# SPECIAL NEEDS ADAPTED PROGRAMME (SNAP): AN EVALUATION STUDY OF THE TUTOR TRAINING PROGRAMME FOR EARLY INTERVENTION FACILITATORS WITH AUTISTIC CHILDREN.

#### **Emily Jean Elkington**

Mini-thesis submitted in partial fulfilment of the requirements for the degree Masters in

Clinical Psychology in the department of Psychology at the University of the Western Cape.

UNIVERSITY of the
WESTERN CAPE

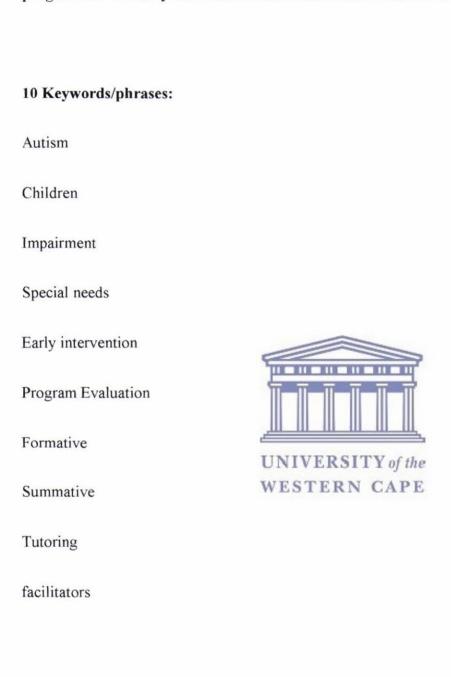
Supervisor: Dr Mario Smith

December 2011





Special Needs Adapted Programme (SNAP): An evaluation study of the tutor training programme for Early Intervention Facilitators with Autistic Children.



#### **ABSTRACT**

The research conducted was an evaluation study of a training programme for early intervention facilitators with autistic children. Autistic Disorder is a developmental disorder affecting sufferers in three primary areas: Communication, social interaction and behaviour (often characterised by restriction and repetition). Children on the spectrum often experiences difficulties with learning and cognition. There are, however, a limited number of special needs schools available in South Africa. There is a discrepancy between the number of schools available and the growing number of children diagnosed with ASD each year. For individuals in the higher income bracket private care is available in the form of one-on-one tutoring programmes. These are provided by non-governmental organisations. The success of a programme is dependent, in part, on the quality of training which is provided by the training department of the organisation. SNAP (Special Needs Adapted Programme) is a UNIVERSITY of the unique, child specific, one-on-one integrated programme for children with Autism and other special needs. Programmes like this have typically been evaluated in terms of the clinical outcome, with little focus on the training process. By focusing on the training aspect of an intervention programme the population was served in a less intrusive manner. Being evaluation research the study intended to answer programme-related questions through the eyes of the concerned constituents through qualitative methods of data collection and analysis. A formative and summative evaluation was conducted, the former revealing the strengths and weaknesses of the programme while the latter sought to assess the attainment of the programme goals and objectives. Three methods of data collection were used: Semistructured interviews, focus groups, and programme documentation. Thematic analysis was employed for qualitative data whilst descriptive statistics was used to summarize

demographic data. Consent from the University of the Western Cape and the organisation itself was obtained before embarking on the research. Participants were given an information sheet and asked to give informed consent. Eight themes emerged during the thematic analysis. The results and the discussion of the study revealed, that while the training programme at SNAP provides a good foundation for the tutors who are to work with children on the spectrum, on-going training and support in particular is essential. The content and implementation of the course prepares the tutors for what are referred to as beginners children. It is through on-going training and exposure in the field that prepares the tutor for more advanced children or children with more complex difficulties.



## **DECLARATION**

I, the undersigned, declare that the thesis entitled "Special Needs Adapted Programme (SNAP): An evaluation study of the tutor training programme for early intervention facilitators with autistic children" is my own work submitted by me for evaluation purposes. It has not been submitted before for any degree or examination in any other university. All sources I have used or quoted have been indicated and acknowledged as complete references.

Emily Jean Elkington

December 2011



# **DEDICATION**

This research paper is dedicated to my parents Jean and Lee Elkington.

Thank you for your ever present support, prayers and encouragement.



### **ACKNOWLEDGEMENTS**

I would like to extend my sincerest gratitude to my research supervisor, Dr Mario Smith, without whom this research would not have been possible.

Furthermore I would like to thank the staff at SNAP for being so open and willing to give of their time to help me with the completion of the data collection.

Thank you to my family and friends who have supported me and always believe in me.



# TABLE OF CONTENTS

	Page
CHAPTER ONE: INTRODUCTION	
1.1)Background to the study.	1
1.2)Problem statement.	1
1.3)Rationale of study.	3
1.4)Aim of study.	3
1.5)Objective of study.	3
1.6)Overview of study.	3
CHAPTER TWO: LITERATURE REVIEW	
2.1) Review of the literature.	5
2.2) SNAP Special Needs Adapted Programme.	
2.3) Theoretical framework.	
CHAPTER THREE: METHODOLOGY WESTER	SITY of the
3.1) Aim of Study.	18
3.2) Objective of study.	18
3.3) Research design.	18
3.4) Participants.	19
3.5) Sampling and procedure.	20
3.6) Data collection.	21
3.6.1) Semi-structured interviews.	22
3.6.2) Focus group discussion.	22
3.6.3) Programme and training documents.	23
3.7) Data analysis.	24

3.8) Trustworthiness and credibility of data.	25
3.9) Reflexivity.	26
3.10) Ethical considerations.	26
CHAPTER FOUR: RESULTS AND DISCUSSION	
4.1) The training manual.	28
4.2) Frequency distributions.	30
Table 1: Frequency distribution.	30
4.3) Themes extracted.	31
4.4) Themes and participant responses.	31
Table 2: Management responses on theme 1.	32
Table 3: Tutor responses on theme 1.	33
Table 4: Management responses on theme	#
Table 5: Tutor responses on theme 2.	В8
Table 6: Management responses on theme UNIVERSITY of	f the
Table 7: Tutor responses on theme 3. WESTERN CA	P.E
Table 8: Management responses on theme 4.	43
<b>Table 9:</b> tutor responses on theme 4.	44
<b>Table 10:</b> Management responses on theme 5.	45
<b>Table 11:</b> Tutor responses on theme 5.	47
Table 12: Management responses on theme 6.	49
<b>Table 13:</b> Tutor responses on theme 6.	50
Table 14: Management responses on theme 7.	52
<b>Table 15:</b> Tutor responses on theme 7.	53
<b>Table 16:</b> Tutor responses on theme 8.	55

#### **CHAPTER FIVE: CONCLUSION**

5.1) Conclusion.	57
5.2) Limitations of the study.	59
5.3) Significance of study.	59
5.4) Recommendations for further study.	60
5.5) Self-reflections.	60
REFERENCES	62

#### APPENDIX A

Semi-structured interview guide.

#### APPENDIX B

Focus group discussion.



#### APPENDIX C

Ethical clearance from the university.

#### APPENDIX D

Ethical clearance from the organisation.

#### APPENDIX E

Information sheet.

#### APPENDIX F

Consent forms.

independently. Early intervention has been highlighted as essential since the brain has more plasticity in younger children that in turn assists in a more effective response to intervention programmes (Zachor & Itzchak, 2009). Thus the timing of intervention post diagnosis is a critical factor for the necessary skills to be obtained. The Children's Act (2005) states that if a child has a disability it should be made possible for that child to participate in social, cultural, religious and educational activities, recognising the special needs that the child may have (Children's Act, 2005). There are, however, a very limited number of special needs schools available in South Africa. There is a substantial discrepancy between the number of schools available and the growing number of children diagnosed with ASD each year. An alternative to public schooling (subsidized care) is inclusive education. There are a limited number of schools available that accept special need children with or without a facilitator e cases institutionalisation is an option depending on the level of assistance required. along with assisted living facilities. Many children remain at home until a space at school becomes available which is seldom guaranteed This is particularly true of the lower income areas where children as old as ten are not enrolled in attending school yet. For individuals in the higher income bracket private care is available in the form of one-on-one tutoring programmes. These are provided by non-governmental organisations. These organisations go a long way in helping to minimise the impact of ASD on society. If further research demonstrates their effectiveness it is hoped that further funding be acquired in order to reach those families that can ill afford private tutoring and care. The success of a programme is dependent, in part, on the quality of training provided by the organisations and offered to individuals who wish to work with children on the spectrum. Programmes have typically been evaluated in terms of the clinical outcome, with little focus on the training process and the effectiveness thereof. Thus the present study will include a programme evaluation of the tutor training component of a private tutoring programme.

#### 1.3) Rationale of study:

Gaining access to the clients of the intervention programme would mean gaining access to children on the autism spectrum. This raises many ethical issues as these children represent a particularly vulnerable population. By focusing on the training aspect of an intervention programme the research becomes non-reactive and non-intrusive. The study will evaluate the training programme and make recommendations as to improvements, as well as aim to provide empirical support for the acquisition of knowledge and skills in the tutor corps, and their preparedness to transfer those skills to children with ASD and their families as a result of having participated in the tutor programme. In this manner, the outcome of the research will still serve the clinical population.

#### 1.4) Aim of study:

The aim of this study was to perform an evaluation of the training component of the Special Needs Adapted Programme (SNAP) based in the Northern suburbs of Cape Town.

UNIVERSITY of the

WESTERN CAPE

#### 1.5) Objective of study:

The objective of this study was to carry out a programme evaluation, both formative and summative, of the training component of SNAP by looking at understanding it from the multiple points of view of some of the people who have a stake in the programme and its success.

#### 1.6) Overview of study:

Chapter one has provided the background to the study, together with the problem statement, rationale, the aims and objectives and an overview of the thesis. The next chapter gives a review of the literature that is relevant to the study. This includes the problem ASD poses to

-

<sup>&</sup>lt;sup>1</sup> The organisation has given permission to be named.

society and the limitation in terms of education facilities available to children on the spectrum, and finally a theoretical framework is offered.

Chapter three explains the methodological framework and the research process. This includes the process of acquiring participants, how the information was collected, and the method of data analysis. Reflexivity issues and ethical considerations were explored in this chapter.

In chapter four the results and the discussion of the study are presented. The researcher explores the themes that emerged during the analysis phase, as well as the subjective experiences of the tutors in the organisation. The final chapter provides the conclusions of, and reflections on the study. This also includes the limitations of the study and recommendations for further studies.

UNIVERSITY of the WESTERN CAPE

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1) Review of the literature:

Normal development has three facets: a physical; cognitive; and social component. The development of motor and sensory skills starts before birth when the infant is able to distinguish the mother's voice in the womb, to approximately seven years old when the child should be able to learn new motor skills such as throwing a ball and riding a bicycle. Cognitive development refers to both the acquisition of language and the development of intelligence. Jean Piaget (1928) suggested commonatives across children in terms of cognitive styles as they progress through the stages of cognitive growth. The growth of intelligence was seen to be dependent on a child's attempts to actively adapt to the world and assimilate new knowledge into existing schemas (Carr. 2006). Language development is, to some degree, independent of intellectual description. Cirally social development involves the development of emotional responses, morals, identity, friendships and peer groups (Carr, 2006).

Pervasive developmental disorders (PDD's) have as their core features severe and pervasive impairment in the following areas of development: Social interaction skills, communication, and repetitive and or restrictive behaviours, interests and activities (APA, 2000). They are unable to read social cues and non-verbal language and often have trouble with auditory processing. During social interaction they may misread a cue which may come across as if they lack empathy for the other individual in the interaction (Carr, 2006). An example of this would be if the individual fails to pick up on the non-verbal cue that the partner in the

interaction is becoming bored and thus will continue to talk. In addition many individuals suffering from a PDD may experience great difficulties with sensory integration. Sensory integration is the process by which the nervous system organises sensory information for application to life circumstances or events, such as in the classroom, playground activities, and relationships with others. This impairment can be so severe in some instances that it may result in sensory overload. This overload may lead to a tantrum or the opposite, withdrawal. When sensory information is received by an individual suffering from ASD they are unable to channel it appropriately which may result in a state of confusion (Carr, 2006).

