an intermediate phase where there is an awareness that a literal interpretation is inappropriate, but they still fail to grasp the intended figurative meaning (see Demorest *et al.*, 1983 and Rinaldi, 2000 for similar findings). In phase four, between the ages of 13 and 15, the adolescent is likely to display an ability both to comprehend and produce figurative language equally. Phase five is reached when the adolescent has the competence more or less of an adult.⁴

Comprehension of figurative language by special populations

One significant criterion used for the diagnosis of SLI is a marked difference between an individual's (normal) non-verbal IQ and their language IQ, the latter being significantly lower than the former, and the discrepancy is not on account of any physical or mental disabilities (McCauley, 2001). The SLI child presents with morphosyntactic and phonological problems (Leonard, 1998). Children with SLI may also struggle with narrative construction and the use of language in reasoning; as a result, they may experience emotional, behavioural, social, and academic difficulties (McCauley, 2001; Brinton *et al.*, 2005). The SLI child's language basically resembles that of a younger typically developing child.

It has been found to a greater or lesser extent that children with language disorders and language-related disorders experience difficulty with the comprehension of figurative language (Bishop & Adams, 1989; Nippold, 1991; Norbury, 2004; Botting & Adams, 2005). Such disorders include children with autistic spectrum disorder (ASD)⁵ (MacKay & Shaw, 2004; Botting & Adams, 2005), SLI (Nippold, 1991; Norbury, 2004; Botting & Adams, 2005), and semantic pragmatic language disorder (SPLD) (Kerbel & Grunwell, 1998; Hyde-Wright & Cray, 1991). Bishop (2000 as cited by Bishop & Baird, 2001) proposes that children with communicative difficulties fall along a continuum with pure SLI on one end of the spectrum, autism on the other and a range of disabilities in between. All of the above mentioned groups have been noted to have at least one thing in common impeding their comprehension of figurative language, viz. their insensitivity to context (Nippold, 1991).

Children with language disorders often experience semantic difficulties. Children with SLI may experience a degree of SPLD. SPLD is of more concern when it comes to a child's ability to infer information as the pragmatics of a situation is particularly difficult for them and they struggle to use language appropriately in a social setting. Yet, as Botting and Adams (2005) point out, the lines between diagnoses are imprecise, as are measures used for testing the presence of such characteristics. Studies involving idiom comprehension claim that few differences have been found between children with pure SLI and pure SPLD (Bishop & Adams, 1991; Nippold, 1991; Vance & Wells, 1994; Bishop, 2000; Norbury, 2004; Botting & Adams, 2005). In the present study, only one SLI participant had a history and a current status of SPLD.

Vosniadou *et al.* (1984) and Vance and Wells (1994) contend that figurative language does not pose any more of a problem for children with SLI than does literal language. They also state that, as children with SLI are assumed to be following a different developmental path, namely that of a younger child as opposed to typically developing children of their age, children with SLI are able to interpret some situations and not others and are lacking in general language skills, as is characteristic of younger children.

Other studies have indicated that children experiencing ADHD (attention deficit hyperactive disorder) also display a lack of social pragmatic skills (Oram *et al.*, 1999; Bishop & Baird, 2001). Oram *et al.* (1999) argue that behavioural traits in children with ADHD are not necessarily due to difficulties in social understanding, but that their difficulties lie with executive dysfunctions such as lack of inhibitions – meaning their hastiness to respond without thinking through their response. Children vary in degree of severity in terms of diagnoses and it is not uncommon to find a child with multiple diagnoses relating to language, communication and behavioural problems. Three of the six SLI participants in this study were diagnosed with ADHD.

Summary

The findings of studies conducted on the comprehension of idioms and similes on both typically developing and communication impaired children reveal the following general trends:

- (i) Figurative language comprehension improves as children develop cognitively, linguistically and socially.
- (ii) Children with stronger reading abilities generally fair better at comprehending figurative language than those with poorer reading abilities.
- (iii) Similes are more easily comprehended than idioms due to their metaphorical and syntactic simplicity, and many idioms have to be explicitly learned.
- (iv) More often than not, context is not utilised as well by young children or children experiencing

communication impairments as it is by typically developing children.

- (v) The severity of clinical diagnoses may determine children's performance on the tests.
- (vi) Methodologies may influence results according to the populations studied.

The hypotheses for this study

The hypotheses for this study took into account the findings of previous studies on the comprehension and production of figurative language in both typical and atypical populations. It also took into account the descriptions of abilities of typically developing children provided by the GEM. The GEM was used as a starting point to ascertain the abilities of the typically developing children in this study. Using the GEM as a guideline, the typically developing participants of this study were expected to display the characteristics of children in phase two and three, as the children who participated in this study fall into the age category of phase two and three, being eight to 10 year olds. The abilities of children between the ages of eight and 10, according to the GEM, include a development of sensitivity for context, an ability to recognise a discrepancy between spoken words and meaning, and an ability to recognise speaker intention. It was assumed that the atypical group's performance would be slightly inferior to this description.

The following hypotheses were made regarding the current study:

- Hypothesis one: The children with SLI will not fare as well on the idiom test as the AFR group, regardless of whether idioms are tested in isolation or in context, especially considering the nature of the task which was solely verbal and did not present the participant with visual aids or possible answers to choose from.
- Hypothesis two: The context will play an important role in comprehension, but may prove to be of less assistance to the participants with SLI, given their language impairment.
- Hypothesis three: The typically developing children will be more likely to recognise incongruity between the idiomatic expressions and the context, particularly the older children and/or those with stronger reading abilities. Yet, as the age range is not particularly wide, clear differences may not be noticeable. Therefore, it is expected that reading ability will possibly be the surer indicator of performance.
- Hypothesis four: The SLI group will provide more literal answers for both the idiomatic phrases and the idioms placed in context.
- Hypothesis five: The children with SLI will fare much the same as the AFR group due to the relative explicitness of similes. There will be little difference between the two groups as far as plausible answers are concerned, that is those answers in which the logic behind the answers is evident but does not befit the actual expression.

Methodology

The methodology for this study relied solely on the verbal medium. This might be seen as disadvantageous to the children with SLI, but the purpose behind conducting the tests verbally, that is without any visual stimuli, was to assess the linguistic capacity of these children in comparison to typically developing children and to test their ability to express their inferences verbally.⁶

Participants

The two groups of participants (i.e. the AFR and SLI groups) were matched according to their age (in years and months), their school grade (where possible), and their Afrikaans reading mark as assessed by their class teacher. They were matched according to their reading marks as the literature indicates a strong correlation between figurative language comprehension and reading ability (Cain & Oakhill, 1999; Cain *et al.*, 2001; Levorato *et al.*, 2004; Cain *et al.*, 2005).

The data were analysed statistically, but due to the small sample size of only 12, individuals were also treated as case studies in that further information was obtained on the participants concerning their developmental history. To treat the participants as case studies was deemed necessary to ascertain the homogeneity or non-homogeneity of the SLI group.

Table 1 specifies information on the participants of this study. The letters SLI and AFR identify the two groups. The numbers following the three letters indicate the age of the participant, and the

letters A, B and C differentiate between the participants where there is more than one participant in that age group.

