Developing an Observational Assessment for Evaluating the Sinovuyo Caring Families Parent Training Programme

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Abstract

Child maltreatment is a prevalent problem in low and middle income countries like South Africa. Since very few evidence-based interventions are implemented in these regions, a new parenting programme, the Sinovuyo Caring Families Programme, was developed. The programme aimed to improve parent-child relationships, reduce child behavioural problems, and, ultimately, prevent child maltreatment in the peri-urban regions of Cape Town. Both self-report and observational measures were used to assess the outcomes of the programme. Observational measures are particularly essential because they contribute to the accurate identification of changes in behaviour (parent self-report is a weak measure of change). This study outlines the development of a new observational assessment tool, known as the Sinovuyo Observational Coding System (SOCS), which will be used to code the observational data gathered from the intervention trial. The SOCS was developed to provide a valid and reliable means of coding the unique behavioural categories that the programme aimed to address. These categories include 'negative verbals' (e.g., telling the child not to do something), 'positive verbals' (e.g., statements of affection) and 'positive physicals' (e.g., hugs and kisses), positive child behaviours (e.g. compliance) and 'child deviance (e.g. non-compliance). The reliability of the SOCS was evaluated using correlation measurements which determined the degree to which coders could establish intra and inter-rater reliability. Inter-rater reliability was established between two coders. Validity was also established using the coding results of one of the two coders/raters. In light of these results, it is clear that the SOCS is a promising tool that will accurately measure the outcomes generated by the Sinovuyo Caring Families Programme.

Key words: Inter-rater reliability; intra-rater reliability; valid; observational assessment; Sinovuyo Observational Coding System (SOCS)

Contents

Introduction

Child maltreatment is prevalent in low-and-middle-income countries (Waldfogel, 2005). Studies show that it has strong, long-lasting, negative effects on the brain structure, mental health, social functioning and life expectancy of the children who are subjected to it (Mikton & Butchart, 2009). To reduce the prevalence and effects of child maltreatment, evidence-based interventions are essential (Mikton & Butchart, 2009). Unfortunately, few evidence-based interventions are implemented in low and middle income regions (Beardshaw, 2006; Mikton & Butchart, 2009). In light of this problem, more child-maltreatment-focused interventions need to be developed in the regions, and these new interventions need reliable and valid evidences that will show the degree to which they are efficient (Mikton & Butchart, 2009).

Intervening through parent education/training

Parent education/training is considered to be an effective, group implemented method for reducing the risk of child maltreatment because it acknowledges the important role that parents play in the development of the child (Mikton & Butchart, 2009; Turner, Richards, & Sanders, 2007). Examples of effective and prominent parent training programmes include the Triple P- Positive Parenting Programme (Sanders, 1999) and Webster-Stratton's Incredible Years Programme (Webster-Stratton, 2001). While effective, Triple P is mainly established in high income countries and both programmes are costly to implement (Mikton, 2012). Since many interventions like the Triple P and Webster-Stratton's Incredible Years Programme are not easy to implement in low and middle income regions because of their associated expenses, a new cost-effective parent training intervention, the Sinovuyo Caring Families Programme, was piloted in a peri-urban region in Cape Town. Given that the intervention is new, it requires evidence to indicate the degree to which it is effective.

Evidence based interventions need evidence: self-report and behaviour observation

Evaluating the effectiveness of parent training programmes often relies on the self-report of parents about their own behaviours towards their children. Self-reported information is acquired using tools like the Eyberg Child Behaviour Inventory (ECBI) (Boggs, Eyberg, & Reynolds, 1990), the Parent-Child Conflict Tactics Scale (PCCTS) (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998), and the Parenting Young Children Problem scale

(PARYC) (McEachern et al., 2012). The ECBI is a parenting measure that rates conduct problem children between the ages two and seventeen (Boggs et al., 1990). Parents rate how often a behaviour occurs and the sum of the scores they produce results in the intensity score. The Parent-Child Conflict Tactics Scale is a version of the Conflict Tactics Scale that focuses on the behaviour of the parent (Straus et al., 1998). The Parenting Young Children Problem scale is a self-report measure that assesses parenting behaviours that are relevant for caregivers of young children (McEachern et al., 2012).

In standardised conditions, self-report through these tools is expected to produce accurate and truthful results (Del Boca & Noll, 2000; Siegel, 2009). Regardless of this, it is criticized for having systematic biases that are connected to intervention-outcome expectations of the parent (Aspland & Gardner, 2003). That is, parents will often report under- or over-estimated results that they expect an intervention to fulfil regardless of whether or not the intervention has fulfilled these expectations. These parental expectations are generally influenced by the stated aims of the intervention. Overall, self-report is limited in that the subjective reports it produces may not be valid enough for accurate interpretation (Aronson, 1990).

Given that self-report is weak alone, a complementary means of information acquisition is needed. Behaviour observation is a useful and commonly used complementary means of information attainment (Margolin, et. al, 1998). Behaviour observation has been found to powerfully capture data for psychosocial interventions (Snyder, et. al, 2006). It is powerful because parental expectations of intervention outcomes do not distort the information it produces (Aspland & Gardner, 2003). It provides the researcher with a rich set of information that allows for the accurate analysis and interpretation of intervention efficacy (Eames et al., 2008). It has successfully contributed to proving the efficacy of programmes like the Webster-Stratton's Incredible Years Programme (Jones, Daley, Hutchings, Bywater, & Eames, 2008) and the Triple P- Positive Parenting Programme (Sanders et al., 2012). Since parenting that involves ineffectual commands and harsh punishment can contribute to the perpetuation of child maltreatment, parenting programmes like the Webster Stratton's Incredible Years Programme tend to look out for them through behaviour observation so that they know if the behaviour has been reduced following the intervention (Eames et al., 2008). Thus the interventions do not rely on parental self-report alone because self-report is susceptible to influences of social desirability, particularly on these rather stigmatised behaviours.

Observational Assessments

The observational data that are acquired through behaviour observation are documented using observational assessments (coding systems). Observational assessments are used to summarise observed data for the simplified analysis and interpretation of the parent-child interactions as they unfold (Wilson & MacLean, 2011). There are several existing observational assessment schedules that are used for analysing and interpreting parent-child interaction. Some examples include the Home Observation for Measurement of the Environment (HOME) (Totsika & Sylva, 2004) the Dyadic Parent-Child Interaction Scale (DPCIS) (Robinson & Eyberg, 1981).

Home Observation for Measurement of the Environment (HOME).

The HOME is a descriptive profile that produces a methodical assessment of the caring environs in which the child is raised (Totsika & Sylva, 2004). While it was initially designed for screening children who were at risk for developing mental health problems, the tool has also been used to evaluate the efficacy of intervention schedules (Totsika & Sylva, 2004). For example, the HOME has been used in interventions like the Infant Health and Development Program (Linver, Brooks-Gunn, & Cabrera, 2004). There are two versions of the HOME; namely the Infant-Toddler HOME inventory (ages naught to three) and the Early Childhood HOME inventory (ages three to six) (Totsika & Sylva, 2004). The first version codes 45 different behaviours which are divided into six categories. The second codes 55 behaviours and these behaviours are separated into eight categories. This system has an intra-rater reliability of 90% and an inter-rater reliability that ranges from 44% to 89%. Although the inter-rater reliability of the tool reaches 89%, what is concerning is that it can have an inter-rater reliability that is as low as 44%. In Addition to this, a major problem with this observational system is that it does not have a standardised procedure of administration (Totsika & Sylva, 2004).

The Dyadic Parent-Child Interaction Scale.

An observational assessment tool that has better inter-reliability than the HOME is the Dyadic Parent Child Interaction Scale. This observational system has been used to code behaviours and assess the efficacy levels of interventions like the Parent-Child Interaction Therapy and Enhanced Parent-Child Interaction Therapy (Chaffin et al., 2004). It is a highly detailed tool that has three behavioural categories which consist of twenty five parent behaviours and eleven child behaviours. Examples of these behavioural categories include parent behaviours (e.g. direct commands, indirect commands), child deviance (e.g.

cry/whine/yell, smart talk), child responses to commands (e.g. compliance, non-compliance) and parent and child affect (e.g. parent positive affect, verbal and non-verbal child positive affect). The tool has an inter-observer reliability of 91% and 92% for parent and child behaviours respectively (Aspland & Gardener, 2003). The high inter-observer reliability of this observational system is considered very good or excellent (because it is above 90%) and makes the Dyadic Parent-Child Interaction Scale appear to be a powerful observational tool.

Although seemingly powerful, the Dyadic Parent-Child Interaction Scale is not perfect. One weakness of the tool is that its inter-rater reliability was obtained using only two observers. More observers should be used if the tool is to be considered to be really reliable (Aronson, 1990). A second problem with this tool is that it uses the interval time sampling method to code behaviours. In interval time sampling, the coder is given 'observing time' and 'recording time' (Eames et al., 2008). While this method is easier than its alternative (the continuous time sampling method where all parent-child interactions/behaviours are observed and coded continuously), it is criticised for not being able to provide reliable and rich information about parent-child interactions. A third problem is that the tool is too detailed, having up to 36 behaviours that it codes and therefore requiring up to 40 hours to train its coders (Martin et al., 2010). It is therefore complex and difficult to use in practice.

