

**THE ROLE OF PHYSIOTHERAPY IN INCLUSIVE
EDUCATION**

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KEY WORDS

Physiotherapist

Inclusive education

Special school

Ordinary school

Learner

District based support team

Attitude

Barrier

Needs



ABSTRACT

The role of physiotherapy in inclusive education

The education system in South Africa has been on a path of change since 1994, in an effort to correct the injustices and inequalities of our apartheid past. In 2001 Education White Paper Six and the inclusive education policy was introduced. This policy is based on creating an environment where special needs education is seen as a non-racial and integrated part of the education system and envisages the role of special schools changing in order to facilitate this process. Special schools will continue to provide services to the severely disabled and high needs learner. However staff at special schools will be encouraged to make their expertise and resources available to the ordinary schools in the community.

This study is focused on the role of the physiotherapist in special schools. The introduction of the new policy required physiotherapists to serve the needs of learners at special schools as well as provide indirect support to ordinary schools in the community. However physiotherapists have not been trained to provide indirect support and feel that they have not had adequate assistance to improve their skills and knowledge in this area. This study therefore looked at how the knowledge, skills and attitudes of physiotherapists can be enhanced and developed in order to meet the need of successfully implementing inclusive education. The aim of the study was to design, implement and evaluate an intervention aimed at improving the knowledge, skills and attitudes of physiotherapists in providing indirect support in the education system. In order to do so, it was necessary to meet the following objectives. Firstly to determine how physiotherapists perceive indirect support and their role in the district based support team; and secondly to determine the barriers experienced by physiotherapists in providing indirect support as well as their needs to provide appropriate support within the inclusive education framework.

A qualitative study was conducted using the action research method. This study involved five special schools in the Western Cape and a total of nine participating physiotherapists. Focus group discussions were used to collect data. The first focus group discussion involved participants identifying their perceptions of indirect support, their role in the district based support team, barriers to indirect support and their needs in order to provide appropriate support in the inclusive education framework. The data collected were analyzed using content analysis. The findings revealed that many of the physiotherapists are experiencing difficulties in making the shift from direct to indirect support, due to not having been provided with the necessary support, resources and training to facilitate the transition to inclusive education practices. A second round of focus group discussions were held for the physiotherapists to prioritise a need that the intervention would be based on. Thereafter a training workshop was held, based on the prioritised need, to improve the provision of indirect support by physiotherapists. This research has shown that physiotherapists have begun to engage with the change process by questioning the implications of the inclusive education policy and looking at how their role in special schools needs to change. The physiotherapists require assistance in the facilitation of a transition from providing mainly direct support in special schools, to also providing indirect support in an inclusive education setting. They require the assistance of the school management and the Department of Education to provide the necessary support, resources and training to facilitate the transition to inclusive education practices.

DECLARATION

I hereby declare that **The role of physiotherapy in inclusive education** is my own work, that it has not been submitted before for any degree or examination at any other university, and that all the sources used or quoted have been indicated and acknowledged by complete references.

Signature.....

Savondarie Govindaswami Pillay



November 2010

Witness.....

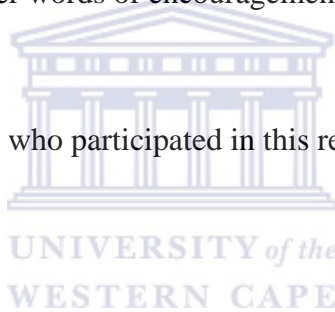
Professor P. Struthers

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I thank my parents for always instilling in me the desire to be better and that one can never stop learning. I wish you were here to share this achievement with me.

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DEDICATIONS

I dedicate this thesis to my husband Kessy and children Rivanee and Sanan.



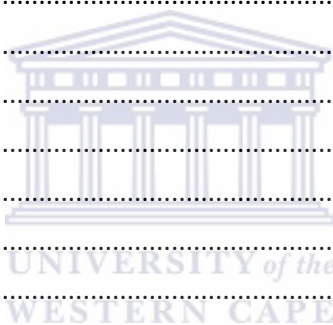
ABBREVIATIONS

APTA	American Physical Therapy Association
DBST	District based support team
DOE	Department of Education
EWP6	Education White Paper Six
IEP	Individual education plan
ILST	Institution level support team
ISP	Individual support plan
NCESS	National Commission for Education Support Services
NCSNET	National Commission for Special Needs Education and Training
SIAS	Screening, identification, assessment and support
UK	United Kingdom
UN	United Nations
USA	United States of America
WCED	Western Cape Education Department

Table of Contents

CHAPTER ONE	1
INTRODUCTION	1
1.1 BACKGROUND	1
1.2 PROBLEM STATEMENT	5
1.4 AIM AND OBJECTIVES	5
1.5 DEFINITION OF TERMS	7
1.6 OUTLINE OF CHAPTERS	9
CHAPTER TWO	11
LITERATURE REVIEW	11
2.1 INTRODUCTION	11
2.2 INCLUSIVE EDUCATION	12
2.2.1 History of inclusive education	12
2.2.2 Definitions of inclusive education	12
2.2.3 Inclusive education in developed countries	14
2.2.3.1 Inclusive education in the United States of America	14
2.2.3.2 Inclusive education in Australia	16
2.2.3.3 Inclusive education in the United Kingdom	17
2.2.3.4. Inclusive education in New Zealand	18
2.2.4 Inclusive education in developing countries	19
2.2.4.1 Inclusive education in Zambia	19
2.2.4.2 Inclusive education in Zimbabwe	20
2.2.5 Inclusive education in South Africa	22
2.2.5.1 The development of an inclusive education policy in South Africa	22
2.2.5.2 Implementation of inclusive education in South Africa	27
2.3 PHYSIOTHERAPISTS AND INCLUSIVE EDUCATION	30
2.3.1 Direct support model	30
2.3.2 Indirect support model	30
2.3.2.1 Advantages of indirect therapy	33
2.3.2.2 Difficulties experienced with indirect support	34
2.3.3 International physiotherapy practices	34
2.3.3.1 Physiotherapy in schools in the USA	34

2.3.3.2 Physiotherapy in schools in the UK.....	36
2.3.3.3 Physiotherapy in schools in New Zealand.....	38
2.3.3.4 Physiotherapy in schools in Zambia.....	40
2.3.4 Physiotherapy in schools in South Africa.....	40
2.3.4.1 Physiotherapists' role in special schools.....	41
2.3.4.3 Effect of the inclusive education policy on physiotherapists in special schools in South Africa.....	42
2.4 SUMMARY.....	47
CHAPTER THREE.....	49
METHODOLOGY.....	49
3.1 INTRODUCTION.....	49
3.2 QUALITATIVE RESEARCH.....	49
3.3 ACTION RESEARCH.....	50
3.3.1 Definitions of action research.....	50
3.3.2 Stages in action research.....	51
3.3.2.1 Planning.....	52
3.3.2.2 Acting.....	52
3.3.2.3 Reflection.....	53
3.3.3 Advantages of action research.....	54
3.3.4 Limitations of action research.....	55
3.4 RESEARCH SETTING.....	55
3.5 STUDY POPULATION.....	56
3.5.1 Sample.....	56
3.5.2 Inclusion criteria.....	57
3.5.3 Exclusion criteria.....	57
3.6 METHOD OF DATA COLLECTION.....	57
3.6.1 Focus groups.....	57
3.6.2 Interview guide.....	59
3.7 PROCEDURE OF THE STUDY.....	60
3.7.1 Focus group discussions.....	60
3.8 DATA ANALYSIS.....	62
3.8.1 Codes to categories.....	63
3.8.2 Categories to themes.....	65
3.9 STRATEGIES TO ENSURE TRUSTWORTHINESS.....	66
3.9.1 Credibility.....	66



3.9.2 Member checking	67
3.9.3 Peer review	67
3.9.4 Dependability	67
3.9.5 Transferability	68
3.10 ETHICAL CONSIDERATIONS	68
3.11 SUMMARY	69
CHAPTER FOUR	70
RESULTS	70
4.1 INTRODUCTION	70
4.2 PHYSIOTHERAPISTS' PERCEPTION OF INDIRECT SUPPORT	73
4.2.1 Physiotherapists' understanding of indirect support	73
4.2.1.1 Indirect support to teachers	74
4.2.1.2 Indirect support for parents or guardians	78
4.2.1.3 Indirect support involving all other stakeholders	79
4.2.2 Physiotherapists' attitude to indirect support	83
4.2.2.1 Positive attitudes to indirect support	83
4.2.2.2 Negative attitudes to indirect support	84
4.2.2.3 Summary of physiotherapists' attitude to indirect support	85
4.3 PHYSIOTHERAPISTS' PERCEPTION OF THEIR ROLE IN THE DBST	86
4.4 BARRIERS TO PROVIDING INDIRECT SUPPORT	88
4.4.1 Lack of resources	88
4.4.1.1 Insufficient physiotherapy posts	89
4.4.1.2 Poor socio-economic circumstances of people receiving indirect support	89
4.4.1.3 Funding by government departments for structural changes	90
4.4.2 Poor communication as a barrier to indirect support	90
4.4.2.1 Communication with parents	91
4.4.2.2 Communication between education district offices	91
4.4.2.3 Communication with the community	92
4.4.2.4 Communication between physiotherapists and staff members at the special schools	92
4.4.2.5 Communication between special schools	93
4.4.3 Teachers' attitude to physiotherapy	93
4.4.4 Intrinsic barriers experienced by physiotherapists' as a result of their training and workload	95
4.4.5 Language	96
4.4.6 Time	97
4.4.7 The Department of Education	98

4.5 NEEDS OF PHYSIOTHERAPISTS TO SUPPORT INCLUSIVE EDUCATION	99
4.5.1 Training of physiotherapists	99
4.5.2 Physiotherapists’ role in the training of others	100
4.5.2.1 Teachers	100
4.5.2.2 Volunteers	102
4.5.2.3 Learners in ordinary schools	102
4.5.3 Resources	102
4.5.4 Improved communication between education districts and special schools	103
4.5.5 Advocacy	103
4.5.6 Time	104
4.6 SUMMARY	104
CHAPTER FIVE	105
RESULTS	105
5.1 INTRODUCTION	105
5.2 INTERVENTION	105
5.2.1 Phase One: Prioritisation of a need to support inclusive education	106
5.2.2 Phase Two: Planning of the workshop	108
5.2.2.1 Procedure followed in planning of the workshop	108
5.2.2.2 Barriers experienced in planning the workshop	110
5.2.2.3 Facilitators experienced in planning the workshop	111
5.2.3 Phase Three: Implementation of the workshop	112
5.2.3.1. Introduction to workshop	113
5.2.3.2. Information on policy	114
5.2.3.3 Indirect support	115
5.2.4 Phase Four: Evaluation of the workshop	118
5.2.4.1 Objectives of the workshop	121
5.2.4.2 Reflection on the workshop	122
5.4 SUMMARY	124
CHAPTER SIX	125
DISCUSSION	125
6.1 INTRODUCTION	125
6.2 INDIRECT SUPPORT PROVISION CURRENTLY PRACTICED BY TWO SPECIAL SCHOOLS	126
6.2.1 Introduction	126
6.2.2 Present practices	126
6.2.3 Facilitators of these indirect support practices	127