Information on SLI participants

Interviews were conducted with the relevant speech-language therapists to obtain more detailed background histories of the participants with SLI. Interview topics included diagnosis, the year in which it was made, assessments done, treatments covered by the speech-language therapist(s) and/or remedial teacher(s), as well as the progress the child had made from the onset of speech-language therapy until the date when the research was conducted. Bishop and Baird (2001) advocate that additional qualitative information from parents and professionals in studies where communication disabilities are assessed, enhance the validity of the results as they give a holistic picture of the participant. Discrepancies however may be found between teacher and parental descriptions and ratings of a child's communicative abilities (Bishop & Baird, 2001). These discrepancies are often related to the task or situation. Children may display different behaviour in an artificial setting like a classroom as opposed to a natural, home setting (Vance & Wells, 1994; Bishop & Baird, 2001). Discrepancies highlight the importance of obtaining information from both teachers and parents, and may also reveal advantages or disadvantages of the task administered. In the present study, however, no significant discrepancies were noted between teacher and parental reports.

The information gathered on the six participants with SLI during the interviews is discussed below. This information clearly illustrates the non-homogeneity of the SLI group and highlights their main areas of difficulty, with diagnoses ranging from impairments in terms of structural language ability to deficits affecting social rapport. It was of particular interest to ascertain how many of the participants experienced deficits affecting social rapport as this might affect their ability to make inferences from contexts (Osman & Shohdi, 2011). The details of these participants concerning their main areas of difficulty are discussed in relation to their performance on the tests, where applicable.

Participants SLI8, SLI9B and SLI9C all attend the same school for learners with special needs. Participant SLI8 was diagnosed in 2004 as a late language developer with a general language delay. Diagnosis took place approximately three years prior to participation in the present study, when the participant was aged five in Grade R (reception year). There is almost no discrepancy between his verbal and non-verbal IQ. This participant underwent group speech-language therapy but received no individual speech-language therapy.

Participant SLI9B was also diagnosed in 2004 as a late language developer with a general language delay. Diagnosis took place approximately three and a half years prior to participation in the present study, when the participant was five or six and in Grade 1. As in the case of participant SLI8, his verbal and non-verbal IQ scores are very similar, and he never received individual speech-language therapy, only group speech-language therapy.

Table 1: Information on participants

Participant code	Age (years:months)	Grade	Afrikaans reading mark
SLI8A	8:4	2	3
SLI9A	9:3	3	2+
SLI9B	9:6	2	2+
SLI9C	9:9	3	2
SLI10A	10:1	4	3
SLI10B	10:2	4	2
AFR8A	8:3	2	3
AFR9A	9:4	3	2+
AFR9B	9:5	2	2+
AFR9C	9:9	3	2
AFR10A	10:2	4	3
AFR10B	10:3	4	2

Participant SLI9C was diagnosed with SLI and ADHD in 2004, approximately three years prior to participation in the present study, when the participant was aged five or six in Grade R. At the time of the study, he was still experiencing auditory perception problems and was unable to discriminate between phonemes. There were no major differences between his verbal and non-verbal IQ scores. This participant received individual speech-language therapy initially and then group speech-language therapy and he was still attending group speech-language therapy at the time of his participation in the present study.

Participants SLI9A, SLI10A and SLI10B all attended the same school. Participant SLI9A was diagnosed in 2005 with SLI and ADHD, approximately two and a half years prior to participation in the present study, aged six in Grade 1. He initially attended a mainstream school, but was identified as experiencing difficulties with language and referred to a special needs school. At the time of participation in the study, he still experienced difficulty with reasoning, supplying definitions, sentence structure, and tenses. There was a large discrepancy between his verbal and non-verbal IQ. This participant received individual speech-language therapy initially and then group speech-language therapy. He was still attending group speech-language therapy at the time of participation in our study.

Participant SLI10A was diagnosed with SLI and SPLD in 2002, approximately four and a half years prior to participation in the present study, when he was five years of age and in Grade R. His receptive language ability is superior to his expressive language ability. This participant also has difficulties with syntax, word categorisation and associations, word finding abilities, problems relating to context, and auditory perception problems. The difference between his verbal and non-verbal IQ is the largest of all the participants. However, his non-verbal IQ is above average and he has a strong aptitude for maths. This participant received individual speech-language therapy initially and then started group speech-language therapy. He was still attending group speech-language therapy at the time of participation in our study.

Participant SLI10B was diagnosed with SLI and ADHD in 2002, approximately four and a half years prior to participation in the present study. In 2002, the participant was in Grade R, age five. He was said to have difficulties with categorising words and associations, particularly relating to context. He also had difficulties with sentence structures and tenses. He is undergoing group speech-language therapy concentrating on abstract thinking and reasoning exercises. The difference between his verbal and non-verbal IQ is pronounced. He was repeating Grade 4 at the time of participation in the present study. Participant SLI10B received individual speech-language therapy initially and then group speech-language therapy, which continued at the time of participation in our study.

All SLI participants were said to have made good progress in the language abilities over the years.

Participants SLI9A, SLI9C and SLI10B were diagnosed with ADHD. It was unknown to what extent these participants had been medicated for their ADHD. No measures were carried out to assess ADHD in this study, and it is therefore not possible, based on the results of this study, to say to what extent their ADHD contributed to their performances. SLI10A was diagnosed with SPLD. In terms of sentence constructions and pronunciation though, all participants with SLI were intelligible. Reference however is made to some pertinent characteristics later in this article (see 'Notable performances of SLI participants'). A synopsis of the SLI participants' histories is provided in Table 2.

Experimental tasks

Two tests were administered to the participants, in Afrikaans – one on idioms and the other on similes, adapted from the *Afrikaanse semantiese taalevalueerings medium* (AST) [Afrikaans semantic language evaluation medium] (Pretorius, 1989). Testing the children purely on idiomatic phrases such as *Ek kan slange vang* [I can catch snakes], as the AST does, seemed a futile exercise for purposes of this study. This would more often than not only be testing the child's knowledge of idioms – without requiring more in-depth, abstract thinking or requiring the child to draw inferences from the contexts provided. Context is also necessary because some idioms are transparent or

Table 2: Details of SLI participants

Participant	Age diagnosed	Large discrepancy between verbal and non-verbal IQ	Individual therapy	Group therapy	ADHD	SPLD
SLI8	5	No	No	Yes	No	No
SLI9A	6	Yes	Yes	Yes	Yes	No
SLI9B	5/6	No	No	Yes	No	No
SLI9C	5/6	No	Yes	Yes	Yes	No
SLI10A	5	Yes	Yes	Yes	No	Yes
SLI10B	5	Yes	Yes	Yes	Yes	No

metaphorical and easier to relate to and other idioms are not. The following context accompanied the idiom *Ek kan slange vang* [I can catch snakes]; *Die man se motor is gesteel en toe hy dit uitvind sê hy dat hy kan slange vang* [The man's car is stolen and when he finds out he says that he can catch snakes]. The children were to infer that the man is angry.