Summary

Overall, what this review has emphasised is the need for a new reliable observational assessment. There are few evidence-based parent training programmes in low-and-middle-income countries and many which are developed anew because Western programmes are not cost effective and/or not generalizable (Mikton, 2012). However, like all interventions, to be deemed effective, the programmes need evidence. This evidence can be provided by observational assessments via observational data. While the observational assessments that have been referred to in this review are strong in some areas (e.g. inter-reliability), they also have certain limitations. For example, the HOME does not have a standardised procedure of administration. Furthermore, although the Dyadic Parent-Child Interaction Scale is potentially the most powerful observational tool mentioned here, it uses interval time sampling methods to code parent-child interactions and is too detailed to use in practice. In order for it to be utilised, it needs to be simplified and modified to suit the needs of the new intervention being implemented by the Sinovuyo Caring Families Programme.

Aims

In order to understand the aims of this study, it is important to first note that it formed part of a larger project, the pilot-test of the Sinovuyo Caring Families Programme. The programme, implemented in a peri-urban Cape Town region, used twelve sessions to educate parents on how to positively interact with their children and encourage their children to do the same. It also teaches parents how to manage child misbehaviour without harming the child, through ignoring, distracting or redirecting the attention of the child. The programme sought to develop an observational assessment that could complement parent self-report in evaluating intervention efficacy. The observational assessment that was of particular interest to the programme was the Dyadic Parent-Child Interaction scale. Though useful, the original scale was not completely suitable for evaluating Sinovuyo Caring Families Programme. In its original form, the scale was highly detailed, and included behavioural categories that were not consistent with the categories that the Sinovuyo Caring Families Programme is interested in reducing and/or improving (examples of behaviours that the programme would like to improve are provided in the methods section of this thesis).

Thus the aim of study was to construct a reliable and valid observational assessment tool that was based on the Dyadic Parent-Child Interaction scale that would be suitable for the Sinovuyo Caring Families Programme. The construction of this assessment was expected to be able to produce relevant and accurate information about parent training programmes like the Sinovuyo Caring Families Programme.

Methods

Setting and participants.

There were two groups of participants in this study. The first group was a group of 68 participants who were enrolled in a pilot randomised trial intervention administered by the Sinovuyo Caring Families Programme. These participants were isiXhosa-speaking parents from peri-urban settlements in greater Cape Town. In order to be recruited as a participant, one had to be above eighteen years of age. Secondly, the person had to be the primary care-giver/guardian of a child (three to eight years old) who met the criteria for clinical intervention on the Eyberg Child Behaviour Inventory 'problem' scale. Third, the parent had to be in the same house as the child for at least four nights a week. The participants were also asked to sign a form of informed consent prior to participation (see *Appendix A*). These participants were important to the study because they provided the research team with the observational data (in the form of parent-child interactions) that were randomly selected for observation and needed for assessing the reliability and validity of the new observational system.

This observational data was to be used by the second group of participants (or research assistants) for coding parent-child behaviours. While there were initially ten participants, two were removed because they failed to uphold the informal yet important contractual promises they made when accepting the position (namely, attending the first day of training and submitting all material needed for this study). As a result of attrition, only eight participants remained throughout this study. The assistants were recruited through advertisements at the University of Cape Town. The recruitment criteria were developed with the guidance of professionals who are experienced in construction of observational systems (J. Hutchings, personal communication, August 22, 2013). Thus the participants who were selected as research assistants were undergraduate science students who understood and fluently spoke isiXhosa. All of the assistants were paid for the coding work they did. They were asked to sign a confidentiality form (*see Appendix B)* so that they did not allow people outside of the Sinovuyo Caring Families Programme team to access the observational data.

Materials

1. **Video recorders.**

Mobile phone video recording technologies were selected as tools for collecting observational data. Since the quantitative data for the larger trial was being collected on mobile phones, the fieldwork staff therefore had easy access to them. Through these technologies, each parent was recorded interacting with his/her child for approximately twenty minutes. In those twenty minutes, parents were instructed to follow a script for interacting with the child (*see Appendix C*) designed by the Sinovuyo Caring Families Programme. Intervention scripts are important because they can standardise the observational data without restricting the natural/normal parent-child interaction styles. The Sinovuyo Caring Families Programme intervention, parents were required to follow a script that required the parents to do the following: (a) participate in child led play for ten minutes, (b) instruct the child to tidy up within five minutes, giving the child an opportunity to comply or not comply to the parent's instruction (c) and eat the meal with the child for the final five minutes.

2. **Dyadic Parent-Child Interaction Scale (modified).**

The Dyadic Parent Child Interaction Scale was used as the framework for the new coding system.

Procedure

The procedure involved the following steps:

1. Reviewing the Dyadic Parent-Child Interaction Scale and developing a system that was appropriate for assessing the outcomes of the Sinovuyo Caring Families Programme.

2. Coding the observed behaviours (two observers) and checking for intra-rater reliability to find the criterion coder.

3. Checking for the inter-rater reliability of the two coders.

4. Training coders.
5. Checking for inter-rater reliability between coders and criterion coder.

6. Assessing the validity of the observational tool.

1. Reviewing the Dyadic Parent-Child Interaction Scale and developing a system that is appropriate for assessing the Sinovuyo Caring Families Programme outcomes.

The Dyadic Parent-Child Interaction scale (DPCIS) was reviewed in consultation with the Programme's team of experts. In the review, parent and child behaviours that were used by the DPCIS were either excluded or modified/collapsed to suit the needs of the Sinovuyo Caring Families Programme. Exclusion occurred if the programme had no interest in the DPCIS behaviour. Examples of behaviours that were not relevant to the Sinovuyo Caring Families in include 'statements', 'questions', 'descriptive questions' and 'critical statements marital'. An example of DPCIS behaviours that were modified/collapsed to suit the needs of the programme include; 'critical statements' and 'negative commands'. These two behaviours were collapsed into one behavioural category called 'negative verbals' in the new coding system (*see Table 1*). These acts of exclusion and collapse were implemented on a range of other DPCIS behaviours in consultation with the Sinovuyo Caring Families Programme's team of experts. Collapsing was important because it reduced the complexity of the observational system without excluding behavioural categories that were important to the Sinovuyo Caring Families Programme. The final product was a new and more simplified version of the DPCIS called the Sinovuyo Observational Coding System (SOCS) (*see Appendix D*). Example of how Dyadic Parent Child Interaction Scale behaviours were eliminated and/or collapsed with one-another is presented in the table (*see Table 1*) below.

Table 1

Development of Sinovuyo Observational Coding System					
DPCIS behaviours	eliminated behaviours	collapsed behaviours	SOCS behaviour	Parent	child
Grandma's rule		Warning	Consequence	√	
Warning		Warning	Consequence	√	
Acknowledgement	Acknowledgement				
Information description	Information description				
Behavioural description	Behavioural description				
Descriptive,	Descriptive,				

Reflective and normal statements	Reflective and normal statements				
Descriptive, Reflective and normal questions	Descriptive, Reflective and normal questions				
Irrelevant verbalisation	Irrelevant verbalisation				
Unlabelled praise		Unlabelled praise	Positive verbals	√	
Labelled praise		Labelled praise	Positive verbals	√	
Indirect command		Indirect command	Negative verbals	√	
Direct command		Direct command	Positive commands	√	
Criticism		Criticism	Negative verbal	√	√
Smart talk		Smart talk/cheeky remarks	Child negative verbal		√
Play talk	Play talk				
Laugh		Laugh	Positive non-verbal	√	√
Whine		Whine	Child negative non-verbal		√
Yell		Yell	Child negative non-verbal		√
Physical positive		Physical positive	Physical positive	√	√
Destructive		Destructive	physical negative		√

Physical negative		Physical negative	Physical negative	√	√
Physical intrusion		Physical intrusion	Physical negative	√	√
Compliance		Compliance	Compliance (child)		√
Non-compliance		Non-compliance	Non-compliance		√
No opportunity for compliance		No opportunity for compliance	Negative verbal	√	
Answer	Answer				
No answer	No answer				
No opportunity for answer		No opportunity for answer	Negative verbal	√	
Critical statement marital	Critical statement marital				
Parent Ignore	Parent ignore				

2. Coding of observed behaviours (by two raters) and checking for intra-rater reliability to find the criterion coder.

The Sinovuyo Observational Coding System is based on five primary categories. These categories consist of sub-categories or behaviours that the Sinovuyo Caring Families Programme is interested in improving or eradicating. They categories include (1) Positive parenting, (2) Effective parenting (3) Negative parenting, (4) Positive child behaviours and (5) Negative child behaviours.

2.1. Positive parenting.

Positive parenting refers to the progressive parent behaviours that are directed towards the child. For the purposes of the Sinovuyo Caring Families Programme, these behaviours are *positive-verbals* and *positive non-verbals*. *Positive verbals* are constructive statements that express approval, appreciation or positive acknowledgement of child behaviours, attributes and/or products. *Positive non-verbals* are intentional non-verbal positive expressions and/or physical contact that display positive acknowledgement of the child by the parent. Examples

of *positive non-verbals* include smiles, hugs, lifting the child, encouragingly clapping hands in support of the child and so on.

2.2. Effective parenting.

The second category is effective parenting. Effective parenting refers to the efficient parental behaviours that contribute to productive child behaviours. These behaviours include *positive commands* and *consequences*. *Positive commands* are orders, demands and/or directions that clearly describe what the child must do. *Consequences* are rewards that are promised if the child complies with a *positive command* given by the parent.