6.3 PHYSIOTHERAPISTS' UNDERSTANDING OF INDIRECT SUPPORT.....	128
6.3.1 Indirect support to teachers	129
6.3.2 Indirect support to parents.....	131
6.3.3 Indirect support to other stakeholders in the education setting	133
6.3.4 Advocacy	136
6.3.5 Summary of physiotherapists' understanding of indirect support.....	138
6.4 ATTITUDES OF PHYSIOTHERAPISTS TO INDIRECT SUPPORT	140
6.4.1 Positive attitudes of physiotherapists to indirect support	140
6.4.2 Negative attitudes to indirect support	142
6.5 PHYSIOTHERAPISTS' PERCEPTION OF THEIR ROLE IN THE DBST	145
6.6 BARRIERS AND NEEDS EXPERIENCED BY PHYSIOTHERAPISTS IN PROVIDING INDIRECT SUPPORT	148
6.6.1 Lack of resources.....	148
6.6.1.1 Insufficient physiotherapy posts.....	149
6.6.1.2 Poor socio-economic conditions of communities that act as barriers to indirect support ..	150
6.6.1.3. Lack of funding by government departments for structural changes	150
6.6.2 Poor communication as a barrier to indirect support	151
6.6.2.1. Communication with parents	151
6.6.2.2. Communication between education districts and between special schools.....	153
6.6.2.3. Communication with the community.....	154
6.6.3 Teachers' attitudes to physiotherapy	155
6.6.3.1 Teachers' workload	155
6.6.3.2 Lack of training for teachers to work with learners with disabilities.....	157
6.6.3.3 Teachers' unrealistic expectations of the role of the physiotherapist	158
6.6.3.4 Power relationships that exist in a school setting	159
6.6.4 Intrinsic barriers experienced by physiotherapists that limit their provision of indirect support	160
6.6.4.1 Implementation of EWP6.....	160
6.6.4.2 Physiotherapy training for employment in the education sector	161
6.6.5 Time as a barrier to indirect support	162
6.6.5.1 Time to work with the teacher	162
6.6.5.2 Time to work in the community.....	163
6.6.6 The Department of Education.....	163
6.6.7 Advocacy	164
6.7 AN INTERVENTION TO IMPROVE PHYSIOTHERAPY SUPPORT IN THE INCLUSIVE EDUCATION SETTING	165

6.7.1 Reflection	170
6.8 SUMMARY	171
CHAPTER SEVEN	172
CONCLUSION.....	172
7.1 INTRODUCTION	172
7.2 SUMMARY OF STUDY	172
7.3 CONCLUSION.....	177
7.4 LIMITATIONS OF THE STUDY	178
7.5 SIGNIFICANCE OF THE STUDY	178
7.6 RECOMMENDATIONS.....	179
REFERENCES	181
Appendix	195
Appendix I	195
Appendix II	196
Appendix III	197
Appendix IV	199
Appendix V	200
Appendix VI.....	201
Appendix VII.....	203
Appendix VIII	204
Appendix IX	205



List of tables

Table 1: Codes to categories	63
Table 2: Categories to themes	65
Table 3: Profile of special schools that participants were employed in at the time of this study.....	71
Table 4: Profile of physiotherapists that participated in the focus group discussions	72
Table 5: Evaluation of the workshop	119

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

My background as a therapist in the education sector began in 1993 when I worked at a special school in KwaZulu-Natal. Physiotherapy at special schools was based on the medical model of support and comprised largely of individual and group therapy. Learners who experienced barriers to learning whether physical or academic, were referred to special schools, where these barriers were addressed. The aim of the special school was to equip learners with skills to overcome these barriers, thus enabling them to return to ordinary schools. However the physical, social and psychological support required by the learners upon their return was often not available in ordinary schools. Consequently the learners remained in special schools. My experience of working in a special school in the Western Cape revealed that the medical model is still the basis of therapy and learners who experience barriers to learning in ordinary schools are still referred to special schools in order for their needs to be addressed. There is uncertainty with regard to the role of therapists within the inclusive education framework and this was corroborated in research conducted by Struthers (2005) and Kotze (2009) in the Western Cape.

Education White Paper Six on Special Needs Education: Building an Inclusive Education and Training System (EWP6) arose out of a need for changes to be made in the provision of education and training so that it is responsive and sensitive to the diverse range of learning needs (Department of Education [DOE], 2001). The focus is on overcoming barriers in the education

system that prevent it from meeting the needs of the learner rather than changing the learner, as was the case in the past.

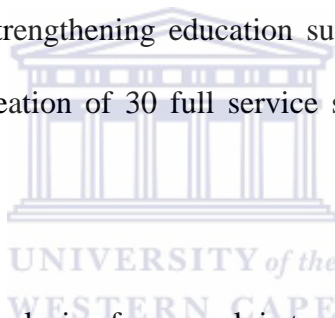
Building an inclusive education and training system would focus on the following:

- Acknowledging that all children and youth can learn and need support.
- Accepting that all learners are different in some way and have different learning needs.
- That education structures, systems and learning methodologies should meet the needs of all learners.
- That changes need to be made to attitudes, behaviour, teaching methodologies, curricula and environment to meet the needs of all learners.
- Empowering learners to develop their strengths to enable them to participate maximally in the process of learning and to uncover and minimize barriers to learning.
- Acknowledging that learning also occurs in the home and community.

(DOE, 2001: 16)

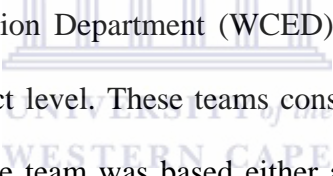
The apartheid policies of the past resulted in enormous disparities in the funding and allocation of resources to the different race groups and the present government faces enormous challenges in the implementation of the EWP6. The DOE acknowledged that believing in and supporting such a policy was not enough to ensure that such a system will work in practice (DOE, 2001). It is therefore imperative to evaluate the existing resources in order to determine how they can be strengthened or changed in order to support inclusive education (DOE, 2001:16).

The vision and goals outlined in EWP6 reflect a 20 year developmental plan that was initiated in 2001. The long-term goal is the development of an inclusive education and training system that will uncover and address barriers to learning and also be able to respond to a diverse range of learning needs through a variety of different institutions such as special schools, resource centres, full service schools, public adult learning centres and higher education training institutions (DOE, 2001). The medium to short-term goals include addressing weaknesses and deficiencies in the current system and expanding services to include those not presently accommodated in the education system. This includes the strengthening of special schools to enable them to function as resource centres; training and capacity building of all the role players for their changed or new roles; strengthening education support services; establishing district based support teams (DBSTs); creation of 30 full service schools and establishing institution level support teams (ILSTs).



The role of special schools in the inclusive framework is to serve the identified disabled learners on site, as well as to act as a resource centre integrated into the DBST so that staff can provide specialised professional support in curriculum, assessment and instruction, to ordinary schools in the neighbourhood. This new role will be performed by special schools in addition to the services they provide to their existing learners. This role requires therapists to shift the balance from doing mainly direct support to learners in special schools to increasing indirect support to ordinary schools, parents and others in the community around them. In order for schools to take on this additional role, EWP6 advocates that there needs to be a qualitative upgrading of its services with the focus on training of staff including physiotherapists for their new roles as part of the DBST (DOE, 2001).

In 2007 the Minister of Finance announced that spending in the inclusive education sector would be increased substantially in the 2008/2009 financial year (Thutong, 2008). The money would be utilised for upgrading and maintaining special schools by providing additional material and human resources as well as for completing the conversion of 30 ordinary schools into full service schools. Provinces were encouraged to build the capacity of the inclusive education system by running advocacy and parent empowerment campaigns, appointing additional support staff in district offices, establishing ILSTs to assist teachers in inclusive practices and implementing the National Strategy on Screening, Identification, Assessment and Support (SIAS). The function of SIAS is to overhaul the process of identifying, assessing and providing programmes for all learners requiring additional support so as to enhance participation and inclusion (DOE, 2008).



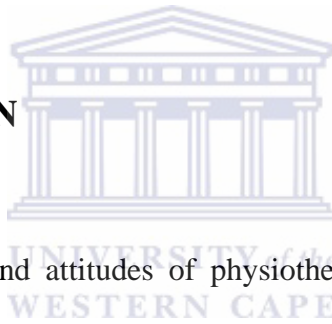
In 2008 the Western Cape Education Department (WCED) began the process of establishing inclusive education teams at district level. These teams consisted of a therapist, a psychologist and a learning support teacher. The team was based either at the district office or at a special school in the area that they served. The idea of basing the inclusive education team at a special school was twofold. It was firstly to strengthen special schools as resource centres by providing training for staff at special schools on inclusive education practices and involving them in outreach work thus beginning the shift to providing indirect support to the community and secondly, to make the resources at special schools available and accessible to ordinary schools in the community. This idea has been met with resistance from management and staff at special schools as they are uncertain of exactly what this entails. Members of the inclusive education teams at district level also reported that they are being met with resistance and lack of support by

management and staff at special schools who feel that they have high workloads and are unwilling to do outreach work as well.

1.2 PROBLEM STATEMENT

The introduction of EWP6 and the inclusive education policy makes demands on physiotherapists for which they feel they are inadequately trained. In addition to providing direct support to learners at the special schools, physiotherapists also have to provide indirect support to teachers, parents, ordinary schools and the community as part of the DBST.

1.3 RESEARCH QUESTION



How can the knowledge, skills and attitudes of physiotherapists that work in the education system be developed in order to meet the demands of inclusive education?

1.4 AIM AND OBJECTIVES

The aim of the study was to design, implement and evaluate an intervention targeted at improving the knowledge, skills and attitudes of physiotherapists in providing indirect support in the education framework.

The objectives were:

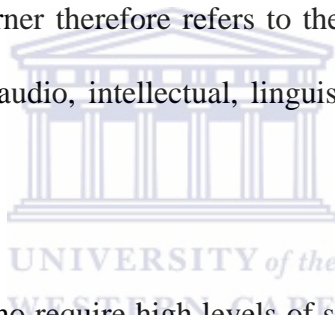
1. To determine physiotherapists' perception of indirect support.
2. To determine physiotherapists' perception of their role in the DBST.
3. To determine the barriers physiotherapists experience in providing indirect support.
4. To determine the needs of physiotherapists to provide appropriate support within the inclusive education framework.
5. To plan, implement and evaluate the intervention aimed at improving physiotherapy support in the inclusive education framework.