For this reason, the AST's idioms were first tested out of context and, if a child could not accurately convey the meaning of the idiom, the idiom was presented in context. This ensured more conclusive results on the role of context. Refer to Appendix A for the list of idioms used in this study, in their order of presentation.

The first author approached one Afrikaans-speaking remedial teacher and one English-speaking foundation phase teacher to obtain adult ratings of the tests which were to be administered to the participants. The purpose of obtaining such ratings from professionals, who are familiar with the abilities of children of the age group being studied, was to establish whether the tests were indeed suitable for the age groups. In no instances were any of the contexts rated as more opaque than the idiomatic phrase by either of the teachers, thus supporting the value and reliability of the material used for testing. See Appendix B for details.

Data collection procedure

This section first deals with idioms and then similes.

Prior to the tests, participants were asked if they knew what figurative or metaphorical language was. None did. Participants were then given an example to illustrate the concept of figurative language. They were asked what one meant if one said that *Hy eet soos 'n vark* [He eats like a pig]. All participants were able to give an appropriate explanation, such as 'He eats badly', 'He has no manners', 'He does not use a knife and fork' or 'He is a messy eater'. It was explained that one is reminded of how a pig eats when one looks at that person eating. One does not mean that he is a pig with ears, a snout, pink skin and a curly tail but, rather, that the person's manner of eating mimicked that of a pig. This introduction aimed to help those who were unfamiliar with the concept of figurative language and allowed us to ascertain whether any of the participants were familiar with this topic.

The participants were then asked if they knew what an idiom was. Only participant AFR10A gave a correct answer stating that 'it is like a saying'. Of the 12 participants, he was the most advanced in terms of age, grade, which was Grade 4, and reading mark, which was a reading mark of 3, and, he had covered some idioms in the Grade 4 syllabus (refer to Table 1: Information on participants). Hereafter participants were given the following example of an idiom, placed in context, with appropriate intonation and facial expressions:

Daar is 'n dogtertjie en sy trek haar skoene aan die verkeerde voet aan, sy sit melk in die ketel in plaas van water, sy bak 'n koek en sy vergeet om meel by te sit, sy sit die oond aan en vergeet daarvan. Toe sê haar ma vir die dogtertjie: 'Dogtertjie, jy is deur die blare'. Wat bedoel die ma as sy vir die dogtertjie sê: 'Dogtertjie, jy is deur die blare'?

The direct translation reads as follows: [There is a little girl and she puts her shoes on the wrong feet, she puts milk in the kettle instead of water, she bakes a cake and forgets to put the flour in it, she puts the oven on and forgets about it. Then her mom says to her 'Little girl, you are through the leaves'].⁷

Both correct and plausible answers were given. Answers such as *Sy is stout* [She is naughty] were considered to be plausible answers as they made sense within the context provided. However, the participants who gave such plausible, yet less correct answers, were prompted with questions until they arrived at a correct answer and it was felt that they had understood. Examples of answers which were considered to be correct or more correct were *Sy is deurmekaar* [She is confused], *Sy weet nie wat sy doen nie* [She doesn't know what she is doing], *Sy doen dinge verkeerd* [She is doing things wrongly] or *Sy dink nie lekker nie* [She isn't thinking properly].

The participants were then told that they would be read a sentence which they must explain. They were reassured that their answers could not be wrong, and that they should merely say what they think the sentence means. Of course there are right and wrong answers, however the participant was reassured that they would not be told that they were wrong as to not inhibit them from talking. They were then told that, in some instances, they would be told a short story in which the idiom was placed in context, and would be asked to respond to it.⁸ All sessions were tape recorded with the permission of the child and one of his parents. Only the first author was present during the tests.

Scoring of responses

Scoring was based on categories proposed by Nippold (1991) and used by Cain *et al.* (2005). The categories by which answers were differentiated were (i) correct/idiomatic explanation, (ii) related explanation, (iii) restatement/repetition of idiom, (iv) unrelated explanation, (v) literal meaning explained, and (vi) no response.

Scores tallied for the idiom test included both correct and related answers in both categories of questions asked on idiomatic phrases and idioms placed in context. Related answers were included, because it was often evident or judged to be highly probable that the meaning of the idiom was understood, yet the answer was not well verbalised by the participant. This was, predictably, especially the case for the participants with SLI. In cases where the participants had given related answers, they were prompted and asked to explain themselves further in order to ascertain whether they did in fact have an idea of, or were able to grasp, the concept. In instances of prompting, leading questions were avoided. No participant had more related answers than correct answers.

These are examples of answers supplied by the participants:

Idiom:	<i>Ek is nie onder 'n kalkoen uitgebroei nie.</i> [I was not hatched out from under a turkey.]
Correct answer:	<i>Ek is nie stupid nie.</i> [I am not stupid.]
Related answer:	<i>Ek lyk nie so simpel soos 'n turkey nie.</i> [I do not look as stupid as a turkey.]
Restatement:	<i>'n Kalkoen het my nie in 'n eier gelê nie.</i> ⁹ [A turkey did not lay me in an egg.]
Unrelated answer:	<i>Jy kom nie uit 'n kalkoen nie, jy kom uit 'n hoender uit. 'n Hoender broei jou uit, dan is jy net 'n kleintjie, dan raak jy net so groot soos hy.</i> [You do not come out of a turkey, you come out of a chicken. You hatch from a chicken egg, then you are just small, then you get big like a chicken.]
Literal interpretation:	<i>Ek is uit my ma se maag uitgebroei.</i> [I was hatched out of my mother's stomach.]
No response:	<i>Ek weet nie.</i> [I do not know.]

The similes were not treated in the same manner as the idioms when they were scored. Only those similes which were correct, that is those answers befitting the actual, standard expressions such as *so glad soos ... seep* [as smooth as... soap] received marks. In other words, only *seep* [soap] was accepted as a correct answer. All the children were able to supply suitable answers for the similes in which the logic behind the answer was evident. Since all the children were able to supply suitable answers, these answers were not awarded marks. The authors then wished to see how many children were familiar with the actual standard expressions, hence the reason why only the standard expressions were awarded marks. Examples of suitable answers which were given for

the simile *so glad soos ...* [as smooth as ...] and not awarded marks were *'n eierdop* [an egg shell], *plastiek* [plastic], and *glad rotse* [smooth rocks]. All typically and atypically developing participants were able to give suitable answers.

Results

Table 3 shows the raw scores of only correct (excluding related responses) responses given by the participants for the idioms tests: both the idiomatic phrases (decontextualised) and the idioms placed in context.

Idiomatic phrases

The raw scores depicted in Table 3 indicate that the AFR group performed better than the SLI group providing explanations for just the idiomatic phrases, achieving a mean score of 7/25 versus the SLI group's 1/25.

A statistical analysis was done using the Kruskal-Wallis test, which is a method for testing equality of population medians among groups. As it is a non-parametric method, the Kruskal-Wallis test does not assume a normal population. This means that population variabilities among groups do not have to be equal in order for this procedure to be performed. Given the inherent heterogeneity of the population with SLI (Aram, 1991), this statistical method was deemed appropriate. Confidence levels of 0.05 or less were taken to indicate significant differences between groups.