2.3. Negative parenting.

Third is negative parenting. Negative parenting refers to parenting behaviours which research shows often result in negative child behaviours (Morris et al., 2002). These behaviours include *negative verbals*, *indirect commands* and *negative physical*. A *negative verbal* is a critical statement, nasty command and/or shout that is directed at the child. It also refers to commands that tell the child what not to do. An *indirect verbal* is an order, demand, or direction given by the parent who seeks out a behavioural response from the child. However, the indirect command is not always a clear parental instruction. Thus the child may not always know how to respond appropriately. A *negative physical* is a parent-initiated touch on the child that inflicts pain, restrains, and forces or pulls the child. It can result in the child responding in a manner that indicates that s/he has been negatively affected (e.g. crying or wincing).

2.4. Positive child behaviours.

The fourth behavioural category is positive child behaviours. These behaviours are commendable or favourable child behaviours that include *compliance*, *child positive verbals*, *child positive non-verbals* and *child physical positives*. *Compliance* is a behaviour that occurs when the child obeys, begins to obey or attempts to obey a command given by a parent. *Child positive verbals* are positive evaluative or expressive verbalisations of pleasure, warmth, enthusiasm or gratitude. They are presented by the child and directed towards the parent or to the self. For example, saying "I love you" to the parent would count as a *child positive verbal*. An example of *child positive verbal* directed to the self would be if the child said, "I have done a good job putting the puzzle together". *Child positive non-verbals* are non-verbal expressions of enjoyment, warmth, and enthusiasm. These behaviours are also made by the child and directed to the parent. Examples include smiles and laughter. *Child physical*

positives are explicit physical acts of endearment that are initiated by the child. They refer to hugs, kisses sitting on the parent's lap and so forth.

2.5. Child deviance.

The final category is child deviance. Child deviance refers to undesirable child behaviours. These behaviours include *noncompliance*, *child negative verbals* and *child negative physicals*. *Non-compliance* occurs when the child fails to obey a positive or indirect command that is given by the parent. *Child negative verbals* are cheeky, disrespectful verbal statements that are presented by the child. They also include crying and whining. *Child negative physicals* refer to behavioural instances where the child destroys, damages, or attempts to damage any object, person (including himself/herself) or animal.

Determining the criterion coder through intra-reliability assessment.

To determine if the observational schedule was reliable, two observers/raters coded the behaviours mentioned above and checked for intra-rater reliability. Each coder/rater had to code the same ten videos twice. The second phase of coding had to be done at least seven days after the first phase. This was done to ensure that the coders had as little recollection of their first phase codes as possible. The measurements used to assess if intra-reliability was established were the Pearson's correlation coefficient and the intra-class correlation coefficient. Both measurements are important to this study because they can verify the results of the other (Aspland & Gardner, 2003; Margolin et al., 1998). However, it should be recognised that the intra-class correlation coefficient is considered to be a better measure than Pearson's *r* because it can take into account the overall mean of behaviours (Margolin et al., 1998). The coder with the highest intra-rater reliability was to become the criterion coder. This meant that s/he would set the scoring benchmark for the recruited raters/coders in this study. Since s/he set the benchmark, s/he was also expected to train the new coders.

3. Checking for the inter-rater reliability of the two coders.

However, before new coders could be trained, these two coders had to show that the SOCS could produce reliable and valid parent-child interaction results when used by two independent raters coding the same interactions. Thus the two raters coded the same ten videos each. Inter-rater reliability was assessed using the same measurements that assessed intra-rater reliability.

4. Training coders.

In the case that inter-rater reliability could be established using the two coders, training of new coders could commence. These new coders were important to the observational assessment development task because they could further prove the degree to which the observational assessment's reliability could be assessed. These coders were also important because they would assist with the rating of the large number of videos that were generated by the research team. Thus, ten new raters/observers were recruited for training (of which only eight remained throughout the study). These observers were trained for six to eight hours over a period of three days. During the training sessions, they were taught how and when to code using the guidelines (*see Appendix C*). They were also given practical examples from the parent-child interaction videos that they were asked to code in class and compare with one another. Once training was completed, the assistants were asked to code the same five videos. Having the same video was important because the assistants' coding could be compared with the criterion coder.

5. Checking for inter-rater reliability.

Once the videos had been coded by the trained observers, their ratings were analysed. The aim of the analysis was to determine if there was any inter-rater reliability between the criterion coder and each trained observer. The observers who had the worst inter-observer reliability relationship scores were to be released from their coding duties because of their low scores. Those that had the highest levels of inter-rater reliability were to be asked to remain for further coding.

If the inter-rater reliability between the criterion coder and the majority of the trained raters is too low, then the raters would have to undergo more hours of training before inter-rater reliability could be assessed again. This is suggested in light of the many training hours that were used by other reliable and valid observational systems. For example, the Teacher-Pupil Observational Tool used about 23 hours to train coders who had had previous experience with assessment tools (Martin et al., 2010). The architects of the tool stated that as many as 30 to 40 hours would be required for coders who had never had any experience with coding systems.

Should the additional training hours be required, the observers will be asked to comment on the things they found made coding difficult, and the weaknesses the identified in

the coding system. If there are any identified weaknesses, the coders will be encouraged to suggest possible solutions to those problems.

6. Assessing the validity of the observational tool.

Once the reliability of the SOCS was established, its concurrent validity was examined by correlating it with the behavioural outcomes reported by the Eyberg Child Behaviour Inventory (ECBI) (Boggs et al., 1990), the Parent-Child Conflict Tactics Scale (PCCTS) (Straus et al., 1998) and the Parenting Young Children Problem scale (PARYC) (McEachern et al., 2012). Pearson's correlation matrix was used to compare the SOCS with these three scales. Two correlational analyses using SOCS were run. One was using the coded outcomes of coder A and the other analysis was using the outcomes established by coder B.

Ethical Considerations

This study was part of a larger study for which ethical approval was granted by the Ethics Committee of the Psychology Department from the University of Cape Town (*see Appendix E*).

Results

Finding the criterion coder through intra-rater reliability.

Once the two initial coders had each coded a sample of ten videos twice, the relationship of the scores between the first (observation 1) and second (observation 2) coding phase was assessed through Pearson's correlation (*r*). This was to measure intra-rater reliability. While both were able to establish significant correlations between their first and second coding of videos (*see Table 2*), Coder B ($p < 0.01$) had better intra-rater reliability than coder A ($p < 0.01$). To verify the results, intra-rater reliability was also assessed using the intra-class correlation coefficient (*see Table 3*). Although the scores were different from the ones presented by Pearson's (*r*) correlation measure, it is important to note that all interclass results were significant ($p < 0.05$) and coder B still had higher scores. Thus coder B could be selected as the criterion coder.

Table 2

Finding the criterion coder with Person's correlation coefficient.

CODER	Positive Parenting	Effective Parent	Negative Parenting	Child pos. Behaviour	Child Deviance
A	.95**	.83**	.96**	.98**	.87**
B	.92**	.97**	.85**	.98**	.94**

**. $p < 0.01$ level (2-tailed).

Table 3

Finding the criterion coder with the Intra-class correlation coefficient.

CODER	Positive Parenting	Effective Parent	Negative Parenting	Child pos. Behaviour	Child Deviance
A	.97 **	.90**	.75*	.93**	.99c**
B	.96**	.98**	.86**	.99**	.96**

*. $p <$ 0.05 level (2-tailed).

**. $p < 0.01$ level (2-tailed).

Inter-rater reliability of coder A and coder B

According to Pearson's *r* (*see Table 4*) coder A and B were able to establish inter-reliability for all the behavioural categories. An inter-observer reliability of 70% is considered to be good (Aspland & Gardner, 2003). Although good inter-rater reliability was not achieved for child positive behaviours (r=0.66, p<0.05), the results were nevertheless significant and overall, acceptable. The intra-class correlation coefficient (*see Table 5*) produced better results that indicated inter-rater reliability was established for all the behavioural categories. Thus both the Pearson's *r* and intra-class correlation coefficient indicated that coder A and B had established inter-rater reliability.

Table 4

Inter-rater reliability measurement of Coder A and B. (Pearson's correlation coefficient.)

Positive Parenting	Effective Parent	Negative Parenting	Child pos. Behaviour	Child Deviance
0.94**	0.80**	0.85**	0.66*	0.77*

*. $p < 0.05$ level (2-tailed).

**. $p < 0.01$ level (2-tailed).

Table 5

Inter-rater reliability measurement of Coder A and B. (Intra-class correlation coefficient.)

Positive Parenting	Effective Parent	Negative Parenting	Child pos. Behaviour	Child Deviance
0.97**	0.90**	0.93**	0.74*	0.74*

*. $p < 0.05$ level (2-tailed).

**. $p < 0.01$ level (2-tailed).

Inter-rater of new/trained coders reliability: After first set of training sessions

According to Pearson's correlation coefficient, the inter-rater reliability results between the research assistants and the criterion were mostly not significant with the exception of a few findings (see *Table 6*). RA 8 had the best results with three of the observed behaviours having significant and highly positive correlations with the criterion

coder (e.g. positive parenting [$r = 0.91$, $p < 0.05$]; effective parenting [$r = 0.936$, $p < 0.05$]; child positive behaviours [$r = 0.923$, $p < 0.05$]).

The intra-class correlation coefficient showed a different trend in the result (*see Table 7*). According to this measure, RA 2 (and not RA 8) had the best inter-rater reliability with the criterion coder. The research assistant and the coder were able to establish reliability that was statistically significant on three behaviours (e.g. positive parenting [$r = 0.959$, $p < 0.01$]; effective parenting [$r = 0.874$, $p < 0.05$]; child positive behaviours[$r = 0.873$, $p < 0.05$]).

Table 6

Criterion coder vs. research assistants (RA). (Person's correlation coefficient.)