The levels of impairment and symptomology vary so substantially that these disorders are often placed on a spectrum of continuity ranging from high to low functioning. This section of disorders includes Autistic Disorder (AD), Rett's Disorder, Childhood Disintegrative Disorder, Asperger's syndrome (AS), and Petvasive Developmental Disorder Not Otherwise Specified (PDD-NOS) (APA, 2000). In the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (APA, 2000) the guidelines are often inadequate to encompass all children on the 'Spectrum'r (Rosepheng et al. 2009). For this reason they shall be referred to as autism spectrum disorders (ASD) for the purposes of this thesis.

The knowledge base around ASD has evolved substantially over the past two decades concerning the presentation of the disorder, aetiology, genetic links, environmental influences and co-morbidities. Furthermore, there has been an increase in the amount of research being conducted in this area (Rosenberg et al., 2009). It was once considered a rare condition almost exclusively associated with mental retardation (Safran, 2008). Many doctors, 40 years ago, had not yet heard of autism and children were often labelled as "brain-damaged" (Grandin, 2006). This had enormous implications for the children as they were essentially "written off" and institutionalisation was recommended. Grandin (2006) reported that if it

had not been for the perseverance of her mother and encouragement of some of her teachers, she would have remained uneducated.

International autism rates currently reflect that 1 in 100 individuals meet the criteria for diagnosis. This means that every hour a child will be born that will develop ASD in South Africa alone. This equates to approximately 7665 autistic children being born in South Africa in 2010. Incidences of ASD have increased dramatically over the past two decades with a growth rate of between 10 and 17% each year (Centre for Disease Control, 2010); one possible explanation could be that there has been an expansion in the classification criteria. Autism occurs in all racial, ethnic and socio-economic groups, and occurs on average 4 to 5 times more often in boys. Both twin and family studies show that there is a fairly significant genetic link in ASD but no consensus on the actiology has been reached (Centre for Disease Control, 2010).

ASD poses a great burden on society as there is a desperate need for special education facilities. This threat comes in the for DATESER STET Merical field these individuals are not appropriately integrated into society. WESTERN CAPE and the many impairments experienced by children with ASD. These impairments inhibit the child's ability to learn in a mainstream environment characterised by group instruction. Special schooling in and of itself is insufficient in terms of ensuring the best prognosis. Over the years intervention strategies have been developed that are increasingly orientated towards psycho-education, in which the role of the parent is given greater importance. It is with the help of the parents that positive results are ensured (Rickards, Walstab, Wright-Rossi, Simpson & Reddihough, 2008). The age at which intervention is received is also important since it is well established in the literature that early intervention strategies are best practice (Panerai et al., 2009). Itzchak and Zachor (2010) found that both biological and environmental factors affect the response to intervention in young children with ASD. One

of the conclusions drawn from this study was that it is important to diagnose and intervene with children on the spectrum as early as possible. This reflects a better prognosis and outcome for the child. Magiati, Moss, Charman and Howlin (2010) also established that early intensive intervention programmes show significant benefits when compared to other programmes that are developmentally orientated.

There is, however, a desperate shortage of government subsidised special needs schools despite the growing demand. These schools generally serve a highly heterogeneous group including diagnoses like ASD, Down syndrome, Mental retardation, and other learning disabilities (Chasson, Harris & Neely, 2007). This may explain a general lack of effectiveness of these schools when dealing with a child on the spectrum. This is due to the fact that a child with ASD may not benefit from a service designed for other disabilities. They would benefit from more specialised education programines (Chasson et al., 2007). Children with ASD remain under represented in special education despite the dramatic increase in the number of people being diagnosed with the disorders (Safran, 2008). UNIVERSITY of the

Some mainstream schools have adopted the inclusive education approach and accept a certain number of special needs children each year. Inclusive education refers to the belief that every individual has the right to be a full member of his or her academic community. It is important that children with learning disabilities are provided with the opportunity to learn among their friends, gain essential social relationships, and build an adequate self-esteem. Depending on the level of assistance required children in inclusive education might need a facilitator whose services are for the account of the parents (Lynch & Irvine, 2009).

Many parents identify with the social benefits of inclusion. Children in inclusive settings are often better accepted by their non-disabled peers, particularly if entering the school system at a young age. Having a classmate with a disability has in fact been reported as a positive

experience by the neurotypical child (Lynch & Irvine, 2009). Children without disabilities who have a disabled classmate reported feeling more comfortable around other children with disabilities (Lynch & Irvine, 2009). This suggests that by exposing non-disabled children to others who have disabilities creates an opportunity for growth in terms of learning tolerance and acceptance. With the increase in peer acceptance and positive social interactions comes increased opportunity for the disabled child to learn new social as well as other important life skills. It also helps these children to learn how to share, resolve conflicts, and engage in cooperative play (Lynch & Irvine, 2009). It is important to note that inclusion does not simply refer to the placement of a disabled child in a regular classroom. Inclusive settings should include increased classroom engagement, and increased time spent working on inclass tasks in order to achieve positive academic achievement in children with disabilities (Lynch & Irvine, 2009).

For school-going children on the spectrum, of children with other barriers to learning, an individualised education programme (TEP) is often developed using input from parents, UNIVERSITY of the teachers and outside consultants. IEPs house the teachers are used to assess goal attainment (Oren & Ogletree, 2000). It is important to develop an IEP for all individuals with special needs as each child shows tremendous variability in symptoms and thus a specialised programme works best. A multidisciplinary approach is effective as all aspects of the child's educational needs are covered.

An additional way of managing ASD is privately-run psychosocial programmes. The following methods of intervention will be discussed: TEACCH (Treatment and Education of

Autistic and related Communication handicapped Children); PECS (Picture Exchange Communication System); social stories; ABA (Applied Behavioural Analysis); the Greenspan method; and Sensory integration.

The TEACCH method is a structured teaching system developed at the University of North Carolina in the 1970's. It was developed by Eric Schopler who defined it as a global approach which is based on collaboration between parents and professionals. There are four main components: 1) physical organisation, this refers to the setup of the teaching area. Teaching is both academic and functional; 2) visual schedules, that give the student a visual structure of what they are expected to do and in which order (children on the spectrum get incredibly anxious when they do not know what to expect next); 3) work systems, this informs the student about how many activities need to be done; and 4) task organisation, informing the student about within task actions (Paneral et al., 2009). These four components work well as they are designed to contain the child on the spectrum. Removing external stimuli that may distract the student and minimising anxiety surfounding performance is essential in order for a child with ASD to care effectively. This programme is a tool that may be helpful in inclusive education (Panerai et al., 2009).

PECS was developed for non-verbal children with ASD. It has as its main objective teaching spontaneous social-communication skills by means of symbols or pictures. Teaching in this approach relies on behavioural principles, particularly reinforcement techniques. The requesting behaviour is reinforced by receiving the desired item. The child requests the item by pointing to the appropriate picture. Physical prompts are initially used to help the child pick up the correct symbol and exchange it for the desired item. These prompts are faded over time (Howlin, Gordon, Pasco, Wade & Charman, 2007).

Social stories are a way of teaching individuals with ASD the necessary social skills required for appropriate interaction. Social stories which describe social situations and the appropriate social responses. Social stories can be used to teach skills such as potty training, how to initiate and maintain a conversation and what behaviours are undesirable in certain settings.

ABA was developed by Ivor Lovaas (1987). His theory holds that new behaviour can be taught by means of drills. Drills are represented and followed by a positive reinforcer, accompanied by verbal praise. Physical and verbal prompts are used to achieve the desired behaviour and are phased out in time. Tangible reinforcers, specific to the client are used for successful responses (Lovaas, 1987).

The Greenspan method, developed by Dr Stanley Greenspan, uses the principles of "floor time" (Greenspan, 2006). This entails completing circles of communication through interactive play. "Floor time" helps children to master the emotional milestones needed to develop a foundation for learning. Play is used to encourage attention and intimacy, two-way communication and the expression of items feetings and aging thought. The individual playing with the child must follow the child's lead (Greenspan, 2006).

Sensory integration is a process whereby the nervous system organises sensory information for application in life, such as in the classroom, playground activities and relationships with others. Various protocols are used such as the brushing technique developed by Patricia Wilberger in 1993. This makes use of brushing, deep pressure and other activities that help the child to integrate his or her senses more effectively.

Individual tutoring programmes are also available. These intervention programmes are based on a number of techniques including the following: applied behaviour analysis (ABA), floor time, diets and supplements, holding, medication, picture exchange communication systems (PECS), sign language (Makaton), relationship development intervention (RDI), special

education, visual schedules, sensory integration, and speech therapy. Many of these techniques have demonstrated efficacy through research (Chasson et al., 2007).

The intervention programmes reviewed in this study have generally been evaluated in terms of the clinical outcome, that is, how the child has improved in terms of cognitive abilities, social development and behaviour. Intervention outcome of children with ASD has been the main focus of many studies in this field of research (Zachor & Itzchak, 2010). Howlin et al. (2007) state that evaluations of many of the available psychosocial interventions rely mainly on single cases or non-randomised group trials. Randomised control trials provide the most rigorous scientific or empirical evidence base of the effectiveness of a treatment approach. This is due to the fact that they are thought to be unbiased and strongly indicative that it was in fact the specific intervention that affected outcome (Howlin et al., 2007). These types of intervention studies have the highest purported lifernal validity, however are lacking in ecological validity or the extent to which they can be generalized to all contexts.

There is a lack of research in terms of Tanity with There have been few studies investigating how well the literature (Probst & Leppert, 2008). There have been few studies investigating how well the training equips an individual to educate or plan interventions for a child with ASD. The studies that have been done have looked at the training in terms of obtaining learning objectives and not on the trainees' subjective experiences of how prepared they feel at the conclusion of training. Probst and Leppert (2008) looked at the outcomes of a Teacher Training Programme for Autism Spectrum Disorders. The study focused on the effect of the training as reported by the teachers in terms of a) child behavioural symptoms in the classroom b) corresponding teacher's stress reactions, and, c) implementation of structured teaching strategies in the classroom. In terms of the research questions there was a clear improvement in behavioural symptoms, a reduction in stress experienced by teachers and an increase in reported levels of confidence and competence by the teachers. In addition to

focusing on the outcomes of the training this study also took into account the training process as viewed by the teachers undergoing training (Probst & Leppert, 2008).

Oren and Ogletree (2000) reviewed goal attainment scaling as an alternative method for evaluating treatments and intervention programmes for children with ASD. They propose that using this approach may make a convergent link between student outcome goals and the programme goals (Oren & Ogletree, 2000).

Evaluations of many of the psychosocial interventions rely on single case or non-randomised group trials. Howlin et al. (2007) proposed that randomised controlled trials provide a sure evidence-base of the effectiveness of a treatment approach. They conducted a study that assessed the effectiveness of expert training for teachers of children with ASD in the use of Picture Exchange Communication System (PECS) and confirmed the value of PECS for non-verbal children with ASD (Howlin et al., 2007).

Peters-Scheffer, Didden, Korzilius and Sturmey, (2011) investigated the effectiveness of an Early intervention based intervention based on Applied Behaviour Analysis in children with

ASD. They found that individuals in the EIBI groups surpassed the control groups on composite adaptive behaviour, communication, daily living skills and socialisation subscales (Peters-Scheffer et al., 2011).