The Kruskal-Wallis test showed that there are no statistically significant differences between the groups ($F_{2,15} = 3.1508$; $p = 0.07$). An anomaly, however, is that the confidence interval for the SLI group stretches below 0, which is technically not possible because the scores are all positive. This anomaly indicates violations of the assumptions of normality, and, to counter this, a non-parametric bootstrap analysis was done. The non-parametric bootstrap analysis allows for re-sampling of the scores and can be used to calculate more accurate confidence intervals. This analysis indicated that the SLI group fared significantly worse ($p < 0.05$) than the AFR group. The most homogenous group was the SLI group and the less homogenous group the AFR group, contrary to what was expected and what is stated in the literature. This may mean that the SLI participants who took part in this study were indeed well matched in terms of their diagnoses. Alternatively, it could mean that all children with SLI experience great difficulties with the acquisition of figurative language, whereas typically developing children are just acquiring figurative language at different rates, possibly due to reading ability, for example; hence the heterogeneity in their performance.

As can be seen from Figure 1, only two of the six SLI participants achieved any score on idiomatic phrases, both of them obtaining 2. There are two possible reasons for the SLI participants' poor performance. The first is that, due to their language disabilities, they could not infer meaning from even the transparent idioms. The second is that they have not been exposed to idioms in the past or managed to pick up on them in common speech. Figurative language learning is not carried out

Table 3: Raw scores of correct responses (excluding related responses) to idiomatic phrases and idioms placed in context

Reading mark	AFR participants	Idiomatic phrases Combination of these two scores is score /50	Idioms in context Combination of these two scores is score /50	SLI participants	Idiomatic phrases Combination of these two scores is score /50	Idioms in context Combination of these two scores is score /50
3	AFR8A	2	8	SLI8A	2	13
2+	AFR9A	7	15	SLI9A	0	7
2+	AFR9B	2	13	SLI9B	0	8
2	AFR9C	4	9	SLI9C	0	8
3	AFR10A	18	11	SLI10A	2	9
2	AFR10B	6	6	SLI10B	0	7
	Mean score	7	10	Mean score	1	9

at the special needs schools attended by these children for precisely the reason that they experience difficulty with it.

Idioms in context

The mean scores for the idioms placed in context (see Table 3 and Figure 2) show that the AFR group achieved a score of 10/25 and the SLI group a score of 9/25. These scores differ by only one, and larger sample sizes would be required to draw significant conclusions. As the raw scores lack significance, the Kruskal-Wallis test also indicated that the differences between the groups are not statistically significant ($F_{2,15} = 1.3808$; $p = 0.28$).

By comparing the raw scores, it is clear that context had an immense impact. This outcome is consistent with the literature as far as the typically developing participants are concerned (see, for

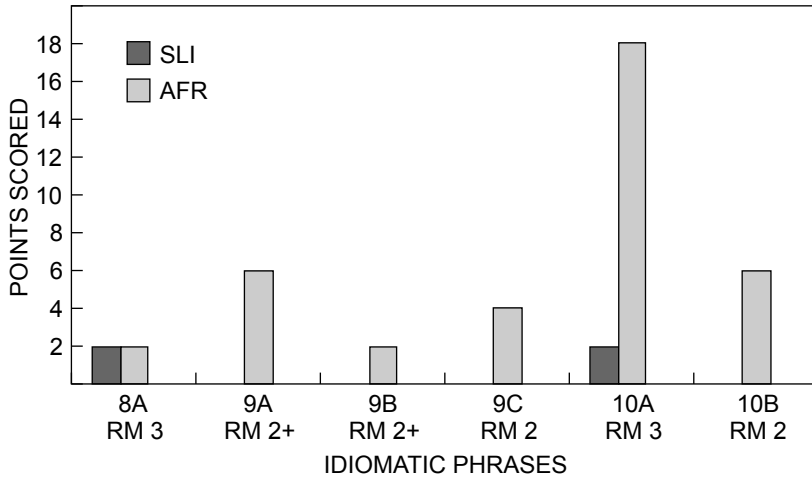


Figure 1: Scores achieved on idiomatic phrases¹⁰

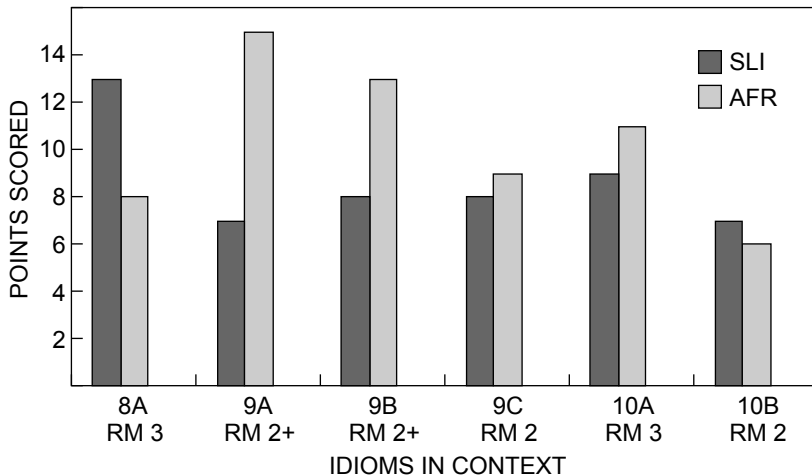


Figure 2: Scores achieved on idioms placed in context

example, Levorato *et al.*, 1992; Cain *et al.*, 2001). However this is contrary to hypothesis two of this study, which states that context will play an important role in comprehension, but may prove to be of less assistance to the participants with SLI, given their language impairment. It is also contrary to the studies reviewed in the literature review (see, for example, Lee & Kamhi, 1990; Botting & Adams, 2005) on the use of context by children with language impairments, since context proved to be the most beneficial for the SLI group.

Literal answers

Table 4 shows the number of literal answers supplied by the participants on both idiomatic phrases and idioms placed in context. It is clear from the raw scores in Table 4 that in both groups there were far fewer literal interpretations given when the idioms were placed in context than there were literal interpretations of the idiomatic phrases – again proving that context aided all participants in reaching the correct conclusions.

Literal answers to idiomatic phrases

The mean score achieved by the AFR group was 5/25 and the SLI group 8/25. These mean scores vary only slightly, but indicate that the SLI group, as anticipated from the literature, gave a few more literal answers for the idiomatic phrases than did the AFR group. The Kruskal-Wallis test indicates that these differences are statistically non-significant ($F_{2,15} = 1.7954$; $p = 0.20$).

Literal answers to idioms in context

The mean scores for the literal interpretations of the idioms placed in context again only differ fractionally from one another. The AFR group scored the lowest (1/25), which was anticipated; and the SLI obtained a score of (3/25). The Kruskal-Wallis test indicated that the differences are statistically non-significant ($F_{2,15} = 1.1975$; $p = 0.33$).