1.5 DEFINITION OF TERMS

District based support team - “Groups of departmental professionals whose responsibility it is to promote inclusive education through training, curriculum delivery, distribution of resources, identifying and addressing barriers to learning, leadership and general management” (DOE, 2008, p3).

Levels of support - In the inclusive education setting, levels of need are used to determine the support required by learners instead of the categories of disability that was used in the past. The high, low and moderate needs learner therefore refers to the degree of support required by the learner to overcome behavioural, audio, intellectual, linguistic, visual and other barriers in all learning areas (DOE, 2005).



High needs learners – learners who require high levels of support such their needs will be met in a special school (DOE, 2005).

Moderate needs learners – learners who require moderate levels of support and can be accommodated in full service schools. At these schools additional support will be made available to the learner via the ILST which will receive support and training from the DBST in strategies to overcome barriers to learning (DOE, 2008, p20).

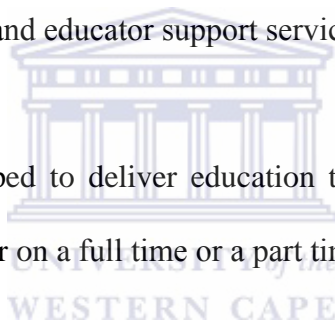
Low needs learner – learners who can be accommodated in ordinary schools with minor modifications either at home, at school or in the classroom to improve conditions which may affect the learner’s learning and development (DOE, 2008, p19).

Barriers to learning - “refers to difficulties that arise within the education system as a whole, the learning site and/or within the learner him / herself which prevent access to learning and development for learners” (DOE, 2008, p3).

Full service schools - “ordinary schools which are specially equipped to address a full range of barriers to learning in an inclusive education setting” (DOE, 2008, p3).

Institution level support teams - “teams established by institutions in general, further and higher education, as an institution level support mechanism whose prime function is to put in place co-ordinated school, learner and educator support services” (DOE, 2008, p3).

Special schools - “schools equipped to deliver education to learners requiring high-intensive educational and other support either on a full time or a part time basis” (DOE, 2008, p3).



Special schools / Resource Centres - “special schools transformed to accommodate learners who have high intensity support needs, as well as to provide a range of support services to ordinary and full service schools” (DOE, 2008, p4).

Direct therapy - is treatment performed at special schools in a specifically designated therapy area with little or no carryover into the classroom or home.

Therapists - includes therapists of all disciplines specifically occupational therapists, physiotherapists and speech therapists.

1.6 OUTLINE OF CHAPTERS

Chapter One presents the inclusive education policy and how this influences the role of the physiotherapist in special schools.

Chapter Two presents the literature review which firstly looks at inclusive education policies and the implementation thereof internationally and in South Africa. The next part covers how these inclusive education policies have affected the way physiotherapists function in school based settings, both internationally as well as in South Africa. Models of support provision are presented, as well as the advantages and disadvantages of indirect support. Models of support used both internationally and locally were identified by reviewing relevant literature.

Chapter Three presents the methodology, exploring the reasons for choice of research design and action research as the method of study, reasons for the choice of sample, focus group discussions and the procedure of the study. The method of data analysis is also presented and the chapter ends with strategies that were used to ensure trustworthiness as well as the ethical compliance.

Chapter Four presents the results of the focus group discussions that were aimed at meeting Objectives One, Two, Three and Four. These objectives were to determine how physiotherapists perceive indirect support and their role in the DBST, the barriers to indirect support as well as their needs to provide support in the inclusive education framework.

Chapter Five presents the results of Objective Five which was to plan, implement and evaluate an intervention strategy based on a need identified by the physiotherapists to provide indirect support.

Chapter Six presents a discussion on the results and compares the findings to other research in the literature that was consulted on the topic.

Chapter Seven brings the study to a close by presenting a summary of the chapters, followed by the conclusion, limitations, recommendations and significance of the study.

In the next chapter the literature review is presented.



CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter will firstly present trends in inclusive education practices internationally as well as in other African states. The focus will be on inclusive education policies and the implementation thereof. It will also focus on how South Africa fares in the adoption and practice of inclusive education principles.

The second part of the literature review will present how inclusive education policies have affected the role of physiotherapists in education. Models of service provision used by physiotherapists internationally are presented as well as the advantages and disadvantages of indirect support. Physiotherapy practices in inclusive education settings are also presented and the chapter concludes with looking at how inclusive education policies in South Africa have influenced the role of physiotherapists working in special schools.

2.2 INCLUSIVE EDUCATION

2.2.1 History of inclusive education

The move to inclusive education practices in countries like USA, UK, Australia and New Zealand began in the post World War Two era as a result of the United Nations (UN) focusing on the rights of every child to an education. In the 1960s this was expanded to include disabled peoples' right to a quality education. This trend gained momentum in the 1990s with the release of the Salamanca Statement (UNESCO, 1994: pp11-12) which states that:

The fundamental principle of the inclusive schools is that all children should learn together wherever possible...inclusive schools must recognise and respond to the diverse needs of their students...through appropriate curricula, organisational arrangements, teaching strategies, resource use and partnerships with their communities.

This process of change towards inclusive education was embraced in developing countries as well. In Southern Africa inclusive education policies have been introduced in Botswana, Lesotho, Namibia, South Africa, Zambia and Zimbabwe in the late 1980s to 1990s in keeping with the global trend (Engelbrecht & Green, 2007; Kashimba, 2005).

2.2.2 Definitions of inclusive education

Inclusive education is described by Cole (1999) as an educational model in which students with disabilities receive their education in a general educational setting with collaboration between general and special educational teachers. This simply means that, instead of being educated separately in special schools, children with disabilities are educated with their peers in mainstream

schools. Inclusive education is also seen as an approach that seeks to address a variety of learning needs in adults, children and youth with a special focus on those vulnerable to exclusion and marginalisation (UNESCO, 1994). This includes: -

“disabled and gifted learners, street and working learners, learners from remote or nomadic populations, learners from linguistic, ethnic or cultural minorities and learners from other disadvantaged or marginalised areas or groups”(UNESCO,1994: p 59).

These definitions indicate that inclusive education is not just about making provision for learners with disabilities but it means extending educational opportunities to a wide range of marginalised groups who may have had little or no access to school (UNESCO, 1994). This issue of looking after the marginalised or vulnerable groups is of particular significance in the less developed countries, as the developed countries have well developed and resourced education systems that have effectively catered for the majority of learners. UNESCO (2003) maintains that for the more developed countries where there are equally well resourced special and general education systems inclusion would mean breaking down the segregation that exists between special schools and ordinary schools. In the less developed countries where there is often a poorly developed special education system, inclusion would look at including marginalised learners in basic education.

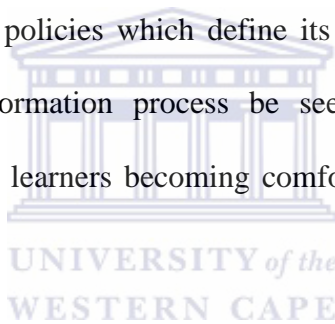
In South Africa EWP6 sought to include the marginalised and vulnerable learner (DOE, 2001: p7):

“Different learning needs arise from a range of factors including physical, mental, sensory, neurological and developmental impairments, psycho-social disturbances, and differences in intellectual ability, particular life experiences or socio-economic deprivation.”

Peresuh and Ndawi (as cited in Engelbrecht, Green, Naicker, & Engelbrecht, 1999) point out that in less developed countries there may be a significant number of learners who are excluded from basic education and that learners with disabilities may not even be the largest group. Furthermore

these countries may lack the resources to establish special schooling to cater for these learners. The inclusive school may therefore be the most viable option to cater for these vulnerable or marginalised learners.

From these definitions it can be seen that the transition to inclusive education is not just a technical or an organisational change but also a move with a clear philosophical direction based on an increased emphasis on human rights (UNESCO, 2003). Inclusive education requires a multi-faceted approach that involves changes and modifications in content, approaches, structures and strategies in order to meet the needs of a diverse group of learners and with each country with its unique circumstances drawing up policies which define its own set of requirements. UNESCO (2003) proposed that this transformation process be seen as a challenging and enriching experience with both teachers and learners becoming comfortable with diversity rather than the process being seen as a problem.



2.2.3 Inclusive education in developed countries

2.2.3.1 Inclusive education in the United States of America

In the USA the introduction of Public Law 94-142 in 1975 brought with it many changes to the education of children with disabilities (O'Neill & Harris, 1982). This law compelled schools to comply with a series of regulations that were designed to ensure that all children with disabilities had available to them a free and appropriate public education; to ensure that the rights of children with disabilities and their parents are protected; to assist states and localities to provide for the

education of children with disabilities and to assess and ensure the effectiveness of efforts to educate such children.

Amendments were made to Public Law 94-142 which became to be known as Individuals with Disabilities Education Act (IDEA) in 1990 and eventually Individuals with Disabilities Improvement Act (IDEIA) 2004 (Effgen, 2006). This Act proposed that special education and related services should be designed to suit the unique needs of children with disabilities from preschool to the age of 21 years, furthermore students with disabilities should be prepared for education, employment and independent living.

Some states in the USA simply instituted the law, which advocated that students with disabilities should be educated with their peers in general education settings, while other states retained a parallel system of general and special education (Ferguson, 2008). Some states gradually implemented collaborative partnerships between special and general education systems. Whichever approach was adopted, the challenge was to rethink schools' practices in order to provide for a diverse student population. Research showed that with inclusive education an increasing number of learners with disabilities graduated from schools with many of them being employed after leaving school (National Longitudinal Transition Study [NLTS], 1987 and 2000 as cited in Ferguson, 2008).

2.2.3.2 Inclusive education in Australia

In Australia in the 1950's, 1960's and early 1970's learners with disabilities were classified according to the medical model and labels such as profound, severe, mild, moderate, vegetative, educable and uneducable were used to describe learners and their needs were seen to by community organisations and churches (Department of Education and Training, Australia, 2006). It was not until legislation was passed to support inclusive education that real change occurred. Critical legislation included: The Equal Opportunity Act, 1984; Disability Persons Service Act, 1986; Australian Disability Discrimination Act, 1992; Disability Services Act, 1993; Disability Standards in Education Act, 2005; and the Disability Act, Australia, 2006 (Department of Education and Training, Australia, 2006).