The focus of this particular study is a Special Needs Adapted Programme (SNAP) that has integrated all these techniques into their approach. By using an integrated approach one can specifically tailor an intervention programme to the child and his or her deficits and strengths. ASD is such a complex disorder and the symptoms so varying that a dynamic approach to intervention is essential. SNAP is a private, non-governmental organisation that has yet to be evaluated empirically despite theoretical, anecdotal, and clinical support for its efficacy. This particular study differs from what has been done before in that it looks at the training

component of an intervention approach to Autism from the responsive framework. This means that it evaluates the training in terms of the subjective experiences of the trainees and those that implement it or have a vested interest in the overall intervention programme and its success.

#### 2.2) SNAP Special Needs Adapted Programme:

SNAP is a unique, child specific, one-on-one integrated programme for children with Autism and other special needs. It also assists and supports parents and caregivers by educating them. Through SNAP they learn to interpret and adapt their child's behaviour. This programme is geared to address the specific needs of each child. SNAP improves the quality of a child's life filtering through to the family, community and society. The professionals within the SNAP organisation work in conjunction with other professionals including occupational therapists, psychologists, specific therapist, physiotherapists and paediatricians. SNAP was founded on the principle that early diagnosis and intervention leads to a better prognosis. It was founded due to the depart of the specific ally, for specialised aid for children on the spectrum with regards to their unique learning needs and development.

SNAP is based in the Northern suburbs and has grown substantially since it was founded. At the organisation there is a Grade 1 and Grade 2 class, as well as several classrooms where children receive one-on-one tutoring. They also have a home-based programme in the Southern suburbs where the tutors go to the children's houses and tutor them in their own homes. The management level consists of the director and founding member, the training director, and five programme managers. The next level consists of the tutors who are employed in two different programmes. There are twenty five tutors at the organisation headquarters and sixteen tutors implementing the home based programme.

SNAP was initially started as a home-based programme for children on the waiting list to be assessed and placed at special needs schools. The programme enabled these children to progress while being on the waiting list. It also provided the much needed support for parents with children on the spectrum. The student-teacher ratio in special schools decreased which highlighted the importance and effectiveness of a personalised one-on-one approach. The SNAP programme grew as an organisation and is currently a facility that reaches beyond the borders of South Africa. SNAP consists of the director who is also the founding member, the training director, and six programme managers who oversee the programmes running in Cape Town, Pretoria, and Bloemfontein.

Tutors are taken through a two-week training course giving them both the theoretical and practical knowledge necessary to work with children on the spectrum. The training takes them through the compilation of an individual's programme which is based on areas of delay, areas of strength, and behaviour. Behaviour are a great obstacle to learning and thus the techniques of Applied Behaviour Analysis are taught to the tutors in order to modify problem UNIVERSITY of the behaviours first and foremost before learning that to the tutors in order to modify problem behaviours first and foremost before learning that property of the underlying principles are covered in training which include the following methods of intervention: TEACCH, ABA, Daily Life Therapy, Makaton, Theory of Mind, Sensory Integration, The Greenspan Method, Relationship Development Intervention, Pivotal Response Training, Verbal Behaviour, Social Stories, Picture Exchange Communication, The Glen Doman Method, Two Word Sentences Method for Life Situations, Grover Games and Learn to Think, Teach me Language, and Brain gym. The SNAP programme uses the underlying principles of all these methods to develop a child specific intervention programme. The tutor has to know these methods of intervention well at the end of their training.

At the end of their training the tutors must have knowledge of the following:

- Report writing, as they have to do this at the end of each session.
- Monitoring of progress.
- How to keep up with the child's development and be able to make minor adjustments to ensure that the child continues to make progress.
- What is expected of effective and reliable tutors.
- > Positive re-enforcement of correct behaviour and/ or responses.
- ➤ How to insist that the child complies with what is expected of him/her.

The training director systematically runs through the programme to help tutors understand the different concepts. Tutors in training have to watch video recordings to see how the programme is implemented. They then sit in on sessions to observe other tutors until such time that the training director is satisfied that the tutor can manage independently. Tutors go through a trial period during which they are closely monitored and observed by the director, training director, and programme managers. Reading material is supplied that the tutor should go through in their own time. Once the training is complete the tutors have to submit UNIVERSITY of the an assignment demonstrating what has been dearning objectives have been achieved.

The tutors undergo continuous training and supervision while employed at SNAP. The SNAP training programme should be looked at on four levels: The content of the training which is compiled with the learning objectives in mind; the implementation; assessment, which can be broken down into subjective assessment (to what extent the tutors attain the learning objectives) and objective assessment (a test); and finally the subjective experiences of the tutors. In other words exploring their feelings surrounding the training process and how well they feel it equips them to work in the field of autism. Thus the aim of this study is to evaluate the training component of the SNAP programme by conducting a responsive evaluation inclusive of, but not limited to the subjective experience of the tutors.

#### 2.3) Theoretical framework:

The framework within which this study is placed is the responsive approach of evaluation research. The responsive approach differs most significantly from other approaches to evaluation studies in that it posits that there is no single or objective answer to programme related questions. An evaluator using this approach should work on the assumption that no answers can be found using tests, questionnaires, or statistical analyses (Stecher & Davis, 1987). Stecher and Davis (1987) believe instead, that because each individual who is influenced by the programme perceives it very differently, the evaluator will try to answer questions by looking at reality through each of the concerned constituents.

Responsive evaluation is an approach that is usually characterised by qualitative methods as opposed to quantitative methods of data collection and analyses. The evaluator gathers data and checks their preliminary understandings with programme participants, and tries to build models that most accurately reflect the themes that came up with the participants during discussion. Working from this perspective requires here along to become an anthropologist of sorts, and understand reality from the multiple perspectives (Stecher & Davis, 1987). A responsive approach was appropriate for this particular study as the researcher aimed to access views on multiple levels, namely the management and tutor levels.

#### CHAPTER THREE

#### METHODOLOGY

#### 3.1) Aim of study:

The aim of this study was to perform an evaluation of the training component of the Special Needs Adapted Programme (SNAP) based in the Northern suburbs of Cape Town.

#### 3.2) Objective of study:

The objective of this study was to carry out a formative and summative evaluation of the training component of SNAP by looking at understanding it from the multiple points of view of some of the people who have a stake in the programme and its success i.e. a responsive evaluation.

#### 3.3) Research design:

This research was an evaluation study, which seeks to determine the effectiveness of social programmes (Potter in Terre Blanche & Describe Programmes (Potter in Terre Blanche & Describe Programmes). Application studies differ from traditional qualitative research in that the latter focuses on service delivery and are transformative in nature. The desired outcome of an evaluation is to provide feedback intended to be used by the programme being evaluated, to implement changes and possible improvements (Isaac & Michael, 1981).

The study adopted a responsive approach as it served to answer programme-related questions through the eyes of the concerned constituents using qualitative methods of data collection and analysis. As mentioned before responsive evaluations help to meaningfully access different points of view of all the people involved since each individual influenced by a programme perceives it in a unique manner (Stecher & Davis, 1987). Furthermore the

evaluation was summative and formative in nature. Summative aspects assessed the outcomes of the training programme whilst formative aspects were achieved by identifying the strengths and weaknesses of the training programme from the perspectives of different stakeholders (Stecher & Davis, 1987). Isaac and Michael (1981) proposed two components of a formative evaluation. The first being the implementation evaluation which seeks to identify the discrepancies between what the programme plans to do and what it does in reality. The second component, called the progress evaluation, monitors the progress of these objectives. The summative phase of evaluation determines if the objectives proposed by the organisation have been attained. At this point recommendations will be made for future modification (Isaac & Michael, 1981). As mentioned before, the training component of the overall SNAP programme was conceptualized as a stand-alone programme for the purposes of this evaluation.

#### 3.4) Participants:

The participants were recruited from two Never Programmer and b) tutors.

WESTERN CAPE

#### a. Management:

The management group included the Director (a special needs teacher who has worked in the field of autism for over 12 years independently), Training Director who has also been working in the field for as many years, and six Programme Managers (tutors who have gone through the training process and have worked for the organisation for approximately 3 years).

#### b. Tutors:

Tutors are employed in two programmes: The home-based and school-based programmes.

The school-based programme is situated at the organisation's headquarters in the Northern suburbs. The children attend the school and receive one-on-one tutoring on the premises.

The home based programme differs in that the tutors go to the child's house and the child receives tutoring at home. For the purposes of this study only tutors placed in the home-based programme were recruited for participation in the focus group discussion. Tutors in the home-based programme were selected for practical reasons, such as accessibility. The time frame of this thesis did not allow for the researcher to gain access to the tutors at the school as that would require consent from the department of education. The home based tutors were more accessible in terms of ethical requirements and time limitations.

The baseline requirement for tutors is a matriculation certificate. There is variation in the levels of education of the tutors currently working at SNAP ranging from matric to masters in psychology.

#### 3.5) Sampling & Procedure:

The researcher collected the sample from two different groups: The management group and the tutor group. With the management group purposive non-probability sampling was used. The director, training director and programme managers have specific characteristics that WESTERN CAPE ensured their selection (Durrheim in Terre Blanche & Durrheim, 1999). The specific characteristic was their position within the organisation. All six programme managers were invited to take part in the study. All the programme managers responded positively indicating willingness to be interviewed, and one was chosen for the interview. The one who was most readily available during the time frame identified for data collection was chosen for the interview. The time frame for data collection was during the two week university vacation period in July 2011.

The list of all tutors who have completed the training and are currently involved with the organization constituted the sampling frame for the second level of sampling. For the purposes of this study the sixteen tutors working in the home based programme were selected. From this frame all the tutors were invited to participate in a focus group discussion. Thus every tutor had an equal opportunity to participate in the study making it a simple random, probability sample (Durrheim in Terre Blanche & Durrheim, 1999). The target was to recruit ten tutors for the discussion which would represent approximately sixty per cent of the sampling frame. The final number of participants in the focus group discussion was six. Of the sixteen invited to participate all responded positively. However on the date chosen for the discussion only six could attend. This represents approximately forty per cent of the total sampling frame.

#### 3.6) Data collection:

The study incorporated methodological triangulation using three qualitative methods of data collection namely, semi-structured interviews From triangulation discussion and course documents. Qualitative researchers use the triangulation technique to ensure that the account is rich, and comprehensive (Cresswell, 1998; Parker, 2005). Triangulation is a useful technique that facilitates validation of the data through verification across more than two sources. In particular, it refers to the application of several research methodologies in the study of the same phenomenon (Creswell, 1998).

Qualitative research methods allow for certain phenomena to be explored in greater depth. They enable the researcher to examine selected phenomenon from the perspectives of those involved. As the aim of the study was to understand the training component at SNAP, and how the different constituents who have a stake in the organisation perceive it, qualitative methods were used (Stecher & Davis, 1987).

#### 3.6.1 Semi-structured interviews:

Three semi-structured interviews were conducted for the management level. Semi-structured interviews allow the opportunity to question and gain insight into the experiences of the interviewee without being overly directive which may restrict the participant's responses (Parker, 2005). The interview was constructed in such a way that the questions tapped into the relevant levels of the training process: content, learning objectives, implementation, and assessment (Appendix A). The researcher interviewed the director of the organisation, the training director and one of the programme managers. Interviews were best for the management level as their positions in the organisation differ substantially. The interviews were approximately 40 minutes in length and were audiotaped and transcribed.

#### 3.6.2 Focus group discussions:

A focus group discussion was used for the throng Crossley (2002) asserted that focus groups are used to establish thematic content. A focus group is useful as it gains access to the intersubjective experience of a group that has a commonality (Barbour & Kitzinger, 1999). The WESTERN CAPE tutors having gone through the training course and currently working as colleagues in the organisation is the commonality that lead to the decision to use focus groups. There is general consensus on what the core components of a focus group should be: a) the group is constructed with a research focus and data collection in mind, b) the researcher needs to collect specific data and determines the research agenda, c) the data are enhanced through group interaction (Barbour, 2007; Puchta & Potter, 2004). Thus the focus group discussion was structured specifically to access information about all levels of the training process including the subjective experiences of the trainees (Appendix B). Tutors were asked to share their perceptions and experiences of their training. They were specifically asked to comment on:

- The content of the training
- The presentation or facilitation styles employed by trainers
- The extent to which learning outcomes have been achieved
- The extent to which training prepared them for clinical work and the transfer of skills
- Improvements and recommendations to enhance training

This study included one focus group of 6 tutors. The discussion was approximately 80 minutes in length, and was audiotaped and transcribed.