Similes test

The mean scores displayed in Table 5 and Figure 3 show the AFR group to have a mean score of 7/25, and the SLI group 5/25, as was the pattern for the idioms test, in which the AFR group achieved a slightly higher score than the SLI group. The Kruskal-Wallis test indicated that these differences are not statistically significant ($F_{2,15} = 1.9675$; $p = 0.17$).

Notable performances of SLI participants

Certain participants' scores were found to be particularly anomalous given their age, grade and/or language ability. Participant SLI8A often out-performed his AFR counterpart. As a possible explanation for his superior performance, one should re-evaluate SLI8A's language history. He was one of the SLI participants who were not diagnosed with a severe case of language impairment. He rather exhibited a mild language delay with a barely significant difference between his verbal and non-verbal IQ.

Table 4: Raw scores of literal responses to idiomatic phrases and idioms placed in context

Reading mark	AFR participants	Idiomatic phrases	Idioms in context	SLI participants	Idiomatic phrases	Idioms in context
		Combination of these two scores is	score /50		Combination of these two scores is	score /50
3	AFR8A	7	2	SLI8A	5	0
2+	AFR9A	5	3	SLI9A	10	7
2+	AFR9B	8	1	SLI9B	10	2
2	AFR9C	5	1	SLI9C	8	2
3	AFR10A	2	0	SLI10A	3	1
2	AFR10B	4	1	SLI10B	9	4
	Mean score	5	1	Mean score	8	3

Participant SLI10A, who was said to be experiencing SPLD as well as SLI, in general also fared better than expected for a language-impaired child. This confirms the literature (Bishop & Adams, 1991; Nippold, 1991; Vance & Wells, 1994; Bishop, 2000; Norbury, 2004; Botting & Adams, 2005), where it is concluded that there are no significant differences between the performance of children with SLI and SPLD. Unfortunately, participant SLI10A is the only participant who had a diagnosis of SPLD and thus cannot be compared to any participants in this regard. Ideally more participants with SPLD would be needed to draw significant conclusions.

Participant SLI10B fared the worst on both the idioms and similes tests. This participant was said to have great difficulties with word categorisations and associations, particularly in relation to context. He also had difficulties with sentence structures and tenses and has a reading mark of 2. He was said to have a limited capacity for abstract thinking and reasoning. The difference between his verbal and non-verbal IQ was pronounced. He was repeating Grade 4 at the time of testing. He was also diagnosed with ADHD. The severity of his language disability is a plausible explanation for his poor performance.

Notable performances of AFR participants

Participant AFR10A scored the highest in the AFR group on both the idioms and similes tests. This outcome was anticipated, as he was the most advanced participant in terms of age, grade and reading mark. He had further advantages of being a first language Afrikaans-speaking, typically developing child who had received some formal tuition on idioms and similes from his schooling.

Table 5: Raw scores of similes test

Reading mark	AFR participants	Similes (score /25)	SLI participants	Similes (score /25)
3	AFR8A	7	SLI8A	4
2+	AFR9A	7	SLI9A	6
2+	AFR9B	4	SLI9B	5
2	AFR9C	8	SLI9C	4
3	AFR10A	9	SLI10A	6
2	AFR10B	5	SLI10B	3
	Mean score	7	Mean score	5

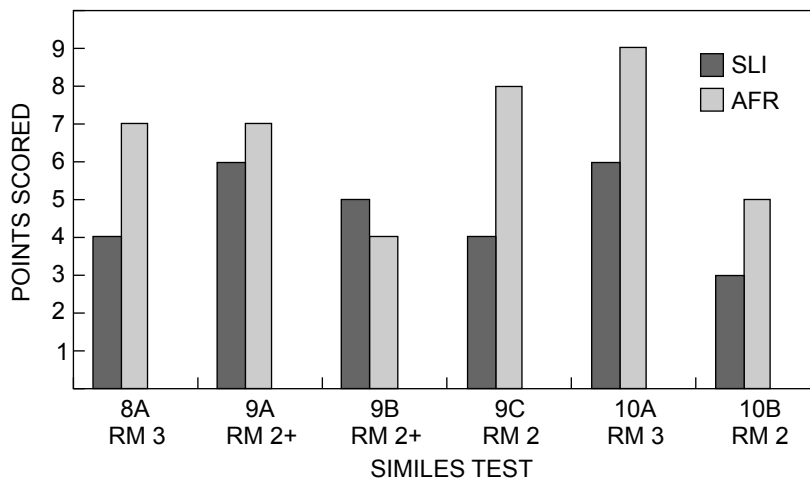


Figure 3: Raw scores achieved on the similes test

Participants AFR9C and AFR10B fared the worst on the idioms test. What these two participants have in common is a reading mark of 2.

Discussion

The first hypothesis, namely that the AFR group would perform better overall than the SLI group regardless of the use of context, was not confirmed. The performance of the SLI group was indeed slightly inferior to that of the AFR group, but was not statistically significantly lower regardless of whether idioms were tested in isolation or in context. It can therefore be concluded, based on the statistical analysis of the data concerning the idioms test totalled out of 50, that there are no differences between the groups. This finding disconfirms the general hypothesis for this study, namely that the differences between the typically developing children and the SLI group would be pronounced. A statistical analysis is more ideal for larger sample groups; however the raw scores do reveal slight differences between the groups.

Context

It was predicted in the second hypothesis that context would play an important role in comprehension, but may prove to be of less assistance to participants with SLI. Context did benefit both groups but proved to be the most beneficial for the SLI group. Therefore this hypothesis was not confirmed. Younger children are said to be more reliant on context in figurative language interpretation than the information they are able to obtain from a semantic analysis (Levorato & Cacciari, 1999). Given that children with SLI are considered to follow a developmental path similar to that of a younger child, it may well explain the SLI group's improvement with the aid of context as they could not decipher meaning even from some transparent idiomatic phrases.

Recognition of incongruity, age and reading ability

Hypothesis three proposed that the AFR group would be more likely to recognise incongruity between the idiomatic expressions and the context, particularly the older children and/or those with stronger reading abilities. The highest number of no responses was supplied by the SLI. Theoretically, this would be assumed to be due to a lack of understanding, either linguistic or conceptual, rather than attributable to the recognition of incongruence. However, without feedback on online processing from the participants, it is difficult to draw conclusions. Furthermore, it should not be overlooked that more comprehension may have taken place but was not able to be expressed by the SLI participants, given that they have expressive difficulties.

Reading ability, as predicted in hypothesis three, did prove to be a more reliable indicator of performance than age. Developmental trends (in terms of age) were only seen in certain instances, particularly amongst the AFR group where literal interpretations were tallied. Ideally a larger sample size would produce clearer trends.

Literal responses

Hypothesis four predicted that the SLI group would provide more literal answers for the idioms test. A subtle difference was evident in the raw scores. It possibly advocates that given their late language maturation process, children with SLI are prone to give more literal interpretations than young children (Botting & Adams, 2005). The provision of context reduced the number of literal interpretations particularly of the AFR group, which seems to show recognition of incongruity. However, the results here were also not statistically significant.