According to Forlin (2004) most states and territories provide a range of support facilities including segregated special schools, education support centres that are independent but on the same campus as ordinary schools and special education classes within regular schools. There are also an increasing number of learners with special needs in ordinary schools (Ashman & Elkins, as cited in Forlin, 2004). In Western Australia there is in addition to special schools, education support centres and special classes, a visiting teacher network that provides support to educators in ordinary schools (Forlin, 2004).

Inclusion in Australia involves including the marginalised with specific reference to the aboriginal and "islander" learners as well as disabled learners in ordinary schools (Forlin, 2004). Although statistically there is an increase in the number of learners with disabilities in ordinary schools this may be due to geographical locality rather than choice (The de Lemos Report as cited in Forlin,

2004). For those learners who reside in rural or remote locations there is no other alternative but to be placed in ordinary schools. This is similar to the findings in South Africa where a number of learners with disabilities were mainstreamed by default or fell outside of the education system due to insufficient or lack of facilities to cater for their learning needs (DOE, 1997).

2.2.3.3 Inclusive education in the United Kingdom

In the 1970's and early 1980's although there were some changes made to improve the education of learners with disabilities in the UK, it was not until the Warnock Report (1978) that education support for learners with special needs were viewed differently (Lacey & Lomas, 1993). The report stated that approximately 20% of school age children would have special educational needs during their school years and would therefore require additional resources, and that this special need could arise from sensory impairment, physical disability, learning difficulties, emotional or behavioural problems or a combination of any of the above.

The Warnock Report (1978) gave rise to the 1981 Education Act, the 1986 Disabled Persons Act and the Children Act (1989), all of which had wide ranging implications for children with disabilities where the ultimate goal is to minimise the effect of the disability and allow the child to lead as normal a life as possible (Lacey & Lomas, 1993). The 1990's saw the introduction of a national curriculum with the emphasis on all students accessing the same broad curriculum. This was based on the premise that all children exist on a broad continuum of needs and learning styles and that they do not necessarily fit into categories of those that have special needs and those that do not.

Research showed that inclusion of learners with disabilities into ordinary schools had the following difficulties: lack of adequate training for teachers who were seen as the key to implementation of inclusion; poor co-ordination and integration of support services; shortage of staff to meet the therapeutic needs of learners; lack of or poor partnerships between parents, learners and teachers and lack of resources such as classroom assistants (Mackey & McQueen, 1998; Mahon & Cusak, 2002).

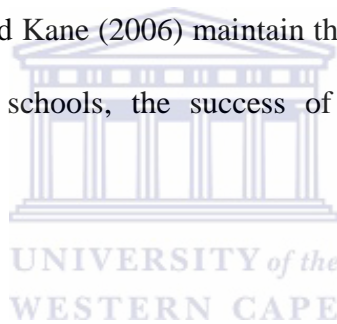
2.2.3.4. Inclusive education in New Zealand

New Zealand adopted the mainstreaming movement in the late 1970s and early 1980s following worldwide trends towards inclusive education (Greaves, 2004). The New Zealand Education Act (Ministry of Education, 1989) entitled all children to receive a free education at any state school. It was the responsibility of individual schools to ensure that the needs of their learners were met. This Act stipulated that parents had the right to choose if they wanted their child to attend a special school, special class or an ordinary school. The Special Education 2000 policy (Ministry of Education, 1995) saw the country set in motion the beginning of an inclusive education system (Greaves, 2004). This policy provided a framework, as well as resources, to assist schools to meet the needs of their learners.

In order to promote the implementation of Special Education 2000, attention was given to teachers as primary role players. Workshops were offered to teachers, in every school in New Zealand, to familiarise them with the policy and to help them take responsibility for learners with special needs. However Kearney and Kane (2006) drew attention to the fact that this did not go according

to plan in that a large percentage of teachers attended the workshop to familiarise themselves with the policy but the workshops on curriculum adaptation, partnerships with parents and effective teaching and assessment strategies were attended mostly by teachers involved in special education. They contend that for inclusive education to be a reality, all teachers need to be able to respond to learners with special needs and not just those who were trained to work in special needs education.

The New Zealand Disability Strategy (Minister for Disability Issues, 2001) was introduced in 2001. It was developed in conjunction with people who were disabled as well as the disabled sector in general. All the objectives of the policy relate to inclusion of the disabled child in mainstream education. Kearney and Kane (2006) maintain that although policy and legislation are important for creating inclusive schools, the success of inclusion rests with attitudes and philosophies of all stakeholders.



2.2.4 Inclusive education in developing countries

2.2.4.1 Inclusive education in Zambia

The Republic of Zambia in Southern Africa is one of the world's 50 least developed countries (International Labour Office, 2007). The 1996 national policy on education has a section on special needs education that states that the Ministry is committed to providing a high quality education to learners with special needs (Republic of Zambia, Ministry of Education, 1996). Furthermore the policy talks of including learners with disabilities in the mainstream education system, except for learner's with severe disabilities who will be accommodated in segregated

special schools. The policy also provides incentives to schools in terms of exemption from school fees for learners' with special needs, scholarships for tertiary level education for learners' with disabilities as well as training of more special education teachers.

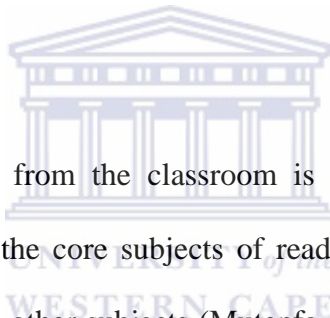
Moberg and Savolainen (2003) revealed that Zambia prefers a more segregated environment for learners with disabilities of a physical nature as well as for those with severe visual and speech disorders. They are more optimistic about integrating learners with specific learning disorders into mainstream education. These views must be seen in the context that they may be reflective of practical problems encountered by learners such as travelling long distances to school whereas a special school with boarding facilities may be more appropriate for the learner. In Zambia inclusion is about including a large proportion of learners who are excluded from schools due to socio-economic reasons (Moberg & Savolainen, 2003). This emphasises the point that inclusion is context dependent and cognisance should be taken of socio-cultural differences when talking about inclusion.

2.2.4.2 Inclusive education in Zimbabwe

Zimbabwe is in Africa and has a population of 12 million people, of which 80% is rural (Mutepfa, Mpofu & Chataika, 2007). This country has a 90% national literacy rate, one of the highest in the world. There are no specific inclusive education policies in Zimbabwe but there are policies that are consistent with inclusive education practices. These are the Zimbabwe Education Act (1996), the Disabled Person's Act (1996) and circulars by the Ministry of Education that require that all

learners regardless of race, religion, gender, creed and disability have access to basic education up to grade seven (Mutepfa et al, 2007).

There are four curriculum and instructional options to provide for learners with disabilities in ordinary schools in Zimbabwe (Mutepfa et al, 2007). They are locational inclusion, inclusion with partial withdrawal from ordinary classroom settings, inclusion with remedial instruction and unplanned inclusion. Locational inclusion is for learners with severe disabilities where the curriculum is taught in a separate room within the school. Most parents do not choose this option but rather opt for a special school which they feel is better resourced and can best meet the needs of the learner.



Inclusion with partial withdrawal from the classroom is for learners with mild to moderate disabilities where they are taught the core subjects of reading and math in a separate resource room and then join the class for all other subjects (Mutepfa et al, 2007). According to Mutepfa et al. (2007) teachers have a positive attitude to this form of inclusion because they receive assistance in teaching strategies from the resource room teacher for use in the classroom and they learn more about different disabilities.

Inclusion with clinical remediation is for students who are able to take the full curriculum in ordinary classrooms but receive remedial instruction when required, either from the class teacher or the resource room teacher (Mutepfa et al, 2007). This form of inclusion is offered at a number of Zimbabwean primary schools.

Unplanned inclusion is when parents have no option but to enrol learners with disabilities in ordinary schools due to an absence or lack of facilities (Mutepfa et al, 2007). These schools often have no personnel or material resources to cater for learners with disabilities and as a result a large number of learners with disabilities drop out of school.

Zimbabwe is one of the few countries in Africa where more than 90% of the teachers have a college degree in education (Mutepfa et al, 2007). Furthermore both regular and special needs teachers have some training in inclusive education practices.

2.2.5 Inclusive education in South Africa



This section presents the development of policy in respect of inclusive education and implementation thereof.

2.2.5.1 The development of an inclusive education policy in South Africa

Education in most countries is shaped by the government of the day and the South African education system over the past sixty two years is reflective of changes from an apartheid era government to a democratically elected one. In 1948 the apartheid government legislated policies that divided education along racial lines with separate education departments. This resulted in duplicated services, functions and responsibilities and subjected different education departments to disparities in funding (Lomofsky & Lazarus, 2001). During the apartheid rule, specialised

education and support for learners with disabilities were provided on a racial basis with the best human, physical and material resources reserved for Whites whilst others from less advantaged communities were “mainstreamed” by default due to the absence or lack of facilities to cater for their special needs (DOE, 1997). This resulted in a huge drop out or failure rate of these learners from the education system.

Since 1994 the democratic government has been transforming the education system to one unified department that caters for a diverse range of learner needs. Given the history of discrimination of the majority of its population this process is multi-faceted. It is more complicated than in more developed countries such as USA, UK and Australia that made the change to inclusive education practices, but already had in place well developed schools and resources available (Engelbrecht & Green, 2007).



Legislation and policies that have shaped education for learners with disabilities in South Africa since 1994 are as follows:

The Constitution of the Republic of South Africa, Act 108 of 1996, which is based on human rights principles and regarding education states that:

“Everyone has the right to basic education including adult basic education and to further education, which the state...must make progressively available and accessible.” (Act 108, 1996, p.14).

The White Paper on Education and Training (DOE, 1995). This paper proposed collaboration between education, health, welfare and labour in order to provide an integrated service to learners with special educational needs in mainstream schools. It stated:

“The inclusive, integrated approach recognises that issues of health, social, psychological, academic and vocational development, and support services for learners with special education needs in mainstream schools, are interrelated.” (DOE, 1995, p.15).

The South African Schools Act (DOE, 1996). This Act allows parents to choose the schools their children may attend including parents of children with special needs. The school must provide services to meet the needs of all learners without discriminating in any way.

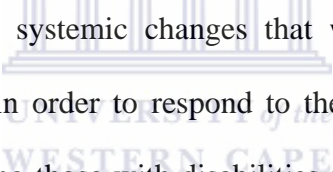
The White Paper on an Integrated National Disability Strategy (Office of the Deputy President, 1997). This paper together with the Constitution ensured that people with disabilities have access to the same fundamental rights and responsibilities as any other citizen. With regard to the education of people with disabilities it made recommendations for life skills training, provision of assistive devices and specialised equipment in order to access the curriculum. The shift to view disability, using the social rather than the medical model, began here by being reflected in South African education policy documents. For people with disabilities this meant that barriers to learning was not seen as being within themselves but could be anywhere in the education system and that the system must change to accommodate the needs of the disabled learner.