#### 3.6.3 Programme and training documents:

The training materials and supporting documentation provided to tutors form an integral part of the training programme. As such, copie nents were obtained from the the disadvantages of using training director, and form the third source of da documentation is that it is often incomplete and not properly archived. This potential obstacle did not pose a threat to the study sisce the documentation is pre-prepared and available in a bound format when handed to tutors during training. Additional learning material provided to the trainee's that does not form part of the training manual was also obtained in the form of two power point presentations. The documents obtained were the bound training manual that includes information on the different intervention strategies employed by SNAP. General information on autism is also provided in the manual. The training director compiled the manual uses sources that she has come across during her years working in the field. The tutors are given the manual on day one of the training and are expected to go through the manual in their own time. For the purposes of this study, just the training manual was subjected to thematic content analysis. The additional documents were not included due to the limited time frame of the thesis.

#### 3.7) Data analysis:

Descriptive statistics was used to compile the demographic profile of the participants. It allowed the characteristics of the sample to be summarized. The statistics were used to represent the sample in the following ways:

Frequency distributions- This refers to the graphical representation of the number of subjects who fall within a particular category. The categories identified were age, race and gender. A tabular representation was used where the frequency of cases falling within each category was recorded (Howell, 1999).

The qualitative data was analysed according to Thematic Content Analysis. Thematic content analysis is a descriptive representation of data. If the analysis is carried out satisfactorily then it will portray the thematic content of transcripts and other texts. The researcher groups and extracts, from the texts, common themes in order to give expression to the harmony of voices across participants (Creswell, 1998). We the after this Glady was to assess the training component at SNAP from the different viewpoints of those who have a stake in the programme thematic content analysis was useful in picking up commonalities across participants. This was completed through a step-by-step process outlined by Cresswell (1998). Firstly, the recordings of the interviews were transcribed, from which patterns of experiences were noted. Secondly, the researcher included themes from the data. During this process, the data was coded according to relationships between one or more of the themes; the next step involved elaboration, which is the process of focusing on the finer nuances of the themes. The final step was interpretation, which involves interpreting the data according to the thematic categories from analysis, including reflexive comments on how subjective

experiences may have influenced data collection and analysis. Data collection and analysis commenced in parallel. Transcriptions and analysis were done solely by the researcher.

The researcher approached the thematic content analysis of the data collected from the management level and tutor level separately and then subsequently compared the findings across the two groups. Eight themes were extracted and are presented in the results and discussion chapter below.

#### 3.8) Trustworthiness and credibility of data:

A research process, informed by the importance of reliability and validity in qualitative research, was followed to enhance the extent to which results were trustworthy and an accurate reflection of the participant's thoughts and perceptions, thereby lending credibility to the research findings. Qualitative methods need to ensure dependability of the findings and that the findings occur as the researcher says they did (Creswell, 1998). The author ensured that the participants were not coerced in anyw had every opportunity to express their true feelings. Furthermore the focus gr vins and interviews were audiotaped and transcribed ensuring accuracy of the data collected. To ensure that the results of the data analysis accurately reflected the gist of interviews and focus group discussion the members of the focus group and the interviewee's at the management level have had an opportunity to comment on the extent to which the themes extracted accurately reflected the theme of the focus group discussion and interviews. This was done telephonically after transcription and analysis had taken place. Both the members of the focus group and the interviewees agreed with the extrapolations made. This is referred to as respondent validation and is a method used to improve the thoroughness of qualitative research methods (Creswell, 1998).

#### 3. 9) Reflexivity:

Reflexivity refers to an awareness of the self in the research situation and the role the researcher plays in constructing that situation (Bloor & Wood, 2006). The researcher's own views, presumptions and biases are often raised during the research process, and thus care was taken when interpreting and collecting the data. An essential requirement of the qualitative researcher is to have a critical awareness of the self. Therefore, the researcher was aware of how she might project her own subjective views onto the research (particularly having gone through the training experience herself); how she was experienced by participants; as well as ensuring that the meaning of the information shared was not changed. It is important to note that having gone through the training process and working in the field for at least four years the researcher was approaching the organisation as an insider of sorts which in turn had an impact on the depth and nature of disclosures by participants. It is omfortable to disclose information. possible that as an insider, the participants fell Therefore it is possible that as an insider the researcher was able to gather richer more UNIVERSITY of the comprehensive data. It is further more postulated that in terms of both levels of participants, they were more readily able to express the concerns and weaknesses of the training rather than just the strengths.

#### 3.10) Ethical Considerations

Ethical clearance was obtained from the University of the Western Cape before embarking on this research study (Appendix C). Organisational clearance was obtained from the director and they were willing to allow their name to be used in the thesis (Appendix D). Participants were presented with a participant information sheet summarizing what participation would entail (Appendix E). Each participant was also requested to complete a consent form in which they provided consent (Appendix F). All participants were reminded that their participation

was voluntary and that anonymity and confidentiality would be maintained. Where the focus group was concerned, each individual was required to keep the confidentiality of other participants. Participants retained the right to withdraw from the study at any stage.

Documents and recordings will be destroyed at the end of the research process.

The results of the analysis have been tabulated and are presented in the ensuing chapter.



#### CHAPTER FOUR

#### RESULTS AND DISCUSSION

# 4.1) The training manual:

The manual consists of the following topics in terms of content:

The first thing presented in the manual is a short foreword welcoming the tutors to the training programme and briefly outlining what will be covered in the course.

Part One: Introduction.

This is just an introduction to what SN

statement

NAP is all about. Its general vision and mission

UNIVERSITY of the

Part Two: Understanding Autism.

This section covers, in detail what autism is, what it looks like, prevalence, aetiology and warning signs.

WESTERN CAPE

Part Three: The SNAP methods.

This section offers an explanation of the different intervention strategies used in the SNAP programme. These strategies include the following:

Part Four: So you want to be a tutor.

This section covers evaluating yourself as a tutor. Teaching tips are offered and some rules to ensure success.

# Part Five: Understanding behaviour.

The section focuses on behaviour and how to manage it. Specific techniques to handle behaviour are not offered just general guidelines in terms of the Applied Behavioural Analysis framework developed by Lovaas.

# Part Six: Getting started.

This section helps the training tutor anticipate their first child. This includes how to work at the child's level, how to introduce the programme to the beginner's child and what problems one might encounter.

# Part Seven: Maximising the child's petertial. This section looks at the sensory system of an autistic child and how sensory integration difficulties are a barrier to learning. This section helps tutors to identify when the child is experiencing difficulties with their sensory system and what to do to help them.

# Part Eight: Report writing.

This section covers report writing skills and how to speak to parents in a professional manner (Being positive while not giving false hope).

# Part Nine: Assignments.

In this, the final section the tutors are given 8 assignments to complete on their own.

Finally there is a short message congratulating the tutor on completing the course.

**4.2) Frequency distributions:** Table 1. Below summarizes the demographic information of the participants in the study.

Table 1: Frequency distribution on Demographic variables (n=9)

Variable	f	cum f
Age		
18 -25 years	3	3
25-40 years	3	6
40-60 years	3	9
Gender		
Female	9	9
Male	0	9
Race		
Mixed race	1	
("Coloured")	0	UNIVERSITY of the
Black	8	WEST ERN CAPE
Caucasian	ō	9

In terms of age, 3 participants fell within the age category 18-25 years, 3 were between the ages of 25-40 years and 3 were in the category 40-60 years. In the race category the majority of the participants (8) were Caucasian while 1 participant was of Mixed race. All 9 participants in the study were female. Finally in terms of level of education the participants ranged from having a baseline matric to a Bachelor's degree in education. One of the participants was completing her Master's degree in educational psychology at the time of data collection.

#### 4.3) Themes extracted:

The results presented below, in totality, contravene previous research in this field. Very few studies have focused on the training within intervention programmes, and fewer still have adopted a responsive style which seeks to understand the programme from the points of view of various programme constituents. The following eight themes have been identified from the data and will be presented below in greater depth along with illustrative quotes from the participants.

- a) Content and compilation.
- b) Learning objectives and outcomes of training.
- c) Implementation of the training course
- d) Assessment of the learning objectives
- e) On-going training and evaluation
- f) Strengths and improvements made
- g) Weaknesses and recommendations WESTERN CAPE
- h) Subjective experiences of the tutors.

# 4.4) Themes and participant responses:

The responses in each of these categories will be reported separately for the management and tutor levels.

#### Theme 1: Content/Compilation.

This category refers to the content of the training course. It includes the material covered during the lectures and in the training manual, as well as the activities engaged in during the training. This also refers to how the training has been compiled and shaped since its conception. This theme identifies who the role players are in determining the content of the

course and what changes are to be made. Table 2 reflects management responses to the compilation of the training course.

Table 2: Management responses.

# Theme 1: Content/compilation

The overall feeling about the content and compilation of the course as viewed by the management level are the following: The course has a balance of theoretical input and practical experience. The theoretical input is updated continuously as the management team keep up to date with advances in the field.

Participant 1	Participant 2	Participant 3
"They get practical experience	"We spend those two weeks steeped	"All the different theories"
while they are training"	in Autism"	"Often pick up on stuff
"Go to conferences and keep up to	"So I'm constantly learning new	that I find the tutors really
date with what is going on in the	ways, and new interventions, and	struggle with, and I feel
field"	new research"	that this may be a general
"And you put that in the training	"And so I put it in the course as I go	thing that should be added
programme"	along'	to their initial training,
	"Didn't used to focus very much on	then I can go and speak to
	behanded in the now I	the training director"
	haWe Sig Feelin Sadehaviour"	
	"They get a manual which is huge"	
	"They get lots of hand outs"	
	"try and make the observation	
	sessions a range of children"	

The overall feeling that came through from the management level was that the practical component was the most essential aspect to the training course. The second important component of the course is the theory of autism and what intervention methods are used at SNAP. The training director is responsible for the actual compilation, but the whole management team has a say in what the content of the course should be. The management team attend conferences and keep up to date with the latest research to ensure that they

incorporate the latest material to the course and to the programme in general. Table 3 reflects the sentiments of the tutors regarding the content of the course.

Table 3: Tutor responses.

# Theme 1: Content/compilation

The general feeling about the content of the course was varied:

The tutors who did the training some years ago got the practical experience but were required to go through the theoretical material independently. The tutors who went through the more formal training received lectures on the theoretical aspects and had the practical experience to help integrate their knowledge.

# **Illustrative quotes**

# **Previous training:**

"Just sat in and observed"

"For me it was ten sessions where you just sit and

"I had to buy the manual and read through

# Formal training:

"We had lectures"

"The training director went through the Will have Whith the

"We sat in and observed"

WESTERN CAPE

"We had to tutor while being watched"

The tutors, when commenting on the content of the training had varying views. Some of the tutors were trained more recently once the course had become more formalised. These tutors received lectures on the intervention strategies and the theories of autism along with a training manual. They also had an opportunity to, not only sit in with the children while being tutored, but were also expected to tutor the children themselves while being observed. The tutors who were trained some years ago had to buy the manual, which has only changed slightly since the start of the official training, and read through it themselves. They also got the opportunity to sit in and observe the children but were rarely given the chance to actually

tutor themselves before being asked to take on a child of their own. The more recent mode of training appeared to be the preferred one and the students who were trained before this implementation felt that they would have liked to have been trained in the more formal way. The training programme was formalised to ensure a better quality and thus better prepare the tutors for the work they are expected to do. It was found that without the formal theoretical training the tutors lacked a depth of knowledge of the interventions they implement. The limitations of self-study became evident and thus the tutors felt that the training was formalised as a response to their feedback about the limitations and difficulties they were experiencing.