Similes test

Regarding hypothesis five, that is performance on the similes test, it was predicted that the children with SLI would fare much the same as the AFR group due to the explicitness of similes. This hypothesis was confirmed and concurs, for example, with the findings of Seidenberg and Bernstein (1986). Both groups were able to produce plausible answers and the number of accurate answers supplied by each group barely differed. Similes are not the most complex form of figurative language, as they are directly and relatively explicitly related to the respective literal meanings.

Even so, the SLI group's performance on the similes test as opposed to the idioms test may be a reflection of the SLI participants' ability to draw comparisons, thus alluding to a basic capacity for interpreting metaphoric language (Reynolds & Ortony, 1980).

Conclusion

Contrary to what was predicted, there are no statistically significant differences in this study between the comprehension of similes and idioms by the Afrikaans-speaking children with and without SLI. This study did produce certain findings comparable – to a lesser or greater degree – to those of previous studies.

The aim of this exploratory study was to examine the differences between the groups and to compare trends in relation to previous findings. Ideally this study should be replicated with a larger sample size and with girls to include a gender variable. In this instance the sample size was determined by the availability of the SLI participants, who were then matched with typically developing children. To establish group homogeneity, all participants might rather have undergone screening tests and been matched according to their receptive and expressive language abilities rather than their reading marks.

It is difficult to draw final conclusions based on the scores of the idiomatic phrases. It was not clear at times, even to the children themselves who provided correct answers to the idiomatic phrases, whether they had, from the idiomatic expressions, inferred the meaning themselves or whether they were simply retrieving the meaning from stored knowledge as one would retrieve definitions of words from one's mental lexicon.

There is a need to teach figurative language explicitly as a concept and as set phrases both to typically developing children and to children with SLI. Children with SLI, however, may only be receptive to idioms at a later stage. Idioms with a high degree of opacity, such as *Sy skiet met spek* [She shoots with bacon] require stock explanations as opposed to those which are more transparent. A degree of awareness and receptiveness was evident for the SLI children who took part in this study. Their awareness and receptiveness was illustrated, in particular, by their comprehension of similes and the marginal differences between their scores and their typically developing counterparts.

Methodological challenges for future research

For future research on this topic, the following recommendations are suggested. Online processing of idiom comprehension is difficult to elicit from children, but this should be probed more in future research. From a qualitative perspective, leading questions can allow the child to self-discover the answers. Not only is inferring an interpretation rewarding for the child, it could lead to possible pattern recognition throughout the exercise, meaning that the child actually practices interpreting figurative language throughout the exercise. Ideally participants with SLI in particular should be issued with screening tests and matched according to their expressive and receptive language abilities to ensure a homogenous population as opposed to being grouped according to their reading mark, as classification according to reading marks is a broad means of classification. The sample size and age range should be increased. A larger sample size would enhance validity of the results and a wider age range would reveal greater developmental trends. The linguistic, cognitive and pragmatic abilities of bilingual children with SLI who have both English and Afrikaans as languages should also be researched further. This study aimed to contribute to the body of knowledge on the comprehension of figurative language by children.

Notes

- ¹ 'Ontological' knowledge here refers to a child's world knowledge and general life experiences.
- ² The literature on idiom comprehension is currently in disarray. We acknowledge that other authors may choose to evaluate idiom comprehension in terms of different paradigms; however for this article we have chosen to describe idioms in terms of decomposability. We view normally decomposable idioms or transparent idioms as those idioms which have an underlying conceptual or metaphoric meaning which are therefore easier to comprehend.

- ³ The authors acknowledge that the results could be as a result of either the children's ability to understand metaphoric language, or their previous level of learning or exposure. Only one of the 12 children who took part in this study had minimal tuition on idioms and similes.
- ⁴ There is, of course, no clear point in a child's or adult's development when it can be said that idioms have been fully mastered (Nippold, 1991).
- ⁵ This includes Asperger's syndrome.
- ⁶ Refer to Lee and Kamhi (1990) and Botting and Adams (2005) for findings which show that children with language impairments perform better on non-verbal tasks rather than verbal tasks.
- ⁷ Even though the context was translated, the idiom was said to the child in Afrikaans. The idiom translates directly as 'you are through the leaves' but figuratively speaking it means 'confused'. The idiom was not translated to establish whether the child could infer meaning from the context without understanding the idiom.
- ⁸ See Appendix A for idiomatic phrases and idioms placed in context.
- ⁹ This sentence could also be interpreted as a literal interpretation. Not all answers were clear cut as to what category they should be placed in. The participants were asked to elaborate if the researcher was in doubt. Another means of controlling for this was striving for consistency between the groups regarding the ratings/categorising of ambiguous answers by making comparisons between the participants answers and in this way judging similarities and differences.
- ¹⁰ The abbreviation 'RM' is used in Figures 1 to 3 for 'reading mark'.
- ¹¹ (See Appendix A.) There is no literal translation for the word 'agie'. In an attempt to provide the children with an analogy from which they could infer meaning, they were told that an 'agie' is like a small animal with big eyes. From this, the children were meant to infer that the person/animal is inquisitive.

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Appendix A

Idioms

(a) Idiomatic phrases

(b) Idioms placed in context

Both the literal translations (within square brackets) as well as the figurative meanings (within angle brackets) are provided in English. In some instances, where no direct translation is possible, the idiom remains in Afrikaans.

1(a) *Hy is 'n bobbejaan.*

[He is a baboon.]

<He is stupid or silly.>

1(b) *Jannie dink dat melk van Pick n Pay af kom en nie van 'n koei nie. Hy is 'n bobbejaan.*

[Johnny thinks that milk comes from Pick n Pay and not from a cow. He is a baboon.]

2(a) *Sy is 'n agie.*

[She is an (no literal translation for 'agie') animal with big eyes.]¹¹

<She is inquisitive.>

2(b) *Elke keer as iemand vir Sannie iets sê, vra sy 'Hoekom? Hoekom?' Sy is 'n agie.*

[Every time that someone tells Sally something, she asks 'Why? Why?' She is an animal with big eyes.]

3(a) *Hy is in sy noppies.*

[He is in his 'delighted state'.]

<He is very happy.>

3(b) *'n Seuntjie het baie presente gekry vir sy verjaarsdag, en nou is hy in sy noppies.*

[A little boy got lots of presents for his birthday, and now he is in his 'noppies'.]

4(a) *Die geld groei nie op my rug nie.*

[Money does not grow on my back.]

<Money does not come from nowhere. Money does not just appear. There is not enough money.>

4(b) *'n Seuntjie wil baie graag 'n baie duur speelding hê. Hy vra vir sy ma of sy dit vir hom sal koop, toe skud sy haar kop en sê, 'Geld groei nie op my rug nie'.*

[A little boy badly wants a very expensive toy. He asks his mother if she will buy it for him, but she shakes her head and says 'Money does not grow on my back'.]

5(a) *'n Appeltjie met iemand te skil hê.*

[To peel a little apple with someone.]

<To want to speak to someone about a serious matter.>

5(b) *My pa het uitgevind dat ek sy motor gestamp het. Nou het hy 'n appeltjie met my te skil.*

[My dad found out that I bumped his car. Now he has a little apple to peel with me.]