The National Commission on Special Needs in Education and Training (NCSNET) and the National Committee for Education Support Services (NCESS) was appointed in 1997 by the

Minister of Education to undertake a needs analysis and to make recommendations to policy makers regarding special needs and support services in education and training in South Africa (DOE, 1997). This report acknowledged that support services were mainly of a curative nature and served a select few in mainly the urban areas and that this approach would not be suitable for a unified education system. Alternative models focusing on prevention and development were recommended.

This Commission expanded the concept of education support to include a larger number of learners as they found that the number of learners requiring support was greater than the number that was presently receiving support. According to the NCSNET / NCESS report, there are many learners in South Africa who experience barriers to learning that are often transient in nature and are due to number of reasons such as: living under conditions of abject poverty resulting in emotional stress that adversely affects learning and development; malnutrition which also leads to lack of concentration affecting the learners' ability to effectively engage in the learning process; substance abuse that can affect the learners or their families; sexual, emotional and physical abuse; limited educational facilities; large classes with high learner to teacher ratio; inadequately trained staff at schools and inadequate learning and teaching materials (DOE, 1997). In order for all learners to be supported and taking into consideration the country's lack of resources the NCSNET / NCESS report recommended a form of support that encouraged collaboration and consultative support for teachers rather than direct support for learners as was the most common practice (DOE, 1997).

The Commission proposed using the terminology “barriers to learning and development” rather than “learners with special educational needs” which implied that the problem was the system and not with the learner. The challenge would therefore be on how to minimise, remove or prevent barriers to learning, thereby making the system more responsive to the diverse needs of the learner population. Some of the barriers affect learners with disabilities as well as others and include poverty, negative attitudes and prejudice based on class, race, gender, culture, an inflexible curriculum, language and communication barriers, an inaccessible or unsafe physical environment and the lack of human resource development for teachers and other relevant role players. Many of the findings and recommendations of this Commission were taken forward in Education White Paper 6 (EWP6): Building an Inclusive Education and Training System (DOE, 2001).



EWP6 provided a framework for systemic changes that were directed towards building the capacity of the education system in order to respond to the wide range of barriers to learning experienced by all learners including those with disabilities (DOE, 2001). The aim was to create positive learning conditions for learners who are presently out of school and for learners who experience barriers to learning in existing schools. To cope with the demands that these learners would place on the existing education system, special schools were to be improved and ultimately converted to resource centres and some existing ordinary schools were to be converted to full service schools that would be equipped to cope with the diverse learning needs of all learners. Staff at special schools were to be integrated into the DBST. The function of the DBST would be to provide support services to special schools, full service schools and other ordinary schools in the district (DOE, 2001). This is in line with the Salamanca Statement which states that the expertise of staff at special schools can be a valuable resource for staff in ordinary schools and that

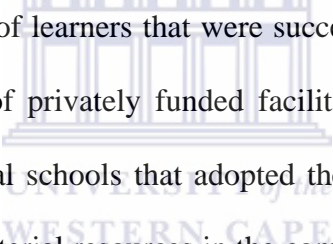
the therapists need to be geared for their new and expanded role in providing support to teachers, parents and the community (UNESCO, 1994).

2.2.5.2 Implementation of inclusive education in South Africa

With the implementation of inclusive education practices in South Africa some authors are of the opinion that socio-economic barriers, lack of resources and capacity of schools and personnel are the major obstacles to the implementation of inclusive education (Lomofsky & Lazarus, 2001; Engelbrecht, Oswald & Forlin, 2006). However there are others who believe that although resources and funding are essential, inclusion is not about funding and resources alone but also about facilitating a paradigm shift in the behaviour of all stakeholders involved in education (Swart & Pettipher, 2005; Engelbrecht, 2006; Naicker, 2006; Ntombela, 2007). In this section both these opinions are presented as well as some success stories upon the implementation of inclusive education.

Engelbrecht, (2006) and Lomofsky and Lazarus (2001) argue that as long as there still exists a huge disparity between former White schools as compared to former disadvantaged schools, especially in the rural areas and where poverty is an overriding problem in the community, it is difficult to promote inclusive education. In addition to lack of resources, inadequate teacher training also contributes to difficulties in turning policy into practice. Naicker (2006) indicates that in the training of teachers for implementation of inclusive education, not enough attention was given to the type of changes that needed to take place in teaching and learning. He maintained that the inclusive education framework in South Africa required teachers to be dynamic, creative and

reflective. However if their preparation was inadequate then this would not materialise. This is corroborated by Ntombela (2007) who examined the ways in which teachers were trained in preparation for EWP6. Her findings suggested that the training was ineffective and did not result in a true understanding of inclusive education. As a result the required reculturing of schools and classrooms did not occur. Engelbrecht et al. (2006) in a study in the Western Cape found that the majority of teachers were unfamiliar with the content of EWP6 as well as the vision for inclusion in South Africa. Naicker (2006) therefore advocates that there be a partnership between South African educationists and the universities so that teachers emerge with the necessary intellectual tools to make inclusive education work.



There were some individual cases of learners that were successfully included in ordinary schools but this was with the assistance of privately funded facilitators (Lomofsky & Lazarus, 2001). There were other examples of local schools that adopted the health promoting schools concept, where they drew on human and material resources in the community to address basic needs of the learners and their families and this idea of working with all members of the school community is one of the principles on inclusivity (Lomofsky & Lazarus, 2001).

With regard to implementation of policy involving the DBSTs, Engelbrecht and Green (2007) maintain that these they are not functioning as planned. Reasons for this include difficulties in promoting collaboration between professionals who are accustomed to working in isolation, resistance to replacing the medical model with the social model and rejection of what is perceived as added responsibilities. Wildeman and Nomdo (2007) found that the establishment of DBSTs as

proposed by EWP6 is not a reality in all the provinces and that there are different versions of what some of these provinces think that the DBST should be.

Swart and Pettipher (2005) believe that for inclusive education to succeed, teachers need to shift from the present set of values, beliefs and practices to one which reflects a supportive environment that promotes equal access to education for all learners including those who experience barriers to learning. This paradigm shift requires role players in education to have an in depth understanding of inclusion. This paradigm shift requires a major transformation and deep levels of change in both organisations and individuals. Naicker, (2006), Ntombela, (2007) and Engelbrecht, (2006) agree that facilitating a mind shift to inclusive practices is essential and that to achieve meaningful change in organisations and individuals, adequate support is required from government. If this support is seen as funding for resources and capacity building of schools and personnel then Wilderman and Nomdo (2007) argue that implementation of inclusive education is dependent on both funding and capacity of schools to deliver and that should one of these be less than optimal, then implementation becomes dependent on the available capacity of existing institutions and persons instead of delivering on the policy.

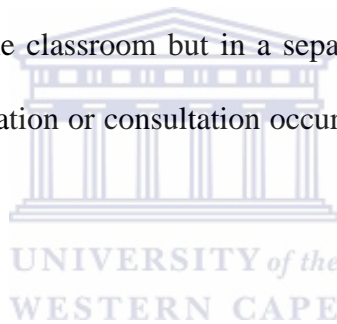
This second part of the literature review will look at how inclusive education policies have affected the role of physiotherapists in the education sector. The direct and indirect service delivery models are described and their negative and positive attributes highlighted. Indirect service delivery models which are inextricably linked to inclusive education practices are examined in more detail internationally due to there being a limited amount of empirical data in the South African context.

2.3 PHYSIOTHERAPISTS AND INCLUSIVE EDUCATION

Models of service delivery used by physiotherapists working in school based settings fall into two broad categories: direct and indirect support services.

2.3.1 Direct support model

This is the traditional model used in education. It involves a one on one interaction between the physiotherapist and the learner and is usually provided in an area that is separate from daily educational activities i.e. not in the classroom but in a separate therapy room (Swinth & Hanft, 2002). In this model little collaboration or consultation occurs with teachers and parents (Sandler, 1997).



2.3.2 Indirect support model

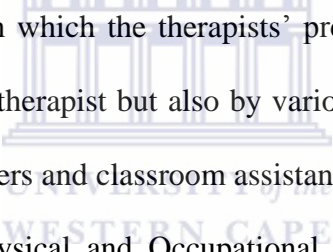
The indirect support model involves therapists interacting with others (teachers, parents, classroom assistants and other professionals) so that these individuals can carry out the therapeutic interventions that are required by learners (Rapport, 2002). There are different indirect support models which will be discussed in this section namely integrated, consultative, monitoring and collaborative model.

The **integrated model** is where the physiotherapist ensures that therapeutic intervention is provided in a holistic manner and blended into a functional activity of the learner (Mackey &

McQueen, 1998). Various therapies (occupational therapy, physiotherapy and speech and hearing therapy) are integrated into the daily lives of the learners and their families and takes place in places where learners spend a significant part of their lives. Different therapists (physiotherapists, occupational therapists and speech and hearing therapists) work with the teachers, parents, learners and classroom assistants in the classroom, at home, on the playground or in whichever environment the learner needs to function. This model requires therapists of different disciplines to work together as a transdisciplinary team. A transdisciplinary team is defined as one in which different professionals perform their tasks interactively and share their expertise and ideas and support one another (Engelbrecht, 2007). Any member of the team may carry out the actual intervention with support provided by the other team members.

The **consultative model** is one in which therapists design the learners' intervention programme and then teach the skills needed to implement the programme to teachers, parents or classroom assistants (Rapport, 2002). The therapist does have direct contact with learners to assess performance and design intervention strategies but the therapist's primary role in this model is that of a consultant (Sandler, 1997). A strength of this approach is that other stakeholders (teachers, parents, caregivers and friends) are empowered to cope with what might have been seen as a barrier to learning and the learners have more therapeutic input from the people who have contact with them during every day school and home routines. The responsibility for the outcome of the intervention in this model rests with the consultee which is the teacher, parent or others that implement the intervention (Effgen, 2006).

The **monitoring model** is one in which the therapist does not provide direct therapy but instructs and monitors the efforts of teachers, parents and classroom assistants towards meeting specific outcomes of an intervention (Rapport, 2002). This model is especially suitable for learners who have motor impairments, activity limitations and participation restrictions that might deteriorate over time (Effgen, 2006). Monitoring is essential to ensure that aids and appliances such as standing frames, wheelchairs and crutches are in good working order and that they are correctly used. It is also necessary to assure parents that the learner is being observed, progress is being assessed and that changes will be made as and when necessary. The responsibility for the outcome of the intervention in this model rests with the physiotherapist.