The content of the training manual falls in line with what was discussed with the management level. All three interviewees mention the theories of autism and a knowledge of the intervention strategies. They also highlighted the importance of behaviour as a section in the course. The manual deals with the theory of autism in part 2 Understanding autism), the intervention strategies in part 3 (The SNAP methods) and behaviour in part 5 (Understanding UNIVERSITY of the behaviour). The manual also covers what he person system is and how it is affected in children on the spectrum. The manual also consists of learning activities where they are asked to discuss a topic after observing a child in the morning session. This supports the management levels claim that the content of the course is both theoretical and practical or experiential.

The tutor's views were similar to those of the management level and are supported by the training manual. The difference between the tutors trained recently and those trained some years ago were that those trained recently have been helped to integrate the theory with the practical work while for the tutors trained previously the theory and the practical remained somewhat separate. When looking at the literature reviewed in the earlier chapter it becomes clear how this study differs from many of the studies that have been done in this field. This

research and this theme in particular explores the content of the training course and not the content of the SNAP intervention programme itself. As the success of the programme as a whole relies, in some part, on the quality of the training it is important to look at the content of that training particularly as viewed by the participants.

# Theme 2: Learning objectives/ Outcomes of training.

This refers to the specific learning goals that the trainee is expected to accomplish during the training. This also refers to the level of preparedness reached by the trainees. What do the trainees come out with after they have finished the course, and what are they able to do? It is important to note that the learning objectives and outcomes of training differ slightly in that the learning objectives refer to the short term goals of training while the outcomes of training refer to longer term goals, i. e. what skills the trainagement team would like the tutors to acquire in the long run. This theme starts the process of the implementation evaluation which seeks to identify the discrepancies between what the programme plans to do and what it does in reality. By identifying the learning objectives he researches can then assess the extent to which these learning objectives are met as reported by the participants in the study. Table 4 reflects the sentiments of the management level in terms of theme 2.

Table 4: Management responses.

# Theme 2: Learning objectives/outcomes of training

The three main objectives identified by the management level were the following:

A thorough knowledge of the interventions used in the SNAP programme, the flexibility and creativity to implement the programme innovatively, and an ability to manage intense behavioural difficulties. In terms of the outcome of the training the tutor is prepared to tutor a beginners child and gains experience and insight over time.

Participant 1	Participant 2	Participant 3
Knowledge of interventions:	Knowledge of interventions:	Knowledge of interventions:
"Thorough understanding of the	"Understanding of the types	"Basic knowledge of all the
different" interventions"	of interventions used"	interventions"
Flexibility:	Flexibility:	Flexibility:
"Flexible in their tutoring"	You gain insight through	"Flexible to change what isn't
"Goal-orientated and need to be	experience"	working"
creative in getting there"	Managing behaviour	Managing behaviour:
Managing behaviour:	Delha Ji R Sil Ta Yinfptherant	"behaviour, they do find it
"Control behaviours"	VEOINTOFFERING CHACKERSE, If	challenging but they have to
Outcome of training:	you can get the behaviour out	experience it"
"Training prepares them for a	the way the child can learn"	"Not just a little tantrum"
beginners child"	Outcome of training:	Outcome of training:
"Those that don't really have it I have	"Training prepares them for	"Training is really only for a
found that over the years "	what I call a beginners child"	beginners programme"

The views of the management team reveal that the training equips tutors with a good knowledge of the intervention strategies used in the SNAP programme. The tutors would have gained a deep understanding of autism. Managing behaviour is another important objective and expected outcome of the training course. A problem arises when the behaviour of the child is particularly difficult and the child becomes aggressive. Tutors are sometimes

frightened by this behaviour and doubt their own ability to manage it. This takes experience and confidence building. Finally they need to learn how to collect data and the importance of doing so.

The training programme prepares the tutor for a beginners child. A beginners child is a child who has just started on the SNAP programme and does the very basic activities. The tutor coming out of the training is expected to be able to implement this. The tutor is not equipped to handle an advanced programme and it was a general consensus that this takes years of experience to learn. It is through this process that the tutor gains insight and becomes more expert in this field. At this point they begin to 'read' the child correctly and the child's progress is enhanced. Another expectation is that tutors remain flexible and creative in their approach to the children.

Table 5 below reflects the views of the total

outcomes of the training.

earning objects and the

UNIVERSITY of the WESTERN CAPE

# Table 5: Tutor responses.

# Theme 2: Learning objectives/outcomes of training

The tutors felt that the most important learning outcome would be how to control defiant behaviour.

They felt unprepared for the type of work they were expected to do as they never realised how intense and emotional it was going to be at times.

# Illustrative quotes

- "Coping with their behaviour"
- "For the first month I didn't know what to do"
- "You don't realise how strong you need to be and how grounded you need to be to still be in control"
- "Impossible to learn everything that you will encounter"
- "So if you can just get the baseline that will prepare you"
- "I was not really prepared for the child I was put with because of her difficult behaviour"
- "You can't ever really be prepared for the children because they are so different"
- "You have to be creative"
- "Unpredictable children, can't learn how they are going to rea
- "I didn't know whether I was going to be able to cope with a child or not"
- "What works for one child now is not going to work for that same child tomorrow"
- "The training can't prepare you for that

UNIVERSITY of the

# WESTERN CAPE

The tutors agree with the management level that these expectations or learning outcomes are achieved. However, they felt that the training team could prepare tutors better for competencies like flexibility and creativity, despite their belief that it is not necessarily something that can be taught. Creativity and flexibility is something inherent within the individual but it needs to be fostered and encouraged rather than stifled. The manual gives the tutors guidelines on how to conduct tutoring sessions. In this section however, there is a lot in terms of what not to do as opposed to helping them develop the skill. It was revealed by both the tutors and the management level that the work they are expected to do is incredibly intense and draining both emotionally and physically. The tutors admit that many times they questioned whether or not this was the right line of work for them and the

management level admit that they do have tutors leaving right after training, deciding that this is not for them. Tutors further state that they sometimes don't know what to do but also realise that it is impossible to learn every possible scenario.

This theme speaks to the qualities and skills that the tutor should possess in order to implement an intervention the "SNAP" way. Research in this area tends to steer away from the necessary characteristics of those implementing a programme and focuses more on the clinical population being served, which in this instance is the child on the spectrum. Therefore this data is unique and helpful in terms of understanding how best to serve the clinical population, by developing and improving upon the skills of those implementing the intervention.

# **Theme 3: Implementation**

The implementation is how the course is implemented. This refers to the practicalities of the training such as the duration and the structure. There has been a substantial change in the implementation process, as the training has become more formalised. Table 6 summarizes WESTERN CAPE the information about what the training was like before and after the improvement according to the management team.

Table 6: Management responses to implementation.

# Theme 3: Implementation

The consensus was that the training director is responsible for implementing the two week training course which she has structured to include lectures and observations. The director and programme managers give continuous input.

Participant 1	Participant 2	Participant 3
"The training director does	"Participate in a two week training	"It's a two week training
the training and I will look	course"	course"
in and supervise"	"Very Intense"	"Didn't used to have proper
"I'm into everything"	"Very informal"	training"
	"Explain what is going to happen over	"Just observed"
	those two weeks"	"Didn't have the
	"Observations in the mornings and	background into what
	lectures in the afternoons"	Autism is"
	"Wednesday they are allowed to participate a bit"  "By the time they get back here on Friday afternoon they have got a roster for the following weekTY of the "Major WeekTY of the	

The training course is two weeks long as revealed by all three interviewee's in the management level. The training director is responsible for the implementation but the director over sees it. The programme managers have very little to do with the actual implementation. It is a very intensive two weeks but also informal to help the participants feel at ease. To start with they are told what to expect for the duration of the course and welcomed by the training director and the programme director. They are taken through the manual and have discussions based on the learning activities in the manual. They have observation sessions in the morning of the first week and then lectures and discussions in the afternoon. In the second week they do further observations and begin to plan and implement

the tutoring programmes themselves. At the end of the two weeks they receive a debriefing session where they discuss how they feel about their future and how what they feel they have learnt.

Table 7 summarizes the sentiments expressed by the tutors.



# Table 7: Tutor responses.

#### Theme 3: Implementation

Again the views varied:

The tutors trained some years ago never received the lectures which the tutors trained recently did.

There has been both a change in the content of the course as evidenced in theme one and in how the course is implemented. The more recent and more formal way of implementing the course appears to be the preferred and more beneficial method.

# Illustrative quotes

- "Two week training"
- "Lectures and observations"
- "It was actually so intense, at the end of the day you were dead tired"
- "Very Informal"
- "I had the whole week to read through the manual"

The tutors who did the course recently echo the view of the management level. They explained the structure of the two weeks which was in line with what the programme manager described. This was the preferred structure and the most beneficial. The tutors that had to self-study reported feeling that week and have the opportunity to have more formal theoretical training. It is reiterated at this point that the results in this theme are unique when compared to other research in this field, as very few studies have focused on how the training component of an intervention programme is implemented.

# Theme 4: Assessment of learning objectives.

In this category the researcher is talking of the ways in which the achievement of the learning objectives are assessed. This is the second part of the evaluation called the progress evaluation which seeks to monitor the attainment of the learning objectives proposed earlier.

Table 8 reflects the views of the management level regarding theme 4.

# Table 8: Management responses.

# Theme 4: Assessment of learning objectives

The learning objectives are assessed by completing eight assignments which the training director evaluates. After they have completed this requirement they receive a certificate. For this section only quotes from participant 2 were used since she was more involved with assessing the tutors after the completion of the course.

#### Illustrative quotes

- "They do assignments"
- "Eight assignments at the end of their two week course"
- "Simple assignment"
- "Forces them, you know to look deeper"
- "Allocated to programme managers"

Table 9 summarizes the tutor's sentiments

Table 9: Tutor responses.



Theme 4: Assessment of learning objectives UNIVERSITY of the

The tutors trained recently had to do the assignments while those trained previously were not expected to do so. Previously they were observed and assessed thereby as meeting the required level of competency. However the tutors were not coming out of the course with the depth of theoretical knowledge required and were thus less prepared for the challenges that may arise.

# **Illustrative quotes**

- "The training director just watched (Through a one way mirror)"
- "The director is standing there watching you and sometimes she will come in"
- "I never had any assignments"

Again, there were few discrepancies in the reporting across the two levels of participants.

The tutors are expected to complete eight assignments to assess whether or not they have met the learning objectives of the training course. They are also observed while they participate in the tutoring. At times they are videotaped and then go through the recording with the training director when they are given criticism on what they can do better and what they are doing well. The assignments are not difficult but it does force them to look at the material on a deeper level. The ones that went through the more recent training were assessed through observations and the assignment and were occasionally videotaped. The ones who went through the training in the past were sometimes observed. Some of the tutors were not assessed at all. The two dispensations have different frequency and methods of assessments. The earlier dispensation had no formal assessment methods while the new training has implemented more formal methods of assessing the attainment of the learning objectives. Again, in terms of the literature reviewed there is very little research on how early intervention facilitators or tutors are assessed as meeting the learning objectives during training. The research is generally restricted to the way in which on implements the intervention and whether overall programme goals are attained. As mentioned previously, the success of the intervention programme itself relies, in part on the success of the training they offer their facilitators. Thus information on how best to assess the attainment of learning UNIVERSITY of the objectives is useful. WESTERN CAPE

Theme 5: On-going training and evaluation.

On-going training refers to the input the tutors receive after completing the training.