RA	Positive Parenting	Effective Parenting	Negative Parenting	Child pos. Behaviour	Child Deviance
1	0.6	0.79	0.35	0.80	0.10
2	0.92*	0.85	0.42	0.87	0.76
3	0.86	0.94*	0.16	0.64	0.41
4	0.26	0.81	0.83	0.82	0.88*
5	0.38	0.87	0.85	0.84	0.99**
6	-0.56	0.98**	0.32	0.51	-0.068
7	0.09	0.76	0.23	0.87	0.96*
8	0.91*	0.94*	0.01	0.92*	0.22

*. $p < 0.05$ level (2-tailed).

**. $p < 0.01$ level (2-tailed).

Table 7

Criterion coder vs. Research assistants. (Intra-class correlation coefficient.)

RA	Positive Parenting	Effective Parenting	Negative Parenting	Child pos. Behaviour	Child Deviance
1	0.58	0.65	0.84	0.25	0.02
2	0.96 **	0.87*	0.54	0.87*	0.50
3	0.89*	0.96**	0.16	0.50	0.57
4	0.57	0.39	0.89*	0.58	0.96**
5	0.53	0.66	0.85*	0.92*	0.52

6	-5.27	0.86**	0.36	0.67	-0.04
7	0.15	0.83*	0.28	0.50	0.59
8	0.67	0.85*	0.01	0.97**	0.07

*. $p < 0.05$ level (2-tailed).

**. $p < 0.01$ level (2-tailed).

In a general sense, both Pearson's correlation coefficient and the intra-class correlation coefficient measure suggested that the research assistants needed to be re-trained because a large majority were not significantly reliable with the criterion coder. Since all the assistants had problems with different behaviours, it was important that the training session re-teach and equally emphasise what all the parent and child behaviours entailed.

Inter-rater reliability: after the second set of training sessions

The results produced by Pearson's correlation coefficient (*see Table 8*) indicated that some of the research assistants correlated less with the criterion coder after the second phase of training. Although the results of the research assistants who depreciated the most were insignificantly different from their previous results?, it is still important to note that they produced negative correlations with the criterion coder for the majority of the behavioural categories (e.g. RA1 for 'effective parenting' [$r = -0.3$, $p > 0.5$, 'negative parenting' [$r = -0.05$, $p > 0.05$] and child positive behaviours [$r = -0.24$, $p > 0.05$]; and RA3 for 'negative parenting' [$r = -0.67$, $p > 0.05$], child positive behaviours [$r = -0.26$, $p>0.05$] and child deviance [$r = -0.43$, $p>0.05$]. While RA 1 and RA 2 produced weaker correlations, the rest of the research assistants were able to improve. The most notable improvement was from RA 7 who acquired significantly high positive correlations for positive parenting ($r = 0.88$, $p<0.05$) and child deviance ($r = 0.99$, $p<0.001$). RA 8 was still able to produce the strongest the best correlations for positive parenting ($r = 0.88$, $p < 0.05$), child positive behaviour ($r = 0.98$, $p<0.001$) and child deviance ($r = 0.97$, $p < 0.001$).

Table 8

Criterion coder vs. research assistants (RA). (Person's correlation coefficient.)

RA	Positive Parenting	Effective Parenting	Negative Parenting	Child pos. Behaviour	Child Deviance
1	0.89*	-0.3	-0.05	-0.24	0.67

2	0.87	0.58	0.53	0.27	0.98**
3	0.91*	0.36	-0.67	-0.26	-0.43
4	0.79	0.38	0.86	-0.06	0.95*
5	0.85	0.82	0.62	0.68	0.92*
6	0.75	0.69	0.71	0.38	0.89
7	0.88*	0.41	0.65	0.34	0.99**
8	0.88*	0.48	0.7	0.98**	0.97**

*. $p < 0.05$ level (2-tailed).

**. $p < 0.01$ level (2-tailed).

The intra-class correlation coefficient results (*see Table 9*) indicated that RAs were able to do significantly better in positive parenting (with the exception of RA1 [$r = 0.4$, $p > 0.05$) and RA3[$r = 0.51$, $p > 0.05$]) and child deviance (with the exception if RA1[$r = 0.39$, $p > 0.05$], RA2 [$r = -0.28$, $p > 0.05$] and RA6 [$r = 0.71$, $p > 0.05$]). RA 8 improved the most and correlated best with the criterion coder, acquiring significant and high positive correlations for positive parenting (r=0.92, $p < 0.05$), child positive behaviour ($r = 0.99$, $p < 0.001$) and child deviance ($r = 0.99$, $p < 0.001$).

Table 9

Criterion coder vs. research assistants (RA). (Intra-class correlation coefficient.)

RA	Positive Parenting	Effective Parenting	Negative Parenting	Child pos. Behaviour	Child Deviance
1	0.4	-0.12	-0.06	-0.12	0.39
2	0.89*	0.63	0.59	0.23	0.92*
3	0.51	0.4	-0.24	-0.22	-0.28
4	0.85*	0.54	0.68	-0.11	0.90*
5	0.89*	0.81	0.70	0.78	0.92*
6	0.82*	0.81	0.22	0.42	0.71
7	0.88*	0.14	0.81	0.46	0.84*
8	0.92*	0.51	0.63	0.99**	0.99**

*. $p < 0.05$ level (2-tailed).

**. $p < 0.01$ level (2-tailed).

Both the Pearson's and intra-class correlations indicated that RAs had a difficult time grasping effective parenting and negative parenting. This is indicated by the fact that there was no strong, statistically significant correlation for these behavioural categories ($p > 0.05$). Overall, the results indicated inter-rater reliability could be best established when training hours were increased.

The validity of the observational tool: coder A outcomes

According to the correlation matrix (*see Table 10*), which shows correlations between Coder A's SOCS score and the parent self-report scales, SOCS did not have any behavioural categories that significantly correlated with the Eyberg Child Behaviour Inventory (EBCBI), the Parent-Child Conflict Scale (PCCTST) and the Parenting Young Children Problem scale (PARYC). Based on coder A's ratings, the SOCS has no concurrent validity.

Table 10

Correlation matrix showing to assess validity of observational assessment.CODER A

		Pos.Parenting.A	Eff.Parenting.A	Neg.Parenting.A	Pos.ChildBehav.A	Child.Deviance.A	ECBITotalProbScorePre	ECBITotalFreqScorePre	PCCTSTotalScorePre	PARYCTotalProblemPre	PARYCTotalFrequencyPre
Pos.Parenting.A	Pearson Correlation	1									
	Sig. (2-tailed)										
	N	20									
Eff.Parenting.A	Pearson Correlation	.035	1								
	Sig. (2-tailed)	.883									
	N	20	20								
Neg.Parenting.A	Pearson Correlation	.041	.296	1							
	Sig. (2-tailed)	.865	.204								
	N	20	20	20							
Pos.ChildBehav.A	Pearson Correlation	.175	.580**	.646**	1						
	Sig. (2-tailed)	.460	.007	.002							
	N	20	20	20	20						
Neg.ChildBehav.A	Pearson Correlation	.013	.569**	.338	.230	1					
	Sig. (2-tailed)	.958	.009	.144	.329						
	N	20	20	20	20	20					
ECBITotalProbScorePre	Pearson Correlation	-.220	-.438	-.057	-.338	.024	1				
	Sig. (2-tailed)	.352	.053	.813	.145	.921					
	N	20	20	20	20	20	20				
ECBITotalFreqScorePre	Pearson Correlation	-.034	.114	-.013	-.165	.243	.662**	1			
	Sig. (2-tailed)	.888	.631	.958	.486	.301	.001				
	N	20	20	20	20	20	20	20			
PCCTSTotalScorePre	Pearson Correlation	-.026	-.089	.133	-.084	.001	.650**	.630**	1		
	Sig. (2-tailed)	.915	.709	.575	.725	.997	.002	.003			
	N	20	20	20	20	20	20	20	20		
PARYCTotalProblemPre	Pearson Correlation	.035	-.060	.287	-.114	-.075	.225	.247	.749**	1	
	Sig. (2-tailed)	.883	.802	.220	.633	.754	.339	.294	.000		
	N	20	20	20	20	20	20	20	20	20	
PARYCTotalFrequ	Pearson Correlation	.253	-.289	-.388	-.316	-.279	.131	.190	.070	.049	1

encyPre	Sig. (2-tailed)	.282	.217	.091	.174	.234	.581	.421	.768	.838	
	N	20	20	20	20	20	20	20	20	20	20

*Notes:***. $p < 0.01$ level (2-tailed).

Pos.Parenting.A = (Positive Parening from pretest). Eff.Parenting.A = (Effective Parenting from pretest). Neg.Parenting.A = (Negative Parenting from pretest). Pos.ChildBehav.A = (Child Positve behaviours from pretest). Child.Deviance.A = (Child deviance from pretest); ECBITotalProbScorePre = (Eyberg Child Behaviour Inventory Problem Subscale from Pretest). ECBITotalFreqScorePre = (Eyberg Child Behaviour Inventory Frequency Subscale from Pretest). PCCTSTotalScorePre = (Parent-child conflict tactics scale from pretest). PARYCTotalProblemPre = (Parenting young children problem scale from pretest). PARYCTotalFrequencyPre = (Parenting young children frequency scale from pretest).

The validity of the observational tool: coder B outcomes

According to the correlation matrix (*see Table 11*), when using the results of coder B, positive parenting (pre-test) was able to correlate significantly with the Parenting Young Children Problem scale (PARYCT) ($r = 0.50$, $p < 0.05$). Negative parenting and the Parenting Young Children Problem scale (PARYCT) were approaching significance ($r = 0.39$, $p < 0.088$), which suggested that a larger sample size may have resulted in their having a significant relationship.