The **collaborative model** is one in which the therapists' programme is part of a learner's daily routine performed not only by the therapist but also by various members of the educational team including parents, teachers, caregivers and classroom assistants, either in the classroom or at home (Michigan Alliance of School Physical and Occupational Therapists [MASPOT] (1995). The therapists are responsible for planning and implementing the programme and also to teach, monitor and update staff and parents on specific programmes for individual learners. The therapist in this model can provide family and school staff members with advice and training in order to maximise the independence of the learner to access educational curriculum and to overcome barriers in order to attain success in their education. This model is similar to the integrated model in many respects where services are provided by all team members. However, according to Effgen (2006), the degree of role release and crossing of disciplinary boundaries is greater than in the other indirect service delivery models.

There are many similarities and areas of overlap in these models of indirect service delivery as Effgen (2006) makes reference to when she says that the collaborative model is a combination of transdisciplinary team interaction and integrated service delivery and that in the integrated model there are also aspects of direct and consultative therapy services. This is reflected in the literature where these models are often referred to in an inter-related fashion.

2.3.2.1 Advantages of indirect therapy

According to Sandler (1997) indirect support empowers parents and teachers to provide therapeutic input to the learner under the guidance of the physiotherapist. It also enables parents and teachers to cope with what may have been seen as barriers to learning. The learners also have more therapeutic input from the people (classmates, caregivers, classroom assistants, teachers and family members) who have contact with them during daily school and home routines. Rapport (2002) suggests that in areas where there is a shortage of physiotherapists the use of consultative, collaborative and monitoring models may be helpful in spreading the expertise of a limited number of physiotherapists. According to Mackey and McQueen (1998) teachers indicated that integrated therapy facilitated academic work, and with therapists working in the classrooms, it led to them (teachers) having a better understanding of the aims and roles of therapists. Therapy in the classroom also reduces disruption to lessons and this is favoured by learners, parents and teachers (Mackey & McQueen, 1998). Integrated therapy also encourages teachers and therapists to jointly explore ways of approaching physical, learning and communicational difficulties experienced by learners.

2.3.2.2 Difficulties experienced with indirect support

According to Sandler (1997), for physiotherapists to become proficient in the use of collaborative, consultative and integrated therapy models they require skills in collaborative teamwork, effective communication and interpersonal skills as well as in-service training strategies. These are presently not adequately covered in their training. Rapport (2002) suggests that indirect support should not compromise the level of therapy required by learners and maintains that if learners require direct therapy in order to achieve some educational benefit then they should be afforded that opportunity based on their individual requirements. According to Mahon and Cusak (2002) physiotherapists also requested more flexibility in their daily schedule to allow for meetings with teachers and parents as well as more staff to cope with extending indirect support to ordinary schools.

The following section will present how inclusive education policies have influenced physiotherapy practices internationally as well as in South Africa.

2.3.3 International physiotherapy practices

2.3.3.1 Physiotherapy in schools in the USA

The introduction of Public Law 94-142 (1975) and IDEA (1990) saw many changes in the way therapists provided services in the educational environment (Effgen, 2006). Traditionally physiotherapists took learners out of the classroom and provided treatment in a specialised setting with relevant equipment (Blumenkopf, Levangie & Nelson, 1985). Public Law 94-124 required physiotherapists to spend more time in the classroom where they were seen as an important part of

the team, to assist educators and families in enhancing the developmental outcomes of children with disabilities (Masin & Valle-Riestra, 2007). Initially there were no guidelines for this expanded role and this resulted in much confusion as many physiotherapists brought with them their medical background into the educational system (Levangie, 1980). In 1980 the American Physical Therapy Association published guidelines for physical therapy practice in the educational environment. This placed the emphasis on the learner's educational rather than on his or her medical well-being as being the focus of the physiotherapy intervention ((Blumenkopf et al., 1985).

Public Law 94-142 also required that a learner's education be suited to and appropriate to his or her needs and this requirement was met through the development of an individual education programme (IEP) for each child (O'Neill & Harris, 1982). An IEP is a comprehensive plan outlining the specific special educational and related services that the learner will receive. This plan includes annual goals and objectives and is drawn up in collaboration with therapists, teachers, parents and other relevant stakeholders.

The IDEA philosophy encouraged an integrated, functional, family centered model that advocated indirect, consultative as well as in class and home based therapy (Sekerak, Kirkpatrick, Nelson, & Propes, 2003). This gave rise to a variety of models for physical therapy service delivery such as integrated, consultative, monitoring and consultative models in addition to direct service delivery models (Effgen, 2006). A nationwide survey to explore service delivery preferences among school based physiotherapists found that the most common recommendation for service delivery was a combination of integrated (therapy integrated into the learners' school activities) and isolated

therapy (therapy performed in an isolated therapy area) (Kaminker, Chiarello, O'Neil, & Dichter, 2004). Similar findings were made by Sekerak et al (2003) where physiotherapists indicated that no one service delivery model could accommodate the needs of all learners. Instead they chose the integrated model supplemented by other models such as the traditional “pull out” as well as the consultancy model. Rapport (2002) and Effgen (2006) in their research indicated that there is a shortage of physiotherapists in school based settings in the USA and some of the reasons for this are low pay in schools, isolation from colleagues, inadequate resources, excessive caseloads, poor career pathway in schools and difficulty experienced by physiotherapists in working with children.

2.3.3.2 Physiotherapy in schools in the UK

Inclusive education policies in the UK made it possible for learners with disabilities to be educated in ordinary schools provided their parents supported the placement and that their placement would not disrupt the education of other learners. Legislation made it possible to have a mixed model for provision for learners with disabilities, in which special schools still existed but there was increased provisions made for learners with disabilities in ordinary schools.

Models such as the consultative (Sandler, 1997) and integrated therapy (Mackay & McQueen, 1998) were utilised to provide physiotherapy services to children with disabilities. With integrated therapy community based physiotherapists were expected to train teachers and their assistants working in ordinary schools in the management of learners with disabilities. Local therapy services, which in the past provided services to special schools, were now stretched to the limit trying to provide services to ordinary schools as well as maintaining services at special schools

(Mackay, 1991, as cited in Mackey & McQueen, 1998). Another reason for poor physiotherapy support to learners with disabilities in ordinary schools was a result of poor co-ordination and integration of support services in ordinary schools and this was due to poor co-ordination between the Departments of Health, Welfare and Social Services (Mackey & McQueen, 1998).

Mahon and Cusak (2002) indicated that physiotherapists had an essential role to play in the integration of learners with disabilities into ordinary schools. According to Mahon and Cusak (2002) physiotherapists as experts in movement and working with disabilities are therefore the ideal professionals to be involved in the preparation of teachers for integration of learners with disabilities into ordinary schools. Physiotherapists can advise the teacher on the limitations and capabilities of each learner, beneficial exercises to be incorporated into class activities and those to be avoided. Teachers welcomed advice from physiotherapists on integrating therapeutic goals into school routine (Mackey & McQueen, 1998). However literature suggests that teachers do not have enough time to carry out recommendations of the physiotherapists every day (Sandler, 1997). Another role that physiotherapists can play in the integration of learners with disabilities into ordinary schools is in the early identification of learners with disabilities at pre-school level, who will be able to cope in an ordinary school (Mahon & Cusak, 2002). Early identification can lead to more effective preparation of the learner for integration into an ordinary school.

Much of the literature with regard to accommodating learners with disabilities in ordinary schools lean towards looking at practices in special schools regarding collaboration and multidisciplinary teamwork and using these lessons to assist ordinary schools to cope with learners with disabilities (Lacey, 1998; Tollerfield, 2003; Bannister, Sharland, Thomas, & Upton, 1998). Research suggests

that physiotherapy support for learners with disabilities in ordinary schools in the UK is inadequate and this was due to a lack of physiotherapists to provide services to these learners (Mackey, 1991, as cited in Mackey & McQueen, 1998). Literature also points to therapists and teachers in the UK requiring training in collaborative teamwork and communication skills to facilitate integration in schools (Mackey & McQueen, 1998; Mahon & Cusak, 2002).

2.3.3.3 Physiotherapy in schools in New Zealand

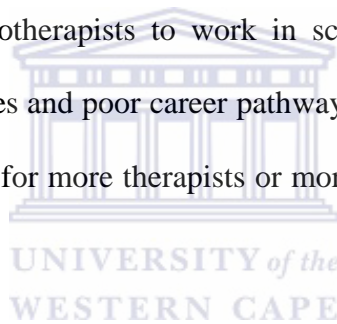
Learners with disabilities in ordinary schools in New Zealand receive physiotherapy from community based physiotherapists who visit schools and use mainly the consultative model of service delivery (Clark, MacArthur, McDonald, Simmons Carlsson and Caswell, 2007). Learners in special schools in most cases received physiotherapy from physiotherapists who were based at the school.

Research by Clark et al. (2007) commissioned by the Ministry of Education to look into service provision for learners with physical disabilities revealed the following with regard to physiotherapy services:

- Physiotherapists in schools worked mainly with individual learners.
- Frequency of therapy was weekly with therapy taking place within regular classroom activities, outside the classroom (but within school premises e.g. playground or bathroom) or outside of school for example in the home.
- Physiotherapy was also provided by other people such as teachers, classroom assistants, special education assistants and parents using the integrated model of service delivery.

According to Clark et al. (2007) staff at schools complained that physiotherapy services for their learners at ordinary schools were insufficient due to a shortage of physiotherapists, or when physiotherapists were involved in developing specific programmes in ordinary schools that took up time that would have been spent with learners or when learners' had surgery that required intensive therapy and this again took the physiotherapist's time. Schools preferred having on site physiotherapists as this led to better teamwork and easy accessibility to support as compared to community therapists who were not as accessible and spent a great deal of their time travelling.

According to Clark et al. (2007) schools in New Zealand had the same difficulties as those in the UK and USA in attracting physiotherapists to work in schools. This was due to insufficient funding to offer competitive salaries and poor career pathway in schools. Schools in New Zealand indicated a need for more funding for more therapists or more therapy hours to meet the needs of their learners.



According to Clark et al. (2007) physiotherapists in New Zealand indicated a need for professional development to equip them with skills to work in school based settings. Working in schools required physiotherapists to have knowledge of relevant education policies, the curriculum and an understanding of school philosophy (how schools and teachers operate). Physiotherapists said that if they are familiar with how teachers manage their learning environment then they will find it easier to integrate therapy, where possible, in the classroom setting.

2.3.3.4 Physiotherapy in schools in Zambia

Although inclusive education practices are advocated in education policies in Zambia, Kashimba (2005) found that learners with disabilities in ordinary schools are deprived of physiotherapy services because physiotherapy services are not part of the policy of inclusion (Ministry of Education 'Educating Our Future', 1996). Physiotherapists in Zambia are employed by the Ministry of Health and work in hospitals and specialised institutions for learners with special educational needs. With inclusion, learners with disabilities are being incorporated into ordinary schools which fall under the Ministry of Education and here, no provision is made for learners to have access to physiotherapy services if required.