Evaluation is how the tutors are monitored and evaluated in terms of their on-going progress and development. This differs from the previous theme in that it takes the evaluation one step further. Once they meet the criterion required to begin tutoring the tutors have to be able to demonstrate an on-going level of competency. This competency is continuously monitored through observation and evaluation. The gaps in knowledge and skills are then filled with on-going training. This brings the researcher to the summative aspect of the evaluation in that the attainment of longer term goals and objectives are assessed at this point. Table 10 reflects the management levels views on this theme.

Table 10: Management responses.

Theme 5: On-going training and evaluation There are training days when they all get togeth	ner to learn more. They also receive by	Theme 5: On-going training and evaluation  There are training days when they all get together to learn more. They also receive by monthly input from the training directors. They
are observed occasionally and sometimes videotaped. Finally they do self-evaluations twice a year	ntaped. Finally they do self-evaluations	twice a year.
Participant 1	Participant 2	Participant 3
"Certain things that you have to keep	"I am constantly videotaping them"	"They receive the training through SNAP and then
reinforcing with the tutors"	"Through observation. There is	I do the on-going training at our meetings"
"Once a term and then the programme	programme managers sit in of t	"Tutor myself and have them watch me"
managers also sit with the tutors and go	"Twice yearly the tutors do a self-	"Teach them as well as show them"
through their programmes and do some	evaluation" RSI	"I see the tutors at least twice a month"
training evenings"	"More formal way, and the the	Once in a group setting where we discuss one
"Supervision helps otherwise they get rigid"	programme managers sit dewn with	topic in general"
"We monitor our tutors by having them fill in	them and go through it W	"We choose one element of the programme and
the programmes and daily reports of their	"The programme managers are now	we just catch up on it, or expand on it"
sessions"	sitting and doing the training with	"Also see them one-on-one and that is where we
	them once a month"	talk about the challenges they are having"
		"Four times a year we have big group training"
		"I observe the tutors and keep track of each tutor"
		"Twice a year we formally evaluate them"
		"Sometimes videotape the tutors, but not enough"

With this theme the management level agreed that the tutors need to have certain skills reinforced occasionally. If they are not properly supervised they can become rigid which will not allow the child to progress. The programme managers are, for the most part, responsible for the on-going training and evaluations of the tutors. The training director reports monitoring the tutors by videotaping them and then going through it with them. The director monitors tutors by going through the daily reports they full in. She can keep track of the tutors and assess whether or not they are fulfilling her expectations through the reports that they have to write daily. The reports are a record of what the tutors are doing well and what areas they are neglecting. The tutors who run the home-based programmes have a meeting once a month, with the programme manager, where they can discuss areas that need input. They are also observed by their programme managers approximately once a term. In addition to observations they do self-evaluations which they then go through with the programme manager. Open days are held once a month where they tindividual one on one time with the programme manager to discuss their current difficult they also have two formal training days where all the tutors get together, friending the selfool based tutors, and the whole management team gives them input.

Table 11 reflects the sentiments of the tutors regarding this theme.

# Table 11: Tutor responses.

# Theme 5: On-going training and evaluation

The tutors are observed approximately once a month and receive training sessions about once a month as well. They self-evaluate twice a year. The tutors find the training helpful but wish there was more in terms of observations and suggestions.

# Illustrative quotes

# Meetings & peer support as training opportunity:

"I found that when we talked about the children in meetings we could pick up hints from other tutors"

# **Topical training inputs:**

"We do have on-going training on things like brushing and sensory integration"

# Access to managers as containment and coaching:

"Can always phone the programme manager and I can cry if I need to"

"I find it more helpful when the programme manager visits us and observes us tutoring and can tell you right there, don't do it like this, rather do this"

"Can always phone and ask for help if it is getting heet

# Evaluation as reflective exercise:

"We evaluate ourselves with a form and then we sit with the programme manager and she goes through it with us"

"Evaluated once in the middle of the year and once at the end of the year"

The tutors view echo that of the management level. They report the following areas of support and on-going training and evaluation:

#### Meetings & peer support as training opportunity;

Tutors have meetings once a month, and open days which are both very helpful. This affords them the opportunity to gain support from their peers and discuss cases and new ideas. They feel, however, a lack of support from the management team at times.

# Topical training inputs;

They also receive training on specific areas which they find very helpful. The programme manager obtains feedback from the tutors about what areas they are struggling with and will then prepare training on this area.

#### Access to managers as containment and coaching;

They all report that they would like the programme manager to do observations more often as these is most helpful. The general consensus was that more support from the management level would be helpful. The programme manager for the home programme tutors has many tutors to "look after" however and cannot possibly do more observations with her limited time. The tutors know that they can always phone if they need to talk and she is always willing to phone them back.

# Evaluation as reflective exercise;

The tutors are also given the opportunity Note to Stat Self-thaluation twice a year. This allows them the space to reflect on their strengths and improve on the areas requiring development.

On-going training and evaluation is essential for the success of an intervention. If the individuals implementing the intervention are not monitored and kept up to date in the field then the techniques they use may become "out-dated". It is much the same as the need for continuous professional development in the field of psychology. Research in this area is also very limited. The studies that are done tend to focus on the on-going development of the clinical population as opposed to those implementing the intervention.

# Theme 6: Strengths and improvements.

The strengths of the training programme are the areas that add value to the course, while the improvements refer to the improvements that have been made to the training since the opening of the organisation. Table 12 summarizes the responses of the management level.

Table 12: Management responses.

# Theme 6: Strengths and improvements

There is agreement that the more formal training has been a great improvement with tutors coming out more prepared. The practical experience was reported to be the biggest strength of the training which helps to integrate the theoretical knowledge.

Participant 1	Participant 2	Participant 3
"You cannot understand Autism	"The practical side"	mDidn't used to have proper training, and
if you haven't seen it and done it yourself'	"Nothing sinks in until you are actually working with	when I got them they would be able to work with only some kids and they didn't
"That's what they see here"	the child" UNIVERSITY of WESTERN CA	have the background into what Autism is" the "Now they have a good foundation" "Definitely one of the strengths is that they get the practical side as well" "They can see the theory being put into practice"

Table 13 below summarizes the responses of the tutors.

#### Table 13: Tutor responses.

# Theme 6: Strengths and improvements

The more formal training was also reported to be a great improvement on the tutor level. There was also agreement that the practical exposure to autism is unique to the training and very helpful.

# Illustrative quotes

- "Now the training is more formal you are actually forced to go through the manual and do the assignments"
- "The training director does try to explain how emotional this job is"
- "The practical side, then you can start somewhere and read up on the theory later"
- "You have to be thrown in the deep end, that's the only way to find out if you can do it or not"
- "See a different range of children"
- "From the third day they said we had to plan the whole lesson and teach"
- "You don't learn until you have been there and they have broken down all that you have done wrong"
- "Theory side was actually very good"
- "It is because of the theory side of it that I am confiden

hat I have done"

UNIVERSITY of the WESTERN CAPE

It is quite clear from the above discussion that many improvements have been made to the training course. The formalised training combines theory with practical and the tutors coming out of it are better equipped to work with children on the spectrum. The following strengths have been identified:

# Making theory accessible;

The tutors are encouraged to read as much as possible and are given helpful references to find relevant literature

# Providing a realistic reference or criterion for Autism Spectrum Disorder;

The director of SNAP put it nicely by saying that "you cannot understand autism until you have seen it and done it yourself". In the training the tutors are exposed to what autism "really looks like" not just what is presented in a text book. This helps to prepare them, to some degree, to the work they have to eventually do.

# Current up to date literature;

The programme managers and the directors keep up to date with the current literature in the field and attend conferences and courses on ASD regularly. The information that they are exposed to is then fed back to the tutors in their training sessions.

# Comprehensive coverage of theory and techn

The theoretical aspect of this training is another strength. It covers the basics of autism and then goes into further detail about the different intervention strategies available. It is these intervention strategies that SNAP incorporates into their programme.

The programme manager was unable to locate specific weaknesses of the training as she believed that in order to learn everything that one would need to work in this field would require years of study. What the training does is provides a baseline which the tutor is then expected to build on.

Research on the strengths of the training programme offers insight into how one can ensure that the facilitators trained are done so successfully. Identifying the strengths of the training and enhancing these serves to better equip individuals to work with children on the spectrum.

As with the other themes that emerged, research in this area is limited making the information gathered here unique and meaningful.

#### Theme 7: Weaknesses and recommendations.

This category refers to the identified weaknesses or areas requiring attention in the training programme and any recommendations made to help enhance the quality of the training.

Table 14 reflects the views of the management level in terms of weaknesses and future recommendations.

Table 14: Management responses.

# Theme 7 Weaknesses and recommendations

The weakness that came across was a lack of opening support. The tutors do receive support but not as much as the management level would the STERN CAPE

Participant 1	Participant 2	Participant 3
	"I could almost	"It would almost be like a
"People get hooked and then they don't move	have a blog so that	degree if you had to add in all
forward"	they can stay in	the levels" "You need to start
"There is such a demand and so the quality of	touch"	somewhere"
the tutors is not what I would like it to be"	"Extra support"	"Emotionally and physically
"And I would like better supervision the whole	"They don't write a	draining"
time but with regards to money it just isn't	test which is a	
possible"	weakness"	

At the management level two sentiments were expressed. 1) the demand for tutors compromises the quality of training provided in an intensive programme, as well as the quality of supervision and 2) tutors increasingly require more containment, supervision and monitoring or guidance given the nature of their work. The tutors require much support in the long run as the work that they are expected to do is intense and stressful. Table 15 reflects the sentiments of the tutor level.

Table 15: Tutor responses.

# Theme 7: Weaknesses and recommendations

The tutors agreed with the management level in terms of support. They also felt unprepared for "worst case" scenarios and lacked the coping skills to handle them.

WESTERN CAPE

# Illustrative quotes

#### Weaknesses:

"Coping skills training"

"Not completely prepared for worse case scenarios" ITY of the

"Thrown into the deep end"

#### **Recommendations:**

"In the training they do not prepare you for the emotional aspects of the job"

"We were never taught personal coping skill"

"I don't know if people would be open to having, it sounds weird, but like a "buddy" or something (For support)"

"Workshop on things like you know this is what is going to happen, you are going to have days when you feel like this"

"Maybe half an hour everyday of different scenarios to help prepare us"

The tutors spoke at length about the intensity of the work and how they felt that the training did not quite prepare them for the work they were expected to do. There was a general

recommendations that the training be adjusted to incorporate 1) preparedness for the emotional demands of the work (what emotional problems might arise during the course of their work.) and 2) preparedness for "worst case" scenarios. Another recommendation was that the on-going support be increased. Specifically that there be more than one programme manager for the home based programme tutors.

Highlighting weaknesses affords not only the organisation to make improvements but other intervention programmes may use the information to make improvements in their training as well. Research has focused on the weaknesses of the intervention programme rather than the training. The training, however, is an essential component in the interventions offered for children on the spectrum.

Theme 8: Subjective experience of the tutors.

This refers to the subjective experience of the tutors while they were in training, as well as their subsequent experiences in terms of how well prepared they felt to work with children on the spectrum. Table 16 summarizes the subjective experiences of the tutors.

WESTERN CAPE

Table 16: Tutor responses.

# Theme 8: Subjective experiences The training was reported to be fun but unlike what they were "thrown into" once it was completed. Many of the tutors felt insecure and unsure of what to do. Illustrative quotes **Emotional sequelae:** Training: "Emotionally draining" "You get confused and you get scared" "the training was fun, but I didn't know what I was "Always feel supported though" getting myself into" was very anxious" Challenges: Nerve wracking" "What I struggled with most was the entor "Dreaded it" stuff" "That anxious feeling is really there all the Negative outcomes: UNIVERSIT'S or you don't have the answer, or you Initiation: WESTERN don't know enough" "Very challenging" "Felt insecure when I started" Positive outcome: "It's all worth it when you are with a child and "I didn't always know what to do" vou hear them talk for the first time"

The tutors reported that the work they do is anxiety-provoking and stressful. There were also reports of how rewarding the job is at the same time. The training, as felt by the tutors, was exciting and enjoyable but they did not feel adequately prepared for what they were expected to do once training was completed. It did however give them the basics on which they all had to build on with the help and guidance from their programme managers.