Table 11

Correlation matrix showing to assess validity of observational assessment.CODER A

		Pos.Parenting.B	Eff.Parenting.B	Neg.Parenting.B	Pos.ChildBehav.B	Child.Deviance.B	ECBITotalProbScorePre	ECBITotalFreqScorePre	PCCTSTotalScorePre	PARYCTotalProblemPre	PARYCTotalFrequencyPre
Pos.Parenting.B	Pearson Correlation	1									
	Sig. (2-tailed)										
	N	20									
Eff.Parenting.B	Pearson Correlation	.038	1								
	Sig. (2-tailed)	.872									
	N	20	20								
Neg.Parenting.B	Pearson Correlation	.140	.549*	1							
	Sig. (2-tailed)	.556	.012								
	N	20	20	20							
Pos.ChildBehav.B	Pearson Correlation	.021	.563**	.013	1						
	Sig. (2-tailed)	.930	.010	.958							
	N	20	20	20	20						
Neg.ChildBehav.B	Pearson Correlation	-.229	-.041	.262	-.132	1					
	Sig. (2-tailed)	.331	.862	.265	.578						
	N	20	20	20	20	20					
ECBITotalProbScorePre	Pearson Correlation	-.031	-.148	-.095	-.216	.116	1				
	Sig. (2-tailed)	.897	.535	.691	.360	.626					
	N	20	20	20	20	20	20				
ECBITotalFreqScorePre	Pearson Correlation	.181	-.255	.154	-.436	.352	.662**	1			
	Sig. (2-tailed)	.446	.278	.518	.055	.128	.001				
	N	20	20	20	20	20	20	20			
PCCTSTotalScorePre	Pearson Correlation	.287	-.096	.154	-.191	.135	.650**	.630**	1		
	Sig. (2-tailed)	.221	.688	.517	.419	.570	.002	.003			
	N	20	20	20	20	20	20	20	20		
PARYCTotalProblemPre	Pearson Correlation	.230	.143	.391	-.083	.018	.225	.247	.749**	1	
	Sig. (2-tailed)	.330	.546	.088	.727	.941	.339	.294	.000		
	N	20	20	20	20	20	20	20	20	20	
PARYCTotalFrequ	Pearson Correlation	.500*	-.031	.254	-.073	.109	.131	.190	.070	.049	1

encyPre	Sig. (2-tailed)	.025	.896	.280	.760	.647	.581	.421	.768	.838	
	N	20	20	20	20	20	20	20	20	20	20

Notes: *. $p < 0.05$ level (2-tailed). **. $p < 0.01$ level (2-tailed).

Pos.Parenting.B = (Positive Parening from pretest). Eff.Parenting.B = (Effective Parenting from pretest). Neg.Parenting.B = (Negative Parenting from pretest). Pos.ChildBehav.B = (Child Positve behaviours from pretest). Child.Deviance.A = (Child deviance from pretest); ECBITotalProbScorePre = (Eyberg Child Behaviour Inventory Problem Subscale from Pretest). ECBITotalFreqScorePre = (Eyberg Child Behaviour Inventory Frequency Subscale from Pretest). PCCTSTotalScorePre = (Parent-child conflict tactics scale from pretest). PARYCTotalProblemPre = (Parenting young children problem scale from pretest). PARYCTotalFrequencyPre = (Parenting young children frequency scale from pretest).

Discussion

The purpose of this study was to develop and evaluate an observational assessment tool (SOCS) that was designed to suit the needs of the new intervention being implemented by the Sinovuyo Caring Families Programme in a peri-urban region of Cape Town. The results produced from the evaluation of SOCS indicated that it is a promising observational tool.

Evidence of the promising nature of the SOCS was noted when coders A and B established intra-rater and inter-rater reliability. The coder that established the best intra-rater reliability became the criterion coder who set the benchmark for other recruited coders. The recruitment of additional coders (research assistants) was needed to show more evidence on inter-rater reliability and therefore the overall reliability of the SOCS. Although the inter-rater reliability between the criterion coder and the recruited coders was limited to only a few behavioural categories (with the exception of RA 8), it was found that additional hours of training improved their inter-rater reliability. Previous research on the development and evaluation of observational assessments shows that about 23 hours is needed to train experienced observers and more than 30 hours are needed for inexperienced observers (Martin et al., 2010). Each of the research assistants in this study received only eight hours of training. While there was evident improvement in inter-rater reliability of the criterion coder and the research assistants, this was not the case for all the assistants (e. g., RA1 and RA3). This may be because these RAs had a notably reduced work ethic in the second stage of coding. Concurrent validity was assessed using the outcomes of coder A and coder B. Results indicated that it was established with the results of one the coders.

Limitations and future studies

Concurrent validity between the SOCS and the Eyberg Child Behaviour Inventory (EBCBI), the Parent-Child Conflict Scale (PCCTST) and the Parenting Young Children Problem scale (PARYCT) was not established using coder A's coded outcomes. This may be because the scales that the SOCS was compared with are based on self-report. It is possible that parents might not have provided the Sinovuyo Caring Families Programme with accurate information concerning their relationship with their children. Future studies should seek to

correlate the results of the SOCS with the results of tools that are not based on self-report when assessing if it is a valid tool or not.

It is also possible that the small sample size of this study contributed to unfavourable results of concurrent validity. Previous studies have been able to acquire significant correlations (and therefore validity) with large sample sizes ($n > 60$) (Arnold, O'Leary, Wolff, & Acker, 1993; Kochanska & Aksan, 1995). Given that there were cases where the results of this study were approaching significance, it is likely that an increased sample size could result in significant outcomes. It would not be surprising if the results did not converge strongly (strong positive correlations). This is because, many studies that compared observational assessments with self-report systems were only able to produce modest or low convergences (Gardner, 2000). Future studies should explore if a larger sample size does indeed contribute to the establishment of the SOCS' validity.

However, the study did find that concurrent validity in some domains was established because positive parenting (SOCS) and the PARYC significantly correlated when the coded results of coder B were used. Prospect studies should use a third coder to see if concurrent validity can be established again. Although the correlation outcomes did not converge strongly, it must be noted that this is common when observational systems are correlated with self-report systems (Gardner, 2000).

The SOCS is a continuous time-sampling system. Continuous sampling can be demanding because it requires the observer to code all relevant behaviours (Eames et al., 2008). However, in this study, coders were given videos that they could pause and replay as necessary. This meant that the coding task was less demanding because they could rest while coding and it provided a complete account of all behaviours. It therefore ensured that the observational tool coded parent-child interaction in a reliable and valid way.

These coding outcomes of the SOCS are only specific to the environment for which it was designed. However, given that there are many low- and middle-income regions that need interventions like the Sinovuyo Caring Families Programme intervention, the tool is an important contribution to the area of observational assessments. Although the SOCS requires the observers to diligently focus when coding parent-child interactions, it is also useful

because it is very simple, straight forward and easy to use (see Appendix C) compared to the Dyadic Parent-Child Interaction Scale which is more detailed (Aspland & Gardner, 2003). Overall, the results produced from investigating the SOCS indicate that it is a useful observational tool that requires further investigation.

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Appendixes

Appendix A

SINOVUYO PARTICIPANT CONSENT FORM

You will be given a copy of this information sheet and consent form to keep.

Participation in this study is voluntary. This means you can refuse to be a part of this study.

Also, you can decide to withdraw from this study at any point without anything negative happening or you losing any benefits you might have.

If you wish to stop at any time, just tell anyone on the research team.

1. Have you read or been read this information and understood the information given here?

___Yes ___No

2. Have you had an opportunity to ask any questions of the research team, received answers,

and been able to ask for additional information?

___Yes ___No

3. Do you understand that you can withdraw from the study without penalty at any time by telling any member of the research team?

___Yes ___No

4. Do you understand who will be able to see to your information, how this information is stored, and what happens to the information at the end of the study?

___Yes ___No

5. Do you understand that you will be recorded on video, and the video will *only* be used for educational purposes?

___Yes ___No

Please sign your name if you understand what is involved and agree to participate:

_____

Signature of person giving consent

Please sign your name if you agree to being recorded by video:

_____ _____

Signature of person giving consent Printed name

_____ _____

Name of child your contact number

_____ _____

Date Place

_____ _____

Signature of person witnessing consent Printed name

(***Only if participant have literacy problems)***

_____ _____

Date Place

_____ _____

Signature of researcher gaining consent Printed name

_____ _____

Date Place

If you have any questions or decide that you no longer want to participate, please tell any of the workshop facilitators or interviewers. Or contact Project Manager, Jamie Lachman at 082 424 5691, or Dr Catherine Ward at 021 650 3422 or Dr. Lucie Cluver at lucie.cluver@spi.ox.ac.uk.

Thank you!

Appendix B

Research Assistant Informed Consent

Thank you for volunteering to be a research assistant for this honours research project. Being the research assistant means that you need to fulfil the following requirements:

- You must be diligent
- You must be fluent in isiXhosa
- You must be an undergraduate science student

Should you not fulfil ALL of the above requirements, then we request that you notify Sindi as soon as is possible on vresearchassistant@gmail.com and sindicmlots@gmail.com . This will allow her to make necessary changes and/or plans that will ensure that the assignment you have been selected to assist in is not jeopardised.

Your duties

You will be required to code behaviours on a certain number of videos (the quantity will be specified in future emails). Details pertaining to how you will go about coding the videos will be provided to you on a later date.

This job requires diligence and confidentiality. You are to ensure that no one watches the videos with and without you being present. Only you are permitted to observe your given videos. Altogether, your duties should take about 10-20hours to complete.