In a study by Kashimba (2005) teachers in inclusive schools in Zambia indicated that physiotherapy support in terms of practical handling skills and medical knowledge will assist them in supporting learners with disabilities in the classroom. They requested that physiotherapy support become a part of the education policy in the school system in order to hasten and facilitate inclusion of learners with disabilities in inclusive classrooms.

2.3.4 Physiotherapy in schools in South Africa

A brief description of the role of the physiotherapist in special schools and their role as part of the DBST is outlined in the following section, before looking at how this influences the way physiotherapists work in the education sector in South Africa.

2.3.4.1 Physiotherapists' role in special schools

Traditionally therapists working in the education sector in South Africa provided direct therapy to learners at special schools. Therapy was based on the medical model of support (NCSNET / NCESS, 1997). The medical model of support focused attention on what are seen as deficiencies in the learner rather than on their educational needs and abilities. EWP6 (DOE, 2001) envisioned a transformation of this education system. It was seen as an adaptation of inclusion for the South African context and it provided guidelines as to how the education and training system must adapt to accommodate a diverse range of learning needs as well as mechanisms of change that needed to be put in place to facilitate the process.

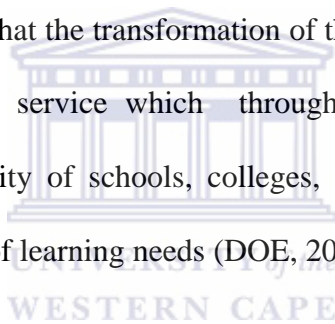
The two areas that directly affected physiotherapists working in special schools was their integration into the DBST and the proposed conversion of special schools to resource centres (DOE, 2001). The therapists' roles in special schools now include (DOE, 2005):

- The development of learning materials for learners with disabilities as well as for learners in ordinary schools that are experiencing barriers to learning.
- Co-ordinating and organising professional development activities for educators, school management, and other staff in full service and ordinary schools as part of the DBST.
- Providing therapeutic support to learners with disabilities in ordinary schools.
- Fostering collaborative ways of working within schools, and between schools and the community.
- Working with parents and members of the community which could include traditional healers, grandparents and caregivers.

These duties are in addition to providing therapy for learners in the special school.

2.3.4.2 Physiotherapists' role as part of the DBST

According to DOE (2005) the main function of the physiotherapist as part of the DBST will be to provide indirect support to the learners by supporting educators and school management. This is envisaged to be in a consultancy role (DOE, 2001). A secondary function will be to provide direct support to learners where necessary and possible (DOE, 2005). According to DOE (2005) members of the DBST as well as special school staff are to receive orientation and training for their new role. The DOE believes that the transformation of the education system relies heavily on a strengthened education support service which through supporting teaching, learning and management will build the capacity of schools, colleges, and higher education institutions to identify and address a wide range of learning needs (DOE, 2005).

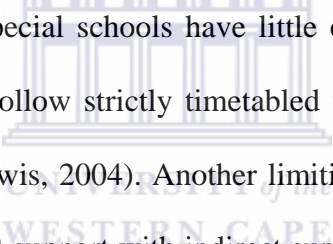


The following section will discuss how these policies have affected the manner in which physiotherapists work in schools.

2.3.4.3 Effect of the inclusive education policy on physiotherapists in special schools in South Africa

One of the prime functions of therapists in education in the past was in testing and assessment of learners for purposes of admission and relevant placement (Schoeman, 1997). The South African Schools Act (DOE, 1996) saw changes to the admission policies of schools. Schools were not

allowed to unfairly discriminate by using specific tests and assessments as a criteria for admission and furthermore parents rights and wishes needed to be taken into consideration when considering the placement of learners with special needs. With education policies necessitating changes to the core functions of therapists in schools, Schoeman (1997) and Engelbrecht (2001) maintain that therapists are still pivotal to changes in education provided they adapt to the new demands and are creative in making their expertise available to teachers, parents and the community in a user friendly approach that enables the transfer of skills to relevant parties. There needs to be a shift from direct support for learners to indirect support for teachers, parents, and non-teaching personnel as well as for the school as an organisation (Struthers, 2005).



Therapists presently working in special schools have little or no time for classroom support to educators due to them having to follow strictly timetabled therapy sessions for individuals and groups of learners (Struthers & Lewis, 2004). Another limiting factor for therapists in schools is that their expertise still lay in direct support with indirect support in the form of collaboration and consultation being poorly developed (Struthers, 2005). Kotze (2009) supported the findings by Struthers (2005) and Struthers and Lewis (2004) when she concluded that the majority of therapists in the Western Cape are still functioning using the medical model of support where they provide more direct therapy than indirect therapy and work mostly in the therapy departments at special schools and very seldom in learners' homes, in classrooms or in the communities.

One of the reasons for therapists in South Africa preferring the direct therapy model is that in many of the tertiary training institutions the medical model is still the focus and basis of training (Struthers & Lewis, 2004). Other reasons are that therapists have far less experience in indirect

support to learners, teachers and parents than direct support; they also need to develop confidence in their own skills to be able to share their knowledge and skills with others (Struthers & Lewis, 2004). According to Sandler (1997) therapists often begin their career in education without any training in consultation and collaborative teamwork and therefore require training and guidance in collaborative teamwork, interpersonal relations, communication and consultative skills as well as effective in-service training skills.

One advantage that therapists at special schools have to support inclusive education is that they know what support is required by learners with disabilities to promote psychological, social and academic development (Johnson & Green, 2007). This knowledge can be used to inform support measures required in ordinary schools and in this way promote inclusion of learners with disabilities into ordinary schools (Pillay & Di Terlizzi, 2009). Johnson and Green (2007) suggest that one way to facilitate the inclusive education process is to create collaborative partnerships between staff at special and inclusive schools. According to Struthers (1997) therapists in the Western Cape in South Africa supported the inclusion of learners with disabilities in ordinary schools provided the learners have the necessary support.

Struthers (2005) identified competencies required by therapists to work in schools. These competencies were divided into knowledge, skills and attitudes of therapists and were as follows:

Knowledge in relevant education policies, curriculum, causes of impairments and disabilities in children, international best practices, value systems in different communities, the process of change as well as available resources that can be accessed from Health, Education and Welfare Departments and within local communities.

Skills: to communicate effectively with parents and teachers, in curriculum adaptation, to identify barriers to learning(in the environment, in teaching approaches, in the curriculum, in the home as well as in the community), to address these barriers to learning (either by changing the environment, implementing healthy school policy or by developing skills of teachers, parents and other key workers that have regular contact with the learner), to facilitate the empowerment of teachers, parents and community members, in advocacy as well as support, mentoring, teamwork, networking, management and organisational skills.

Attitudes: that are accepting of diversity, motivated, creative, adaptable to change and they must also want to work with people and have a positive attitude to indirect support.

Kotze (2009) identified barriers experienced by therapists in the Western Cape with regard to support provision in an inclusive education setting and many of these barriers relate to a lack of or poor development of the competencies identified by Struthers (2005). The barriers identified were: therapists' uncertainty about roles; lack of networking; lack of certain competencies and training; delayed response from district; lack of policy; autocratic leadership styles; exclusion from the district-based support team; concern at reduced support learners at special schools; therapists being based at the special school; lack of human resources; insufficient time; cost of therapists' training; education department circuit boundaries affecting communication; negative attitudes of principals and educators and parents' non-involvement. These barriers to support provision in an inclusive education environment are not unique to South Africa but are also prevalent in countries that have implemented inclusive education policies since the early 1970's (Rapport, 2002; Sandler, 1997; Swinth & Hanft 2002; Mahon & Cusak, 2002; Kaminker et al, 2004; Sekerak et al, 2003; O'Neill & Harris, 1982; Mackey & McQueen, 1998; Clark et al, 2007).

Struthers (2005) argues that therapists in South Africa need to change their support provision from specialised individual support for learners to support for various levels of the education system within a team approach which, in the case of physiotherapists at special schools, will be as part of the DBST. Support to the system can include developing healthy school policy, creating supportive environments, and supporting links between schools and communities. This reorientation of support services requires a major shift to collaborative and consultative practices (Engelbrecht, 2001). This involves education support personnel changing their ways of thinking and behaving. Rather than thinking that they are experts with specialist knowledge, therapists must now acknowledge that all members of the school community bring their own expertise and resources that may be equally useful. Therapists who are accustomed to working with individuals or small classes now have to find ways to offer meaningful consultative support to teachers and parents (Johnson & Green, 2007). The therapists therefore have to develop good mediation skills in order to share their expertise with parents and teachers and interpersonal skills to enable effective collaboration in power relationships that exist in most systems. Unfortunately teachers and therapists have little or no training in collaborative teamwork skills and to develop these competencies takes time, patience and perseverance and as in any change process the people involved need to be supported (Engelbrecht, 2001). Struthers (2005) said that in South Africa the government needed to make a greater commitment to inclusive education by doing more to correct socio-economic disparities that exist or by providing adequate funding and resources for inclusive education practices.

2.4 SUMMARY

The literature reviewed with regard to inclusive education policies and implementation thereof , both internationally and locally, revealed that political discourse is not followed promptly by changes in educational practices and this occurs in both the more developed as well as the less developed countries. Yssel, Engelbrecht, Oswald, & Swart, (2007) found that in spite of contextual differences between USA and South Africa, the perceptions and experiences of parents in South Africa and a mid-western state in USA were remarkably similar. Freire and Cesar (2003) stated that for success in inclusive education practices, rather than explain to people why they should change, focus should be on equipping them with new knowledge, competencies, strategies and methods so they feel able to implement change. Having access to the necessary human and technical resources to allow educational role players to develop inclusive education practices are supported by Engelbrecht and Green (2007) in South Africa and Zimba, Mowes, & Naanda, (2002) in Namibia.

The literature reviewed with regard to physiotherapists in inclusive education showed that in countries that made the transition to inclusive education practices a combination of direct and indirect service delivery models were used. Inclusive education necessitated changes to the core function of therapists employed in school based settings which sees them moving from a medical model of support to a social model of support where the focus is on improving the learners' ability to access the curriculum and not curative and or rehabilitative support. The literature also revealed that barriers to support provision such as: staff shortage; lack of teamwork and collaborative skills; poor co-ordination of support services; lack of training for teachers and therapists in inclusive education; lack of skills to work in school based settings and lack of time presently experienced in

South Africa are also present in countries that have been practicing inclusive education since the 1970s. The literature reviewed also revealed a need to equip therapists employed in schools with competencies to work within the inclusive education framework.