The information in this theme differs substantially from other research in this field. Very few studies have focused on the subjective experiences of the participants. Instead they focus on the clinical population, as mentioned previously. This results in the individuals behind the scene dedicating time an energy to the success of the interventions offered, to some extent being ignored or overlooked. Information about the subjective experiences of early intervention facilitators or tutors offers one insight into the challenges they face. Working with individuals on the spectrum is a very intense and draining job, and although one does it for the children, the needs and feelings of the ones doing the work should always be taken into account.



#### **CHAPTER FIVE**

#### CONCLUSION

#### 5.1) Conclusion:

The results reveal a general consensus on all levels that SNAP is a unique intervention programme that has produced promising results with the children who have gone through, or who are currently on the programme. Both the management and tutor level participants showed great satisfaction with the work that they do despite the difficulties and challenges they reported. The eight themes that emerged during the data analysis phase of the study offer rich insight into the exact nature of the programme and how the participants perceive it. It prompts one to take a closer look at the training programme and analyse what works and what doesn't. It allows not only SNAP but other organisations dealing with ASD the opportunity to make improvements to the training they offer. By focusing on the training component of this programme this resurce server to the programme the quality of the intervention programmes available to individuals on the spectrum.

The aim of the training, as reported by the management level, is that the tutors come out at the end with a thorough knowledge of the intervention approaches used in the SNAP programme. This learning objective is for the most part accomplished during the two week training course. The expectation is that through further reading in the field and the practical experience over time, the tutors gain a more comprehensive knowledge in the long run. The second important objective is that the tutors have the creativity and flexibility to implement the programme in an innovative way. This, as agreed by the participants, is not something that can be taught but rather something inherent in the individual. It was recommended

however that a workshop on "how to be creative" during the training might help foster the ability that may be already present but perhaps not explicit. With this objective, as with the previous one it is noted that the vast majority of growth and learning is achieved through ongoing training and support that fosters the creativity and flexibility. The meetings are times when the tutors can talk of their experiences and "bounce ideas" off of one another with the programme manager to guide them. They are also opportunities to acquire further skills and knowledge in the field. In terms of managing behaviour, which was the third objective of the training, the tutors are equipped to manage moderately defiant behaviour. However, when this behaviour becomes overtly aggressive or does not abate after numerous attempts to modify it, tutors tend to struggle. Again it is through exposure that one builds the confidence to manage all situations.

As for the strengths and weaknesses of the training, there was a general consensus from all participants. The strength that was agreed upon across the board was the practical aspect of the training which helped to integrate the theoretical material covered. This bridges the gap UNIVERSITY of the between theory and praxis. The weakness as reported by the typors in particular was the lack of preparation for the emotionally draining aspects of the job. This brings the researcher to the final aspect of the evaluation which is responsive in nature. The subjective experiences of those involves in the training were varied to some degree. However, there was agreement that the training, although intense, was fun and very informative. The training director displayed particular excitement when discussing the training and is always open to suggestions on how to improve it.

The researcher had to redirect the discussions and interviews towards the training as the participants were more prone to talk about the SNAP programme itself. The training is short and intense and despite the practical experience they receive the "real experience" begins once the training ends. This results in some having the feeling of being thrown into the deep

end. The transition from training to real work experience is not an easy one. The tutors report it to be a shock and the training team, particularly the director feel that the tutors need as much support as possible, particularly in the beginning. Continuous reinforcement and training is necessary to refresh and then build on what was learnt during the training. To make this transition easier for management and tutors, it would be beneficial to do more work around preparation for the difficulties inherent in the job. The training does not end with the course but comes to life in their work.

# 5.2) Limitations of the study:

The scale of this study was small and included only the home-based programme tutors in the sample due to time limitations. Given more time a more representative sample of the whole organisation could have been selected encompassing tutors running both programmes. More comprehensive research would have been useful as the scope of this study didn't allow for this.

UNIVERSITY of the WESTERN CAPE

# 5.3) Significance of study:

By focusing the research on the interventions that are currently available for the treatment of autism one takes an important step forward in ensuring the best care possible for children on the spectrum. If these children are not taught the necessary skills of independence than they will be reliant on their families and eventually society they grow into adulthood. Intervention programmes are to some extent dependent on the quality of their training and therefore the researcher has focused the research on the training component of SNAP to gain insight into how this might be enhanced. The tutors and managers had the opportunity to express their thoughts and feelings around the training programme and strengths and weaknesses were

highlighted. It afforded the management level the opportunity to be reflective and encouraged them to contemplate the organisation in terms of their tutors and not just the clinical population they serve. The tutors were given the opportunity to express their feelings. When they became aware that others were feeling the same way as they were it allowed them the space to gain peer support.

# 5.4) Recommendations for further study:

The field of autism is a vast area in which more research is needed. The growing demand for specialised schooling and the apparent lack of availability of the appropriate placements for children on the spectrum is a great concern. Parents who are unable to afford specialised schooling have to find alternatives for their children. The case is that these children are sometimes left at home with a caregiver while the parents have to work. The child remains uneducated and therefore becomes a burden on the family and on society in general. There is a desperate need for funding in programmes like SNAP who are then able to do outreach and offer placements to children who cannot affected as STERN CAPE.

More comprehensive evaluation research of other aspects of the programme would be helpful in this area. This was not possible in this research given the time limitations and the scope. One could possible compare the efficacy of the home based programme in relation the school based programme. An evaluation of how the training is internalised by the tutors is another area for possible further study.

#### 5.5) Self reflections:

Having worked in the field of autism for five years this study was very meaningful for me.

Having gone through the training myself I was aware of many of the weaknesses reported as these were the ones I myself experienced when I started. I felt "thrown into the deep end"

and was not always able to access the support I needed. However, over time, I gained experience and my creativity and coping skills were enhanced through the on-going training and support of the organisation. The focus of the organisation is very much on the children, sometimes leading to the tutors being overlooked. It is essential to look after the tutors as without them none of the children will receive the help they require.

Having been a part of the organisation for many years prior to this research I may have had a significant impact on the research process. The management level may have been less likely to present the organisation in an overly positive manner given that I was already privy to the organisations structure. The tutors may have been more open and willing to report truthfully as they identify with me to some extent as their one time colleague. Thus the data collected was rich and perhaps more likely to be an accurate reflection of the views of the participants.

UNIVERSITY of the WESTERN CAPE

#### REFERENCES:

American Psychiatric Association (2000). Diagnostic and statistical manual of mental disorders fourth edition, text revision. Arlington: American Psychiatric Association.

Autism South Africa. (2010). [Online]. Available www.autismsouthafrica.org.

Barbour, R. (2007). Doing focus groups. London: Sage.

Barbour, R. S., & Kitzinger, J. (1999). Developing focus group research: Politics, theory and practice. London: Sage.

Bloor, M., & Wood, F. (2006). Keywords in qualitative methods: A vocabulary of research concepts. London: Sage.

Carr, A. (2006). The handbook of child and adolescent clinical psychology: A contextual approach. London: Routledge UNIVERSITY of the WESTERN CAPE

Centre for Disease Control, (2010).

Chasson, G. S., Harris, G. E., & Neely, W. J. (2007). Cost comparisons of early intensive behavioural intervention and special education for children with autism. *Journal of Child and Family Studies*, 16(10), 401-413.

Child Act, (2005).

Cresswell J. (1998). Qualitative inquiry and research design: Choosing among five traditions. California: Sage.

- Crossley, M. L. (2002). Could you please pass one of those health leaflets along?: Exploring health, morality and resistance through focus groups'. *Social Science and Medicine*, 55(8), 1471-1483.
- Durrheim, K. (1999). Quantitative analysis. In M. Terre Blanche & K. Durrheim (Eds.),

  \*Research in Practice: Applied methods for the social sciences (pp. 96-122). Cape

  \*Town, South Africa: University of Cape Town Press.
- Greenspan, S. (2006). Understanding autism. Scholastic Parent and Child, 13(4), 54-56.
- Grandin, T. (1995). *Thinking in pictures: And other reports from my life with autism.* Great Britain: Bloomsbury.
- Howell, D. C. (1999). Fundamental statistics for the behavioral sciences. (4<sup>th</sup> Ed). Pacific Grove, CA: Brooks/Cole.
- Howlin, P., Gordon, R. K., Pasco, G., Wade, A. & Charman, T. (2007). The effectiveness of Picture Exchange Communication System (PECY) of alming for teachers of children with autism: a pragmatic, group randomised controlled trial. Association for Child and Adolescent Mental Health, 48(5), 473-481.
- Isaac, S., & Michael, W., B. (1981). Handbook in research and evaluation: For education and the behavioural sciences. (2<sup>nd</sup> Ed). San Diego, CA: EdITS.
- Itzchak, B. E., & Zachor, D. A. (2010). Who benefits from early intervention in autism spectrum disorders? *Research in Autism Spectrum Disorders*, 5(11), 345-350.
- Lovaas, O. I. (1987). Behavioural treatment and normal education/intellectual functioning in young autistic children. *Journal of Consulting and Clinical Child Psychology*, 55, 3-9.

- Lynch, S. L. & Irvine, A. N. (2009). Inclusive education and best practice for children with autism spectrum disorder: an integrated approach. *International Journal of Inclusive Education*, 13(8), 845-859.
- Magiati, I., Moss, J., Charman, T. & Howlin, P. (2011). Patterns of change in children with autism spectrum disorders who received community based comprehensive interventions in their pre-school years: A seven year follow-up study. Research in Autism Spectrum Disorders, 379, 1-12.
- Oren, T., & Ogletree, B. T. (2000). Program evaluation in classrooms for students with autism: Student outcomes and program processes. *Focus on Autism and Other Developmental Disabilities*, 15(3), 170-175.
- Panerai, S., Zingale, M., Trubia, G., Finocchiaro, M., Zuccare lo, R., Ferri, R. & Elia, M.

  (2009). Special education versus inclusive education, the role of TEACCH program.

  Journal of Autism and Developmental Disorders, 39, 874-882.

  UNIVERSITY of the
- Parker, I. (2005). Qualitative research. England:

  Open University Press.
- Peters-Scheffer, N., Didden, R., Korzilius, H., & Sturmey, P. (2011). A meta-analytic study on the effectiveness of comprehensive ABA-based early intervention programs for children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 5, 60-69.
- Piaget, J. (1928). Judgement and reasoning in the child. London: Lowe & Brydone.
- Potter, C. (1999). Programme evaluation. In M. Terre Blanche & K. Durrheim (Eds.),

  \*Research in Practice: Applied methods for the social sciences (pp. 209-226). Cape

  \*Town, South Africa: University of Cape Town Press.

- Probst, P., & Leppert, T. (2008). Outcomes of a teacher training program for autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 38(10), 1791-1796.
- Puchta, C., & Potter, J. (2004). Focus group practice. London: Sage.
- Rosenberg, R. E., Daniels, A. M., Kiely-Law, J., Law, P.A., & Kaufman, W. E. (2009).

  Trends in autism spectrum disorder diagnoses: 1997-2007. *Journal of Autism and Development Disorders*, 39(14), 1099-1111.
- Rickards, A. L., Walstab, J. E, Wright-Rossi, R. A., Simpson, J., & Reddihough, D. S. (2009). One-year follow-up of the outcome of a randomized controlled trial of a home-based intervention programme for children with autism and developmental delay and their families. *Childs Care, Health and Development*, 35(5), 593-490.
- Safran, P. (2008). Why youngsters with autistic spectrum disorders remain underrepresented in special education. Remedial and Special Education, 29(2), 90-95. UNIVERSITY of the
- Stecher, B. M., & Davis, W. A. (1987). How to focus an evaluation. California: Sage.
- Wilczynski, S. M., Menousek, K., Hunter, M., & Mudgal, D. (2007). Individualized education programs for youth with autism spectrum disorders. *Psychology in the Schools*, 44(7), 653-666.