Research assistants that do not fulfil their expected duties will unfortunately not be paid.

Should you wish to ask any questions that have not been addressed in this document, please send an email to sindicmlots@gmail.com and/or vresearchassistant@gmail.com.

Having read all of the above, if you are still willing to be the research assistant for this honours project, please fill in your details in the spaces provided below. Once you have filled the provided spaces, please return this document (keeping your own copy) to sindicmlots@gmail.com.

Name:_____ Surname: _____

Signature:_____ Date:_____

Appendix C

SCRIPT FOR RESEARCH VISIT 2

Entering the home

When entering the home, say hello, remind the parent who you are, and thank them for letting you into their home. Tell them that it is important that they do not tell you whether or not they received the programme.

Hello, I am XXX and I am a research assistant with the Sinovuyo Caring Families Project. You may remember me from when I/ my colleague visited you in January or February. Thank you for letting me into your home to do the second visit. It is important for the research that you do not tell me whether or not you have received the Sinovuyo programme.

For this visit we will focus on YYY, like you did in the previous visit.

Finding a space

Just like in the previous visit, we will need a place in the house where we can talk privately, and where it will be quiet. If it is possible, it would be good to do the visit in the same place as last time. **(If that is not possible, find another quiet place.)** *To prevent us from being disturbed, please could you take a message if the phone rings, unless it's an emergency, of course.*

[If the TV/radio is on, ask the parent to turn it off: *Would it be possible to have the TV and radio turned off so we can concentrate on what we are doing?* (In cases where families do not want to turn off television/radio, please ask them politely to turn the volume down.)]

Move to private space. Give parent crayons and paper for child.

I have brought some crayons and paper for YYY to play with while we talk. Is there someone that can watch him/her while we work on the questionnaire? If not, he/she can stay in the room with us. Usually it is fine for younger children to be in the room. If YYY wants to play outside with his/her friends, it is important that he/she doesn't go far. We will need him/her back in the house in about 45 minutes.

Once child is either with another caregiver, or sitting in the room with you, you can move on.

<u>Discussing the whole visit</u>

Let me tell you about how the visit will work. This visit will be just like the previous visit. For the first part, I will ask you some questions and I will fill in the answers on the cellphone.

I will sit next to you so that you can see the answers that I put in. Please remember that everything you tell me is strictly confidential – no-one will know what you have answered. When we have finished the questionnaire, the phone will be locked.

The questionnaire is long, so we will take a break about halfway through it.

During the break, I will observe you and your child together, like I did last time. I would like to video this visit using my cellphone. The cellphone will be locked after the visit so that no-one else can see it. I will then put it onto a computer, so that only the research team can see it. Do you have any questions about this?

Let me tell you about the different things that you will need to do with YYY during the break. Don't worry, if you forget, I will remind you by whispering in your ear. First, you will have

10 minutes of playtime with YYY. I have brought some toys in this bag for him/her to play with. Please will you tell YYY that he/she may play whatever he/she chooses. Let him/her choose any toy he/she wishes. You just follow his/her lead and play along with him/her. Here is the bag of toys that you will use.

Hand parent bag of toys.

When the 10 minutes is finished, I will whisper in your ear to let you know that it is time to move onto the next activity, which is cleaning up. Please will you then tell YYY that it is time that the toys must be put away in the bag. Tell him/her that you want him/her to put the toys away. Make sure you have him/her put them away himself/herself. I will have to take the toys with me when I leave your home.

After YYY has packed away the toys, it will be time for a snack. Remember, I will remind you about what is next by whispering in your ear. I have brought some bread, Rama, polony, and juice.

Hand parent bag of food.

Please could you prepare the sandwiches and eat them together. There is no right or wrong way, just do what you normally do when you prepare a meal and eat with your child. You will have 10 minutes to prepare the snack and eat it. I will let you know when 10 minutes is up, and then I will be finished watching you and your child together. Please try to keep YYY in the room with you.

Do you have any questions about what you will need to do with YYY?

Please try to relax and act as natural as possible. When I watch you and YYY together, I won't be able to talk. I'm not being rude, it's just that I have to concentrate.

When you and YYY have finished eating the sandwiches, we will continue to work on the questionnaire.

Do you have any questions about the way that this visit will work?

Make sure that the parent feels at ease before you start. Please answer all of their questions.

<u>Doing the first part of the questionnaire</u>

Let us now start the questionnaire.

Start the questionnaire. After the questions on depression, stop for the break.

<u>Doing the observation</u>

Thank you for answering those questions. We will now take the break that I told you about. Please could YYY come and sit with us. <u>(Parent will collect child)</u>

Wait until the child is in the room with the parent.

I will now turn on the video to record you and your child.

Turn video on and record parent and child.

Please can you now do the activities with YYY that we talked about earlier. Remember, you will now do the play activity with him/her.

PLAYTIME – 10 MINUTES

When 10 minutes is up, whisper in the parent's ear that it is now time to get the child to pack away the toys. If the parent asks you if they are doing the right thing, just say that they should do what they normally do – there is no right or wrong way.

CLEAN-UP – NO MORE THAN 5 MINUTES

If the parent asks the child to tidy up only once, and the child is not responding, please whisper to them that they should continue to ask their child to clean up – Please say: "Do keep asking YYY to clean up."

When the child has packed up the toys, or if 5 minutes has passed and the child has still not packed away the toys, please whisper in the parent's ear that it is now time to prepare the snack.

PREPARING THE SNACK – NO MORE THAN 5 MINUTES

If the parent has not finished preparing the snack after 5 minutes, please whisper in her ear that it is now time to move to sharing the meal. If the parent takes a very short time to prepare the snack (less than 1.5 minutes), it is alright for them to do another short chore.

EATING THE SNACK – NO MORE THAN 5 MINUTES

Once the snack has been eaten, you can tell the parent that you have now finished watching her and her child and that you will turn off the video.

Thank you for working with me. I have now finished watching you and your child. I will now turn off the video.

Turn off video.

<u>Doing the second part of the questionnaire</u>

We will now need to go back to the questionnaire.

Finish questionnaire.

<u>Ending visit and saying goodbye</u>

Once you have finished the questionnaire, thank and praise the parent for their time and effort.

We have now come to the end of the questionnaire. Thank you so much for your time and for working so hard with us. We really appreciate it!

If you have not yet received the Sinovuyo programme, someone from the Sinovuyo team will be in touch with you soon.

Say thank you and goodbye.

Appendix D

SINOVUYO OBSERVATIONAL CODING SYSTEM

-CODER GUIDELINES-

Parent Behaviours

Positive Parenting

<u>Positive Verbal</u>

A positive verbal is a constructive statement that expresses approval, appreciation or positive acknowledgement of the child's behaviour, attribute(s) or product.

Guidelines

1. **A statement that praises the child's behaviour is a positive verbal. The statement must be clear enough for the child to know what he/she is doing right.**

Examples:

a) Your colouring in is beautiful.
b) You did such a good job tidying up.
c) Well done for finishing your food.

2. **Praise directed towards objects that are not a product or attribute of the child are not coded as a positive verbal.**

Examples:

	NOT positive verbal		**Positive verbal**
a)	That is a cool car you're pushing	vs.	That is a cool car you drew.
b)	I like the animals.	vs.	I like the animals you picked to play with.

.

3. **A positive verbal may refer to a physical attribute of a child.**

Examples:

a) You are a handsome little boy.
b) Your hair is so neat!

4. **A positive verbal must contain a judgment that is CLEARLY constructive and tied to a specific behaviour*.**

Examples:

a) Well done for working so hard with that puzzle.
b) I love how you tidied up so quickly.

* Comments such as "Well done!" or "Good job!" would not be coded as positive verbals because they are not explicitly tied to a specific behaviour, even if the behaviour may be implied.

5. **A reflective question is coded as a positive verbal if it encourages the child in some way.**

Examples:

a) Did you put that puzzle together all by yourself?!
b) You are a smart girl, aren't you?

6. **Terms of endearment are positive verbals.**

Examples:

a) Mtanam.
b) My love.

Positive Non-Verbal

A positive non-verbal is an intentional non-verbal positive expression and/or physical contact that displays positive acknowledgement of the child by the parent.

Examples:

a) Smile
b) Hug
c) Lifting child
d) Kiss
e) Pat
f) Thumbs up
g) Clapping for encouragement, support, congratulations (NOT clapping to hurry the child)

Guidelines

1. **A positive non-verbal can be used to encourage certain child behaviours.**

Example:

a) Thumbs up to indicate that the child is doing or has done a good job in something.

-Thumbs up for a good drawing.

-Thumbs up for tidying up well.

2. **If the parent sits down next to the child and they both lean into one another, code as positive non-verbal for the parent and positive non-verbal for the child**.

3. **If the parent seems to accidentally touch the child do not code.**

Examples:

a) Parent: accidentally brushes against the child's shoulder while reaching for a colouring book. (not coded)
b) Parent and Child: lightly bump into one another as they are playing. (not coded)

4. **Each hug, kiss, smile and other positive non-verbals are coded separately even when occurring subsequently or simultaneously.**

Examples:

a) Parent hugs child, let's go and kisses child on the cheek (2 positive non-verbals occurring subsequently– code as 2 positive non-verbals).
b) Hugs and kisses child in one motion (2 positive non-verbals occurring simultaneously –code as 2 positive non-verbals).