6(a) *Ek is nie onder 'n kalkoen uitgebroei nie.*

[I was not hatched out from under a turkey.]

<I am not stupid.>

6(b) *My broer sê vir my hy het eendag 'n pienk koei in ons tuin sien rond loop. Ek sê toe vir hom dat ek is nie onder 'n kalkoen uitgebroei nie.*

[My brother said to me that one day, he saw a pink cow walking around in our garden. I said to him that I was not hatched out from under a turkey.]

7(a) *Die hele dorp was in rep en roer.*

[The whole town was in hustle and bustle. (No direct English replacement. Idiom was

provided in Afrikaans.)]
 <The whole town was busy.>

- 7(b) *Die president van die land het 'n klein dorpie kom besoek en toe was die hele dorp in rep en roer.*
 [The president of the country visited a small town and the whole town was in 'rep and roer.']

- 8(a) *Hy het die hasepad gekies.*
 [He chose the rabbit's path.]
 <He ran away.>

- 8(b) *Die seuntjie wou nie sy kamer aan die kant maak nie en toe sy ma met hom wou raas, het hy die hasepad gekies.*
 [A little boy did not want to tidy his room. When his mom wanted to shout at him, he chose the rabbit's path.]

- 9(a) *Ek kan slang vang.*
 [I can catch snakes.]
 <I am very angry.>

- 9(b) *Die man se motor is gesteel en toe hy dit uitvind sê hy dat hy kan slang vang.*
 [A man's car is stolen. When he finds out he says that he can catch snakes.]

- 10(a) *Hulle bak en brou net soos hulle wil.*
 [They bake and brew just as they want to.]
 <They do exactly as they please.>

- 10(b) *As die ma uitgaan om inkopies te doen, los sy die kinders by die huis. Toe die ma terugkom sien sy die hele huis is 'n gemors. Toe sê sy vir die kinders julle bak en brou soos julle wil as ek nie hier is nie, nê.*
 [When a mother goes out to do grocery shopping, she leaves the children at home. When she comes back, she sees that the whole house is a mess. The she says to the children that they bake and brew just as they want to when she is not there.]

- 11(a) *Ons ry met Jan Tuisbly se karretjie.*
 [We are driving with John Stayathome's car.]
 <We are staying at home.>

- 11(b) Een vrou sê vir die ander vrou: 'Oe, ons gaan lekker verkansie hou in Bloemfontein'. Toe se die ander vrou: 'Oe, nee hierdie jaar ry ons met Jan Tuisbly se karretjie'.
 One woman says to another woman, 'Oh, we are going to have a lovely holiday in Bloemfontein'. Then the other woman says, 'Oh, no this year we are riding with John Stayathome's car'.

- 12(a) *As die kat weg is, is die muis baas.*
 [When the cat is away, the mouse is boss.]
 <In the absence of supervision or authority, others do as they please.>

- 12(b) *As my ma weg is, dan dink my broer hy kan vir my sê wat ek moet doen en dit maak my kwaad. Ek vertel toe vir my ma, maar sy lag en sê dat as die kat weg is, is die muis baas.*
 [When my mom goes out, my brother thinks that he can tell me what to do and this makes me cross. I told my mom this and she just laughed and said that when the cat is away, the mouse is boss.]

- 13(a) *Slaan die spyker op die kop.*
 [Hit the nail on the head.]
 <Reach the correct conclusion.>

- 13(b) *Pieter wou nie skool toe gaan nie. Hy jok toe vir sy ma en sê sy maag is seer. Later praat*

sy ma met sy pa. Sy sê 'Moes Pieter nie vandag daardie goot wiskundetoets skryf nie? Mmm... so hy is miskien nie siek nie... hy wil net nie die toets skryf nie.' Die pa sê 'Ek dink jy slaan die spyker op die kop.'

[Peter did not want to go to school. He lied to his mom and said that his tummy was sore. Later Peter's mom and dad were talking. She said 'Didn't Peter have to write a maths test today? Mmm... so maybe he wasn't sick, maybe he just didn't want to write the test. 'The dad said 'I think you hit the nail on the head'.]

-
- 14(a) *Sy skiet met spek.*
[She shoots with bacon.]
<She is telling a lie.>
- 14(b) *Chanel se ma sien hoe Chanel 'n lekkertjie steel. Chanel sê toe sy het NIE 'n lekkertjie gesteel nie. Haar ma sê toe: 'Chanel jy skiet met spek.'*
[Chanel's mom saw Chanel steal a sweetie. Chanel said that she did NOT steal it. Her mom then said to her 'Chanel, you shoot with bacon'.]
-
- 15(a) *Slaan voet in die wind.*
[Hit foot in the wind.]
<Run away.>
- 15(b) *Die dief is in die bank, skielik hoor hy die polisie sirenes en toe slaan hy voet in die wind.*
[The thief is in the bank, suddenly he hears police sirens and then he hit his foot in the wind.]
-
- 16(a) *Agteros kom ook in die kraal.*
[The last ox also comes into the kraal.]
<Eventually complete a task. The last one also finishes eventually.>
- 16(b) *Uiteindelik het ek my werk klaar gemaak, toe sê die onderwyseres vir my dat agteros kom ook in die kraal.*
[Eventually I finished my work and the teacher said that the last ox also comes into the kraal.]
-
- 17(a) *Sy draai almal om haar vinger.*
[She turns everyone around her finger.]
<She manipulates people to get what she wants.>
- 17(b) *In die oggend vra die dogtertjie vir 'n lekkertjie van haar oupa en hy gee toe vir haar een. Daardie middag vra sy haar pa vir 'n pop, en hy koop vir haar een. Daardie aand vra sy haar ma vir nog 'n stukkie koek en haar ma gee dit vir haar. Toe sê haar oom vir haar ma: 'Die dogtertjie draai almal om haar vinger'.*
In the morning the little girl asks her grandfather for a sweetie and he gives it to her. In the afternoon she [asks her dad to buy her a doll and he does. That evening she asks her mother for a another piece of cake and her mother gives it to her. Then her uncle says to her mother: 'This little girl turns everyone around her finger'.]
-
- 18(a) *'n Kat in die sak koop.*
[Buy a cat in the bag.]
<Purchase something without having seen it.>
- 18(b) *My pa het vir my boetie 'n speelkarretjie gekoop, maar hy het nie die boks in die winkel oopgemaak nie. Toe hy by die huis kom, sien hy dat die karretjie gebreek is. My ma sê hy moet dit na die winkel terug vat, want hy het 'n kat in die sak gekoop.*
[My dad bought my little brother a toy car, but he did not open the box in the shop. When he got home, my dad saw that the toy car was broken. My mom said that he must take it back to the shop because he had bought a cat in the bag.]
-