## APPENDIX A

# Interview guide



#### **SEMI-STRUCTURED INTERVIEWS**

- 1) Tell me a bit about the structure of the organisation i. e. the different roles?
- 2) What are the specific learning objectives of the training programme?
- 3) Explain the importance of these objectives?
- 4) How do you compile the training programme?
- 5) Tell me about the implementation?
- 6) What role do you play?
- 7) To what extent do you feel the training prepares your tutors for practical work?
- 8) How do you continue to monitor your tutors?
- 9) What do you feel the strengths are:
- 10) Are there any weaknesses or conce
- 11) Is on-going training required?

UNIVERSITY of the WESTERN CAPE

## APPENDIX B

# Focus group discussion



#### FOCUS GROUP DISCUSSION

- 1) To what extent do you feel the training process has prepared you for the work you do?
- 2) Was the training theoretical? (Enough academic knowledge)
- 3) Was the training experiential? (Enough practical skills)
- 4) Do you feel it painted a true picture of what your work essentially entails?
- 5) Do you feel any improvements could be made?
- 6) Were you assessed in anyway with regards to the content of training?
- 7) Were there any strengths that stood out for you?
- 8) Did you feel sufficiently supervised
- 9) Is on-going training required?

UNIVERSITY of the

## **APPENDIX C**

# Ethical clearance from the university



### OFFICE OF THE DEAN DEPARTMENT OF RESEARCH DEVELOPMENT

Private Bag X17, Bellville 7535 South Africa Telegraph: UNIBELL Telephone: +27 21 959-2948/2949 Fax: +27 21 959-3170 Website: www.uwc.ac.za

12 July 2011

#### To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape has approved the methodology and ethics of the following research project by: Ms E Elkington (Psychology)

Research Project:

Special Needs Adapted Programme: An evaluation of the tutor training programme for early cilitators with autistic children

Registration no:

UNIVERSITY of the WESTERN CAPE

Ms Patricia Josias Research Ethics Committee Officer

University of the Western Cape



UNIVERSITY of the WESTERN CAPE

A place of quality, a place to grow, from hope to action through knowledge

# APPENDIX D

# Organisational clearance





REG. NO. 2010/003266/08 • SNAP EDUCATION (ASSOCIATION INC UNDER SECTION 21) • PBO NO. 930035281

Prof. R. Christie Dean of Research University of the Western Cape Bellville, 7535

I would like to invite Emily Elkington (A Masters student at the University of the Western Cape) to conduct a programme evaluation of the tutor training program at SNAP. She furthermore has permission to name the organisation in her thesis. For the purposes of this evaluation, she will be given access to members of the management team and the tutors currently associated with the organization. This letter gives her access and permission to invite the designated to participate in the study. However, participation will remain at the discretion of individual members. We flust that issues of confidentiality, anonymity and voluntary participation will be enforced. Furthermore I give her permission to write this evaluation study up as her master's thesis in the Masters programme in Clinical psychology at the University of the Western Cape. Any publication that emanates from the research must be approved by the programme and copies of the output provided.

Kind regards

<u>ANNALIES VAN RIJSWIJK</u>

DIRECTOR

Landline: (021) 975 7224 Email: info@snap.org.za

5 March 2012

## APPENDIX E

# Information sheet





### Department of Psychology

Private Bag X 17, Bellville 7535, South Africa *Tel: +27 21-959 2283, Fax: 27 21-959 3515*E-mail: mrsmith@uwc.ac.za

#### INFORMATION SHEET

**Project Title:** Special Needs Adapted Programme (SNAP): An evaluation study of the tutor training programme for early intervention facilitators with autistic children.

#### What is this study about?

This study aims to evaluate the training programme at SNAP (Special Needs Adapted Programme). The finished product will be formative in that it will highlight both the strengths and weaknesses of the program and summative in that it will look at the training outcome.

#### What will I be asked to do if I agree to participate?

You will be expected to take part in a focus group or an interview. You will be expected to discuss your perceptions and experiences of the training program at SNAP on four levels: The learning objectives, implementation, assessment, and subjective experience. In order to assist us in accurately capturing your thoughts and feelings, we will audiotape the focus group or interview.

# Would my participation in this study be kept confidential? UNIVERSITY of the

This research project involves making an audiotabe of Count participation in the focus group discussion or interview. This information will be accessed by myself and my supervisor. We will do our best to keep your personal information confidential. To help protect your confidentiality, your name will not be mentioned in my research project and the tape recording will be destroyed at the end of this study. This information will be kept locked in a secure safe at all times. All participants will be asked to undertake to keep the content of the discussion confidential. If we write a report or article about this research project, your identity will be protected to the greatest extent possible.

#### What are the risks of this research?

There are no known risks associated with participating in this research project

#### What are the benefits of this research?

The benefits to you include:

- An opportunity to express your feelings and opinions about the training program at SNAP
- A possibility to enhance the training program as a result of the research findings.

#### Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

#### Is any assistance available if I am negatively affected by participating in this study?

Appropriate referrals will be made if unforeseen negative impacts arise.

#### What if I have questions?

This research is being conducted by Emily Elkington at the Department of Psychology at the University of the Western Cape. If you have any questions about the research study itself, you can contact

Student: Emily Elkington

Dept of Psychology, UV 021-9592283/ 083411414

emelkington@gmail.co

UNIVERSITY of the

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Supervisor: Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za

Head of Department:

Prof. K. Mwaba

Dept of Psychology, UWC

021-9592283/ kmwaba@uwc.ac.za

Dean of the Faculty of Community and Health Sciences: Prof. R. Mpofu

University of the Western Cape

Private Bag X17 Bellville 7535

021-959 2631/ rmpofu@uwc.ac.za

This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee

# APPENDIX F

# Consent forms





Department of Psychology

Private Bag X 17, Bellville 7535, South Africa *Tel: +27 21-959 2283, Fax: 27 21-959 3515* 

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

/

I agree to be audiotaped during my participation in this study.

I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- Unpublished thesis
- Conference presentation
- Published manuscript or article

I take cognisance that all documents and recordings will be destroyed at the end of the research process.

Participant's signature

UNIVERSITY of the
WESTERN CAPE

Date

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

**Emily Elkington** 

Dept of Psychology, UWC 021-9592283/ 0834114142

emelkington@gmail.com

Supervisor: Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za



Department of Psychology Private Bag X 17, Bellville 7535, South Africa Tel: +27 21-959 2283, Fax: 27 21-959 3515

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

I agree to be audiotaped during my participation in this study. I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- Unpublished thesis
- Conference presentation
- Published manuscript or article

I take cognisance that all documents and rec

ed at the end of the research process.

UNIVERSITY of the WESTERN CAPE

Participant's signature

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

Emily Elkington

Dept of Psychology, UWC 021-9592283/0834114142

emelkington@gmail.com

Dr. Mario Smith Supervisor:

19 June 2011

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za



Department of Psychology

Private Bag X 17, Bellville 7535, South Africa Tel: +27 21-959 2283, Fax: 27 21-959 3515

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

✓ I agree to be audiotaped during my participation in this study.

I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- Unpublished thesis
- Conference presentation
- Published manuscript or article

I take cognisance that all documents and recognisance

recordings will be destroyed a

ed at the end of the research process.

UNIVERSITY of the WESTERN CAPE

Participant's signature

Date

19.07.2011

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

Emily Elkington

Dept of Psychology, UWC 021-9592283/ 0834114142

emelkington@gmail.com

Supervisor:

Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za



Department of Psychology

Private Bag X 17, Bellville 7535, South Africa Tel: +27 21-959 2283, Fax: 27 21-959 3515

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

I agree to be audiotaped during my participation in this study.

I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- Unpublished thesis
- Conference presentation
- · Published manuscript or article

I take cognisance that all documents and recordings will be destroyed at the end of the research process.

UNIVERSITY of the WESTERN CAPE

D ...

11-07- 2011

Participant's signature

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

**Emily Elkington** 

Dept of Psychology, UWC 021-9592283/ 0834114142 emelkington@gmail.com

Supervisor:

Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za



Department of Psychology

Private Bag X 17, Bellville 7535, South Africa Tel: +27 21-959 2283, Fax: 27 21-959 3515

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

✓ I agree to be audiotaped during my participation in this study.

I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- Unpublished thesis
- · Conference presentation
- Published manuscript or article

I take cognisance that all documents and recordings will be destroyed at the end of the research process.

UNIVERSITY of the WESTERN CAPE 20/06

Participant's signature

Date

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

**Emily Elkington** 

Dept of Psychology, UWC 021-9592283/ 0834114142 emelkington@gmail.com

Supervisor:

Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za



Department of Psychology

Private Bag X 17, Bellville 7535, South Africa Tel: +27 21-959 2283, Fax: 27 21-959 3515

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

I agree to be audiotaped during my participation in this study.
I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- Unpublished thesis
- Conference presentation
- · Published manuscript or article

I take cognisance that all documents and recordings will be destroyed at the end of the research process.

UNIVERSITY of the

WESTERN CAPE

Participant's signature

Date

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

**Emily Elkington** 

Dept of Psychology, UWC 021-9592283/ 0834114142

emelkington@gmail.com

Supervisor:

Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za



Department of Psychology

Private Bag X 17, Bellville 7535, South Africa Tel: +27 21-959 2283, Fax: 27 21-959 3515

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

I agree to be audiotaped during my participation in this study. I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- Unpublished thesis
- Conference presentation
- Published manuscript or article

I take cognisance that all documents and reco royed at the end of the research process.

WESTERN CAPE

Participant's signature

UNIVERSITY of the

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

Emily Elkington

Dept of Psychology, UWC 021-9592283/ 0834114142 emelkington@gmail.com

Supervisor:

Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za



Department of Psychology Private Bag X 17, Bellville 7535, South Africa Tel: +27 21-959 2283, Fax: 27 21-959 3515

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

I agree to be audiotaped during my participation in this study.I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- Unpublished thesis
- Conference presentation
- · Published manuscript or article

I take cognisance that all documents and rec

recordings will be destrayed a

ed at the end of the research process.

UNIVERSITY of the WESTERN CAPE

abkate

Date

19-7-2011

Participant's signature

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

**Emily Elkington** 

Dept of Psychology, UWC 021-9592283/ 0834114142

emelkington@gmail.com

Supervisor:

Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za



Department of Psychology Private Bag X 17, Bellville 7535, South Africa Tel: +27 21-959 2283, Fax: 27 21-959 3515

#### LETTER OF CONSENT

I, the undersigned, fully understand the research aims, my rights and my role as participant in the study, as well as issues related to confidentiality, as outlined in the information leaflet.

I also undertake to keep the content of the discussion confidential so as to protect the rights of every participant in the study.

I hereby express my willingness to participate in this study. I am aware of my right to withdraw at any time.

I agree to be audiotaped during my participation in this study.

I do not agree to be audiotaped during my participation in this study.

I also grant permission to the researcher to disseminate the information obtained in the following formats:

- · Unpublished thesis
- Conference presentation
- · Published manuscript or article

I take cognisance that all documents and recordings will be destroyed at the end of the research process.

UNIVERSITY of the WESTERN CAPE

19-07-2011

Participant's signature

Date

This section is to be cut off and retained by the participant for future reference.

#### Researcher's Contact Details

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Student:

**Emily Elkington** 

Dept of Psychology, UWC 021-9592283/0834114142

emelkington@gmail.com

Supervisor:

Dr. Mario Smith

Dept of Psychology, UWC 021-9592283/ 0823309284

mrsmith@uwc.ac.za