5. **When the parent gives what would have been a physical positive while making a critical remark, the behaviour is marked as a negative physical.**

Examples:

a) (Touching child on the shoulder) "Sweetheart, stop making a noise." (negative physical & negative verbal)
b) (Hugging child) "I don't like it when you run around in the house." (negative physical & negative verbal)

Effective Parenting

Positive Command

Positive commands are orders, demands and/or directions that clearly describe what the child must do.

Guidelines

1. **Positive commands need to be sufficiently precise so that the child knows what he/she should do.**

Examples:

a) Put that cup on the coaster on the table.
b) Spit that toy out of your mouth.
c) Please talk quietly.

2. **Positive commands generally have an instructing verb and can be preceded by please, the child's name or "you".**

Examples:

a) Lazola, get the plates from the cupboard.
b) Please tidy up the toys, Thando.

3. **A positive command is coded if the child is given a time of five seconds to comply or attempt to comply.**

Example:

a) Thando, give me that toy… five seconds pass… Thando, I said give me that toy. (positive command)
b) Lazola Get the plates from the cupboard… six seconds pass… Lazola, I said give me that glass. (positive command)

4. **If the parent gives the same command without giving the child time (see five second rule) in which he/she can comply, the command is coded as a negative command.**

Examples:

a) Thando, give me that toy… two seconds pass… Thando, I said give me that toy (no opportunity, negative command).
b) Lazola Get the bread in the cupboard… three seconds pass… Lazola, I said give me that toy (no opportunity, negative command).

5. **If the child is told to do a series of things in one sentence, only one positive command is coded.**

Example:

a) Thabo, pour the juice into the cup and drink. (ONE positive command)
b) Please put away your toys and get the plates in the kitchen so that we can eat.

6. **Positive commands should be full sentences.**

Examples:

Indirect command	**Positive command**
a) Wait.	Wait for me to help you pour the juice.
b) Hurry up!	Hurry up and eat your food.
c) Play, Thando!	Play with your toys, Thando!

Consequence

A consequence is an end that is promised by the parent if the child complies with a specific command given by the parent.

Guidelines

1. **A consequence can be positive.**

Examples:

a) If you finish packing away those toys, then we can have those muffins you love.
b) If you chew your food properly then I will let you watch your favourite cartoon when you're done eating.

2. **A consequence can be negative.**

Examples:

a) Chew your food properly or I will not let you watch your favourite cartoon.
b) Play properly or I will not let play tomorrow.

3. **If the consequence is intended for a period outside the limits of the coding period, it is still marked as a consequence.**

Examples:

a) If you tidy up when you are done playing, I'll let you play again tomorrow.
b) If you sit quietly while I fill in this form, then we can go to the mall together on Wednesday.

Negative Parenting

Negative Verbal

A negative verbal refers to a critical statement, nasty command, threat and/or shout that is directed at the child.

Guidelines:

1. **The negative verbal can be defined as critical/nasty statements that express the fault it finds with the activities, products and or attributes of the child.**

Examples:

a) You are chewing like a monkey! (fault with activity)
b) That is an ugly drawing you made. (fault with product)
c) You are a stupid child. (fault with attribute)
d) That is an ugly house you have drawn. (fault with product)
e) You are doing a bad job in catching that ball. (fault with activity)

2. **Statements that are non-cooperative, ungenerous, rejecting, dishonouring or disrespectful to the child are coded as negative verbals.**

Examples:

a) Because I said so. (non-cooperative)
b) Child asks for the ball and parent refuses saying, “It’s not yours, it’s mine.” (ungenerous)

3. **A negative verbal can tell the child what not to do.**

Example:

a) Stop shouting like a fool.
b) Switch off the television, you twit.
c) Do not pour with the water on the floor.

a. A positive command attempts to change the behaviour of the child through suggesting an alternative more desirable behaviour.

Examples:

a) Child: (Shouting)
   Parent: Let's sing instead of shouting. (Positive command)

b) Child: (Watching television)
   Parent: Let's play with these toys. (Positive command)

c) Child: pouring a jug of water into a glass from the floor
   Parent: (Gets a chair for the child to stand on) Stand on the chair so you can pour the water into the glasses on the table. (Positive command)

4. **If the parent provides a negative command, there is no need to code whether the child complies or not.**

Examples:

a) Parent: Don't put the cups on the floor.
   Child: (continues putting cups on the floor). (do not code)

b) Parent: Eat, eat, eat, eat!
   Child: (eats). (do not code)

Indirect Command

An indirect command is an order, demand, or direction for a behavioural response that is implied, nonspecific, or stated in question form.

Examples:

a) Put it here, O.K.?
b) Look. (without a point)
c) Why don't you hand me the car?
d) Wait.

Guidelines

1. **Commands stated in question form are coded as indirect commands. Note that an indirect command in this form requires a behavioural response from the child. A question does not ask for a behavioural response from the child.**

Examples:

a) Why don't you use the red crayon instead of the black one?
b) Do you want to drink that juice?
c) Shouldn't you tidy up those toys?

2. **A parental statement of feeling or preference is an indirect command when it implies an action that the child needs to complete.**

Examples:

a) I would love it if you combed your hair.
b) I want the picture to be drawn.
c) It would be nice if you finished your food.

d) I feel like you should be tidying up now, Lebo

Negative Physical

A negative physical is a parent-initiated touch on the child that inflicts pain, restrains, forces or pulls the child.

Examples:

a) Hitting.
b) Violently holding the child's arm.
c) Pushing the child roughly.

Guidelines

1. **Parent accidental contact is not coded.**

2. **Any touch that causes the child to express having experienced physical pain is coded as a physical negative.**

Examples:

a) Parent: (Pinches child on the cheek).
   Child: OUCH! (Negative physical)

b) Parent: (Slaps child on the bottom)
   Child: Cries (Negative physical)

c) Parent: (Tightly holds child's arm)
   Child: Grimaces (Negative physical).

3. **Restraint of the child is coded as a physical negative. However, if the restraint is protective (pulling child away from a hot stove) it is coded as a physical positive. Thus a physical negative can be noted in the following examples:**

Examples:

a) Parent: (holds child's wrist) No, not the yellow crayon.
b) Parent: (grabs child's arms) Stop throwing things.

4. **A physical negative can occur with a verbal behaviour. The verbal behaviour can be a positive verbal or a verbal negative.**

Examples:

a) Parent: (slaps child's hand away) This puzzle piece goes on next.
b) Parent: (grabs child's arms) Stop throwing things.

5. **If a physical negative is continuous (non-stop), a new physical negative is coded after every five seconds. Here the five second rule is implemented.**

Examples:

a) Parent: (hits child for 10 seconds [2 x 5 seconds =10 seconds]) (two physical negatives).

Child Behaviours

Positive Behaviours

Compliance

Compliance occurs when a child obeys, begins to obey or attempts to obey a command given by the parent.

Examples:

a) Parent: Please give me the red crayon.
   Child: (gives parent red crayon) (compliance)

b) Parent: Please pick up all the toys.
   Child: (picks up one toy but leaves the rest on the floor) (compliance)

Guidelines

1. **The child must at least begin or attempt to obey within five seconds of the command being issued. If the five second rule is NOT satisfied, the behaviour is marked as NON-COMPLIANCE.**

Examples:

a) Parent: Please draw a person. (positive command)

Child: (Draws a face) (complies within five seconds of the given command - compliance)

b) Parent: Go find the car. (positive command)
Child: (Heads toward toy bag) (attempts to find the car within five seconds of given command - compliance)

2. **If the child verbally refuses to perform a commanded behaviour, cries or yells but still performs the behaviour within five seconds (five second rule), then this is coded as compliance.**

Examples:

a) Parent: Let's build a school house. (positive command)
Child: (Begins building) I don't want to play school. (compliance + child negative verbal)

b) Parent: Put the dolly in bed now. (positive command)
Child: No! (Puts doll in bed) (compliance)

c) Parent: Give me the marbles. (positive command)
Child: (Cry while handing parent the marbles) (compliance + child negative verbal)

3. **Compliance is coded even if the child begins to obey the command, but does not completely perform the desired behaviour.**

Examples:

a) Parent: Put the sock monkey on the mat. (positive command)

Child: (Picks up the sock monkey but then gazes out the window as the five seconds passes) (compliance).

b) Parent: Tell me the alphabet. (positive command)
Child: A, B, Mom, when can we eat? (compliance)

Child Positive Verbal

A positive verbal is a positive evaluative or expressive verbalization of pleasure, warmth, enthusiasm or gratitude that is made by the child and directed towards the parent or himself/herself.

Examples:

a) I love you, Dad.
b) I sure did a good job putting the puzzle pieces together.
c) I have a good idea!
d) You're beautiful, Mom.

Guidelines

1. **Child positive verbal can be praise directed to the self or another person (including the parent).**

Examples:

a) Well done, Mom! (praise directed to parent)
b) I sure did a good job putting the puzzle pieces together. (praise directed to self)

2. **Enthusiasm alone is not sufficient to code a behaviour as being a child positive verbal. The enthusiasm has to be somehow associated with the parent.**

Examples:

a) I'm going to school tomorrow! (not coded)
   Mommy is taking me to school tomorrow! (coded)

b) Yey! I'm playing with the ball! (not coded)
   Yey! I'm playing catch with daddy! (coded)

Child Positive Non-Verbal

Child positive non-verbal is a non-verbal expression of enjoyment, warmth and enthusiasm made by the child and directed at the parent.