-
- 19(a) *Iemand oor die kole haal.*
[Haul somebody over the coals.]
<Reprimand someone.>
- 19(b) *Jannie skop aspris vir Sarel op die been. Die onderwyser sien dit, toe het hy Jannie oor die kole gehaal.*
[Johnny kicked Pieter on purpose. The teacher saw this and hauled Johnny over the coals.]
-
- 20(a) *Iets van die hand sit.*
[To put something on the hand.]
<To sell something.>
- 20(b) *My pa het twee fietse gehad toe besluit hy om een van die hand te sit.*
[My dad had two bicycles and he decided to put one on the hand.]
-
- 21(a) *Hy eet alles vir soetkoek op.*
[He eats everything up like sweet cake.]
<He is gullible.>
- 21(b) *As jy vir Jannie sê dat koeie kan vlieg sal hy dit vir soetkoek op eet.*
[If you told Johnny that cows can fly, he would eat it up like sweet cake.]
-
- 22(a) *Lekker is maar 'n vinger lank.*
[Something that is nice is only as long as your finger.]
<When one is enjoying something, time passes very quickly.>
- 22(b) *Betty het 'n heerlike tyd by haar vriendin se partytjie gehad, maar toe moes sy huis toe gaan. Betty besef lekker is maar 'n vinger lank.*
[Betty had a lovely time at her friend's party, but then it was time to go home. Betty realised that something that is nice is only as long as your finger.]
-
- 23(a) *Die koeël is deur die kerk.*
[The bullet is through the church.]
<Damage has been done. Something is over and cannot be fixed.>
- 23(b) *Eendag was my broer kwaad. Toe breek hy aspris my ma se mooiste blompot. Toe voel hy sleg en sê vir my ma dat hy dit wil reg maak. Toe se my ma: 'Die koeël is deur die kerk'.*
[One day my brother was cross and on purpose he broke my mom's favourite pot plant. Then he felt bad and wanted to fix it. Then my mom said: 'The bullet is through the church'.]
-
- 24(a) *Die huis staan in ligte laaie.*
[The house stands in light drawers.]
<The house is on fire.>
- 24(b) *Die Smit-familie het gaan uiteet. Oppad terug huis toe, sien hulle brandweerwaens in hulle straat. 'Wat gaan aan?' vra mev Smit. 'Kyk', sê Mnr Smit, 'ons huis staan in ligte laaie!'*
[The Smit family went to eat out. When they came home they saw fire engines in their street. 'What's going on?' asked Mrs Smit. 'Look' said Mr Smit, our house is standing in 'light drawers!']
-
- 25(a) *Aan iemand se lippe te hang.*
[To hang on somebody's lips.]
<To listen attentively.>
- 25(b) *Die juffrou lees 'n baie opwindende storie vir die kinders en hulle hang aan haar lippe.*
[The teacher is reading a very exciting story to the children and they hang on her lips.]
-

Similes

- 1 *lets is so groen soos ... gras.*
[Something is as green as ... grass.]
- 2 *lets is so rooi soos ... bloed.*
[Something is as red as ... blood.]
- 3 *lets is so stil soos 'n ... muis.*
[Something is as quiet as a ... mouse.]
- 4 *lets is so wit soos ... sneeu/ wolke.*
[Something is as white as ... snow/clouds.]
- 5 *lets is so stadig soos 'n ... skilpad.*
[Something is as slow as a ... tortoise.]
- 6 *lets is so koud soos ... ys.*
[Something is as cold as ... ice.]
- 7 *lets is so maer soos 'n ... kraai.*
[Something is as thin as a ... crow.]
- 8 *lets is so lig soos 'n ... veer.*
[Something is as light as a ... feather.]
- 9 *lets is so blind soos 'n ... mol.*
[Something is as blind as a ... mole.]
- 10 *lets is so glad soos ... seep.*
[Something is as smooth as ... soap.]
- 11 *lets is so dood soos 'n ... mossie.*
[Something is as dead as a ... sparrow.]
- 12 *lets is so vinnig soos ... blits.*
[Something is as fast as ... lightning.]
- 13 *lets is so sterk soos 'n ... leeu.*
[Something is as strong as a ... lion.]
- 14 *lets is so siek soos 'n ... hond.*
[Something is as sick as a ... dog.]
- 15 *lets is so vry soos 'n ... voël.*
[Something is as free as a ... bird.]
- 16 *lets is so lelik soos die ... nag.*
[Something is as ugly as the ... night.]
- 17 *lets is so taai soos 'n ... rattel.*
[Something is as tough as a ... honey-badger (tough as leather/nails).]
- 18 *lets het weggeraak soos 'n ... speld.*
[Something went missing like a ... needle.]
- 19 *lets waggel soos 'n ... eend.*
[Something waddles like a ... duck.]
- 20 *Hulle baklei soos ... kat en hond.*
[They fight like ... cat and dog.]
- 21 *Hulle het geld soos ... bossies.*
[They have money like ... bushes.]
- 22 *lets pronk soos 'n ... pou.*
[Something shows off like a ... peacock.]
- 23 *lets is so mak soos 'n ... hond/ lam.*
[Something is as tame as a ... dog/ lamb.]
- 24 *lets bewe soos 'n ... riet.*
[Something quivers like a ... reed.]
- 25 *lets is so doof soos 'n ... kwartel.*
[Something is as deaf as a ... quail.]

Appendix B

Adult ratings were all based on a scale of 1 (easy) to 5 (difficult).

(a) Idiomatic phrases (no context provided)

(b) Idioms in context

(L) Literal interpretation

(T) Transparent

(O) Opaque

(*) Answer unanimous among all six participants

Table 6: Opacity and transparency; adult ratings and participants' experiences

Idiom no	Adult ratings	SLI	AFR	ENG	Matches in all 3 groups
1a	2	L	L		
1b	2			T	
2a	3	O			
2b	2	O		T	
3a	5	O*	O*	O*	O
3b	2	T	T		
4a	2			T	
4b	2	T	T	T	T
5a	5	O	O	O*	O
5b	2				
6a	4	L			
6b	2				
7a	3	O		O	
7b	1				
8a	3	L		O	
8b	2			O	
9a	1	L		L	
9b	1				
10a	4	O	L	O	
10b	2		T	T	
11a	5	O	L	L	
11b	3			L	
12a	3			T	
12b	2				
13a	3	L		O	
13b	1				
14a	4	O*	O	O	O
14b	2	T	T	T	T
15a	5			O	
15b	1	T	T	T	T
16a	5	O		O	
16b	2				
17a	4	O*		O	
17b	3			T	
18a	5	O	O	O	O
18b	2			L	
19a	5	O*		O	
19b	2	T		T	
20a	4	O*		O	
20b	2		T		
21a	3	L	L	L	L
21b	2	O			
22a	5	O	O		

Table 6: Continued

Idiom no	Adult ratings	SLI	AFR	ENG	Matches in all 3 groups
22b	2				
23a	3			O	
23b	2	T	T	T	T
24a	5	O	O	O	O
24b	2		T	T	
25a	4	O		O	
25b	2		T	T	
Totals		SLI	AFR	ENG	Matches
Opaque (a)		12	6	17	4
Opaque (b)		1	0	2	0
Transparent (a)		0	0	2	0
Transparent (b)		6	9	10	4
Literal (a)		6	4	3	1
Literal (b)		0	0	1	0