Examples:

a) Smile (has to be directed to the parent somehow – e.g., through making eye contact)
b) Laughter

Guidelines

1. **Child positive non-verbal must be seen or heard by the parent if it is to be coded.**

2. **When child positive non-verbal is continuous, the new positive non-verbal must be coded every five seconds (five second rule).**

Examples:

a) Child laughs…..five seconds…..child still laughing (2 child positive non-verbals)

3. **Code any laughter as child positive non-verbal, even when it is nervous laughter.**

4. **If laughter and a smile occur simultaneously, it must be coded as one behaviour.**

5. **Code only the target parent and child**.

Example:

a) Child smiles at parent while playing a game. (code)
b) Child smiles into the video (do not code)

Child Physical Positive

A child physical positive is an explicit physical act of endearment initiated by the child and directed towards the parent.

a) Examples:
b) Hug
c) Kiss
d) Pat
e) Sitting on parent's lap
f) Rubbing parent's head or shoulders

Guidelines

1. **If the child sits next to the parent and they two lean into one-another, code; positive non-verbal for the parent and child physical positive for the child.**

2. **Child physical positive is coded once for each separate child physical positive behaviour.**

Examples:

a) (child climbs onto parent's lap) code one physical warmth for each continuous minute

3. **If the parent says, "Give me a hug" and the child complies it is not coded as a child physical positive. This is because it is not initiated by the child. Instead, it is coded as a positive physical for the parent.**

4. **When the child initiates the physical positive behaviour, it is coded as a child physical positive. This must be done even if the parent responds with a critical response (e.g., No!)**

Examples:

a) Child: (child climbs on parent's lap) (child physical positive)
   Parent: I don't want you to sit on my lap right now (parent negative verbal).

5. **When the child accidentally touches the parent, it is not coded as a child physical positive.**

Example:

a) Child accidentally touches the parent's shoulder. (do not code).

Child Deviance

Non-Compliance

Non-compliance occurs when the child does not obey a positive or indirect command given by their parent, even if the coder thinks that the child did not hear the command.

Examples:

a) Ignoring parent's command.
b) Refusing to obey parent's command.
c) Arguing with parent.

Guidelines

1. **Failure to begin to comply/obey within five seconds is coded as non-compliance**.

Examples:

a) Parent: Come here. (positive command)
   Child: (continues playing and ignores parent for five seconds) (non-compliance)

b) Parent: Let's put everything away. (positive command)
   Child: (continues playing with car for five seconds) (non-compliance)

2. **When a child begins a behaviour that does not correlate with the command, the behaviour is coded as non-compliance.**

Examples:

a) Parent: Give me the sock monkey. (positive command)

Child: (pushes sock monkey in opposite direction) (non-compliance)

b) Parent: Let's play with the animal set. (positive command)
Child: (picks up the ball) (non-compliance)

3. When coding compliance, only code what the child does and not what the child says.

a. If the child verbally indicates willingness to obey but does not actively obey, it is coded as non-compliance.

Examples:

a) Parent: Put away the toys. (positive command)
b) Child: O.K. (continues playing) (non-compliance)

c) Parent: Let's draw a house. (positive command)
d) Child: Alright. (Continues playing with toy car) (non-compliance)

b. If the child verbally indicates unwillingness to obey but actively obeys, it is coded as compliance.

Examples:

a) Parent: Put the toys in the bag now. (positive command)
Child: Aww. (puts toys in the bag) (compliance)

b) Parent: Give me the blue crayon. (positive command)
Child: No! (gives blue crayon to the parent) (compliance)

4. **If the parent provides a command that is not a positive command (negative command or indirect command) and the child fails to comply, do NOT code the behaviour of the child as non-compliance.**

Examples

a) Parent: Don't make a noise (negative verbal)
Child: (Continues to make a noise). (not coded)

b) Parent: come let's tidy-up the toys... (1 second)… Come lets tidy up the toys (negative verbal)
Child: (Continues playing). (Not coded)

Child Negative Verbal

A child negative verbal refers to cheeky, disrespectful verbal statements given by the child. Crying and whining are also coded as child negative verbals.

Guidelines

1. **If the child argues, refuses or counter-commands the command given by the parent, the behaviour is coded as a child negative verbal.**

Examples:

a) Parent: Sit down and eat your food.
   Child: I don't want to.

b) Parent: Please give me that red crayon.
   Child: What if I say no?

2. **Criticism directed to the parent is coded as child negative verbal.**

Examples:

a) Child: You are ugly, Mommy.
b) Child: Stop being stupid, Daddy.

3. **Swearing or cursing is a child negative verbal.**

4. **Mimicking the parent and sarcasm is coded as a child negative verbal**.

Examples:

a) Parent: Let's go to the kitchen.
   Child: Let's go to the kitchen. (mimicking)

b) Parent: Please make me some tea.
   Child: Sure, because I am your maid. (sarcasm)

5. A verbal threat directed to the parent is coded as a child negative verbal.

Examples:

a) I'll hit you mommy!
b) If you don't stop telling me what to do, I will leave you to play alone!

6. A child negative verbal can occur simultaneously with a non-verbal behaviour.

Examples:

a) Child: (hits parent) I hate you!
b) Child: (throws toy) I don't like this toy.

7. Negative verbal behaviour directed to an animal, doll or any other inanimate object is coded as a child negative verbal.

Examples:

a) You are an ugly sock monkey!
b) Swearing at the toy car.

8. **When the child yells or whines, it is coded as a child negative verbal.**

Child Negative Physical

Child negative physical behaviour is when the child destroys, damages, or attempts to damage any object, person (including himself/herself) or animal.

Examples:

a) Child: (tears clothing).
b) Child: (bangs head against the wall).
c) Child: (spits at an object).
d) Child: (hits mother).

Guidelines

1. **If a toy is not designed to be thrown or banged but the child throws or bangs the toy, it is coded as a child negative physical.**

Examples:

a) Banging sock monkey head on the table.
b) Throwing puzzle pieces across the room.

2. **Each bang, kick, or throw is coded as a single child negative physical if it is separated from the previous destructive act by pause of two seconds or longer.**

Example:

a) Child: throws toys in toy bag to the extent that they become damaged...stops for two seconds… Continues to violently throw toys. (coded as two separate negative physical behaviours).

3. **A series of hits, bangs, or kicks that are not separated by two or more seconds is coded as one child negative physical.**

Example:

a) Child: (banging sock monkey on desk for more than two seconds without stopping) (coded as child negative physical).

4. **If the child is unable to complete a destructive behaviour because of parental restraint, it is still coded as a child negative physical. This is because it was an attempt at the destructive behaviour.**

Example:

a) Child lifts arm to hit mother but mother stops the child before the behaviour can be completed. (code as child negative physical).

Sinovuoyo Observational Coding System score-sheet

Instructions

1. **The coder must ensure that he/she is familiar with the Sinovuyo Parent-Child Observational guidelines before beginning the scoring process.**
2. The coder must find a quiet room where he/she will not be distracted.
3. Use one sheet for the overall 20-25 minutes of activity.
4. Each time a behaviour occurs, it must be recorded in the *HOW OFTEN* column with a "**1**".
5. Each coded verbal behaviour follows a ***one sentence rule***.
    - Each clearly demarcated sentence is a single verbal behaviour.
6. When verbal or physical behaviours run together in series, a ***two second rule*** is applied.
    - Each time a behaviour stops for two seconds and then continues again, its continuation is recorded as a separate/new behaviour.
7. When a behaviour continues without pause, a ***five second rule*** is applied.
    - After every five seconds, the behaviour is coded or recorded as a new behaviour.
8. The coder is free to rewind and pause the video to ensure accurate coding. The coder must ensure that he/she does not miss anything that occurs in the videos.
9. Once the video has been carefully observed and coded, the coder must tally up the scores.
10. Once the scores have been tallied up, the coder must answer the questions that follow.

SCORING SHEET

Date: _____ Coder's name: _____ Video Number: _____

			HOW OFTEN	*TOTAL SCORED*
Parent Behaviours	*Positive interaction*	Positive Verbal		
		Positive Non-verbal		
	TOTAL SCORED			*T=*
	Effective parenting	Positive Command		
		Consequences		
	TOTAL SCORED			*T=*
	Negative parenting	Negative Verbal		
		Indirect Command		
		Negative Physical		
	TOTAL			*T=*

	SCORED			
Child Behaviours	*Positive behaviours*	Compliance		
		Positive Verbal		
		Positive Physical		
		Positive Nonverbal		
	TOTAL SCORED			*T*=
	Child deviance and non-compliance	Noncompliance		
		Negative Verbal		
		Negative Physical		
		Negative Nonverbal		
	TOTAL SCORED			*T*=

Impression Scores

1. **Was there child-led play?**

_____

2. **Did the parent and the child seem to be enjoying each other's company? Explain.**

_____

_____

_____

_____

3. **Report if you could see why the child was not complying (**E.g., Child is not complying because he/she is angry).

_____

4. **Are there any other things you noticed that have not been coded?**

Appendix E

UNIVERSITY OF CAPE TOWN

Department of Psychology
Research Ethics Committee
Rondebosch, 7701
Tel: 27 21 6504607 Fax: 27 21 6504104
E-mail: Lauren.Wild@uct.ac.za

04 December 2012

REFERENCE NUMBER: 2012_12_01

Researcher Name: Catherine Ward
Researcher Address: Department of Psychology, University of Cape Town

Dear Dr Ward

PROJECT TITLE: Sinovuyo Caring Families Project

Thank you for your submission to the Department of Psychology Research Ethics Committee.

It is a pleasure to inform you that the Committee has **granted approval** for you to conduct the study.

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please quote your REFERENCE NUMBER in all your correspondence.

Yours sincerely,

Dr Lauren Wild
Acting Chair, Department of Psychology Research Ethics Committee