The methodology used in this research will be presented in Chapter Three.

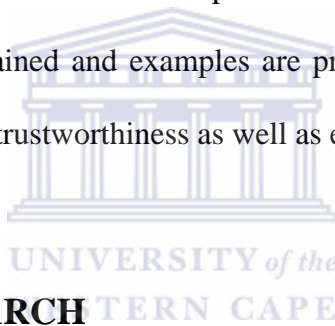


CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the methodology used in this study. The discussion covers the reasons for the choice of research design as well as for using action research as the method of research. Reasons for the choice of sample are also provided. Focus group discussion, which is the method of data collection, is described in detail as is the procedure of the study. The method of data analysis used in the study is explained and examples are provided. Attention is also given to strategies that were used to ensure trustworthiness as well as ethical compliance.



3.2 QUALITATIVE RESEARCH

Mays and Pope (1995) state that the qualitative research paradigm is especially appropriate to studies of attitudes and behaviours. This was significant for this study which looked at how physiotherapists' attitudes to inclusive education policies affect the way in which they view their new role. While other studies especially quantitative ones can identify the existence of gaps in knowledge and behaviour only qualitative studies can actually explain the how and why of the gaps (Mays & Pope, 1995).

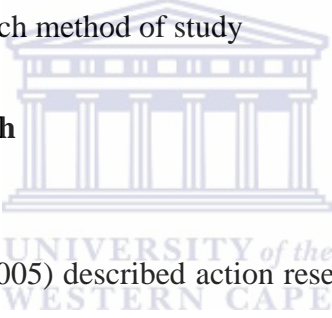
A further reason for making qualitative research a suitable choice is that the research is conducted in a natural setting with an emphasis on the participant's perspective. It was felt that it

was important in this study for the physiotherapists to feel part of the process and for them to feel that this research is not about them but rather “for” and “with” them. The qualitative paradigm was also a suitable choice for this study due to the small number of participants available for the study. The reason for this was that the total number of physiotherapists employed by the Department of Education who were based in special schools in the Western Cape at the time of this research was only 24.

3.3 ACTION RESEARCH

This study utilised the action research method of study

3.3.1 Definitions of action research

The logo of the University of the Western Cape, featuring a classical building facade with columns and a pediment, with the text 'UNIVERSITY of the WESTERN CAPE' below it.

Bassey (1998, as cited in Koshy, 2005) described action research as an enquiry which is carried out in order to understand, evaluate and then to change in order to improve educational practice. Another view is that research is about generating new knowledge and action research creates new knowledge based on enquiries within specific and often practical contexts which results in learning through action leading to personal or professional development (Koshy, 2005). Bless and Higson-Smith (1995) believes that action research encourages the active participation of the people whom the research is intended to assist.

The key words that come up in these definitions are: enquiry, understanding, evaluation, improves practice, new knowledge, change, learning and active participation. The common theme therefore could be seen as an approach that seeks to improve practices: either one’s own

practices or that of an institution by active participation of participants in the research process in all stages of planning, acting, evaluating and reflecting. According to Bowling (2006, p.410) this method can be used to study social systems with the view to either making changes or achieving certain aims. It has been used widely by teachers, social workers, doctors, nurses and community workers to identify needs or problems and to work out solutions to either deal with the problems or to improve services.

3.3.2 Stages in action research

Kurt Lewin, regarded as the founder of action research (as cited in McNiff & Whitehead, 2002) proposed that action research be seen as a series of steps which involves planning, acting, observing and reflecting. This later became known as the action research cycle of planning, acting, observing and reflecting. Others have built on this original model and according to Kemmis and McTaggart (1988) action research could represent a series of stages that are not necessarily linear but may take many directions and often shows a self reflective spiral of planning, acting, observing, reflecting and re- planning in order to improve a situation. McNiff and Whitehead (2002) describe action research as the interplay between stages of practice, reflection and learning. These stages overlap and initial plans could become obsolete as learning occurs through experience.

In the following section the stages of planning, acting and reflecting are explained.

3.3.2.1 Planning

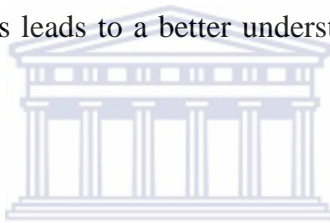
In the planning stage there is an identification of the need for research. This can come from the social community themselves who have identified a difficulty or dissatisfaction with an existing state of affairs, or it could arise from a policy or therapy that was not having the desired effect (Morton-Cooper, 2000). This study arose out of my need as a physiotherapist in a special school to find out more about the role of physiotherapy in inclusive education. This was due to the implementation of EWP6 and the expectations thereof (DOE, 2001). According to Koshy (2005) the importance of planning cannot be over emphasized. It involves many stages such as identifying and limiting the topic, gathering preliminary information (from colleagues, other professionals and stakeholders), reviewing literature and developing a research plan of how this information is going to be gathered and analysed (Mertler, 2009). In this research focus group discussions were used to gather information and content analysis was used to analyse the data.

3.3.2.2 Acting

This stage involves the actual intervention or action that the participants and researcher undertake together. The ultimate goal of any action research is in the action part of action research (Mertler, 2009). It involves implementing a strategy based on the results of the action research project. In this study the intervention resulted in a workshop for the physiotherapists to provide information on their role in special schools within the inclusive education framework.

3.3.2.3 Reflection

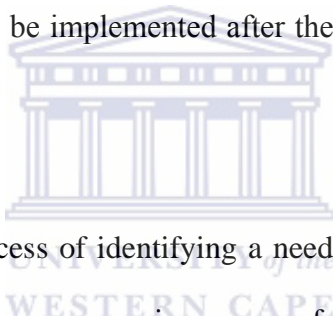
Reflection or critical examination is something that must be done at the end of a particular action research cycle (Mertler, 2009). It is when participants and researcher review what was done, determine effectiveness and make decisions about future plans. Depending on the findings it may be necessary to completely re-design the intervention or the reflection could lead to identification of new problems and the start of a new cycle. In this way action and research continue as alternate processes in search of the solution to a community's problems (Bless & Higson-Smith, 1995). According to O'Leary (2004, as cited in Koshy, 2005) this alternating between action and reflection in action research studies leads to a better understanding of a situation and results in improved action implementation.



On reflection the physiotherapists in this study said that the intervention workshop was useful because it provided them with useful information about EWP6 and indirect support. The physiotherapists indicated that they would like more such workshops as there are still areas of concern that they need to work through. They also expressed a desire to include therapists of other disciplines in future workshops so that they can together decide on the way forward. As the researcher I was happy to hear that they wanted more workshops, as this indicated a willingness by the physiotherapists to find solutions to problems they were experiencing with inclusive education. I felt that my new position as therapist with the inclusive education team, a job that I had assumed during the course of this study, would enable me to facilitate such workshops with the assistance of the WCED and therefore the action research cycle would continue.

3.3.3 Advantages of action research

Action research involves a close working relationship with key players in identifying, planning, implementing and evaluating the action taken (Bowling, 2002). The collaboration that occurs between researcher and participants leads to research being “with” rather than “on” or “for” the research participants (O’ Leary, 2004 as cited in Koshy, 2005). It has another advantage of not simply describing, interpreting, analysing and theorising as with other traditional research but to act in and on a situation in order to make things better than they were or to improve the situation (Kemmis & McTaggart, 1988). In other words the intended changes are incorporated into immediate goals and are not left to be implemented after the project (O’Leary, 2004, as cited in Koshy, 2005).



It was hoped that this cyclical process of identifying a need, implementing an intervention and evaluating the outcome could become an ongoing process for physiotherapists who work in the education sector in the Western Cape. This remains to be seen but discussions in this regard are continuing with the WCED. One of the features of action research is that it allows participants to assess a situation and offers opportunities to overcome problems that hamper or frustrate change (Mertler, 2009). It is one of my hopes as a researcher that once the process of change is initiated, it would become an ongoing one in an effort to improve service delivery in the inclusive education paradigm.

3.3.4 Limitations of action research

There are those that feel that the findings of action research are not generalisable, but action research is not about making generalisable claims but sharing findings with other practitioners who may want to learn from it, replicate it, or apply the findings to their situation (Koshy, 2005). In this study appropriate strategies were employed to ensure validity in data collection, interpretation and presentation of results. (These strategies are explained in more detail in 3.9)

All forms of action research involves some form of change and therefore requires participants who are willing to change or perceive the need to change and are willing to be actively involved in the change process (Meyers, 2000). However the success of an action research study should not be judged in terms of the size of the change or the implementation of solutions but rather on what has been learned by both participants and researcher from the experience (Meyers and Bridges, 1998).

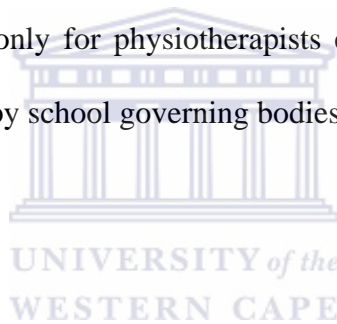
3.4 RESEARCH SETTING

This study took place in South Africa which has nine provinces and this particular study took place in the Western Cape Province. At the time of commencement of the study in 2008 this province had seven education districts and 71 special schools. The education districts have since been restructured and now consist of eight education districts divided into 49 circuits (sub-districts). These education districts are responsible for education management and were established to facilitate an integrated approach to service delivery in keeping with national

policy. The boundaries for these districts were done in such a way so as to allow for equitable distribution of schools and resources across education districts and circuits. These districts include four rural (West Coast, Eden and Karoo, Cape Winelands and Overberg) and four urban districts (Metro North, South, East and Central). The districts chosen for the study were Metro East and North. The reasons for this choice were easy accessibility and convenience.

3.5 STUDY POPULATION

The total number of physiotherapists employed in Western Cape special schools at the time of the study was 24. This figure is only for physiotherapists employed by WCED and does not include those that were employed by school governing bodies.



3.5.1 Sample

The two districts which were chosen have 23 special schools and employ a total of 12 physiotherapists. This was to be my sample group. However at the time of collecting data only nine physiotherapists chose to participate in the focus group discussions. This was not due to them not meeting the inclusion criteria.

3.5.2 Inclusion criteria

The sample consisted of physiotherapists from selected special schools that were employed by WCED. Selection was irrespective of age and gender but they had to have at least one year of experience of working in a special school.

3.5.3 Exclusion criteria

Participants with less than one year's experience working in a special school were excluded from participation in the study.

3.6 METHOD OF DATA COLLECTION



3.6.1 Focus groups

This study used focus group discussions as the main source of data collection. According to Stewart, Shamdasani and Rook (2007) focus group discussions are group discussions that occur among carefully selected individuals guided by a skilled moderator who follows a loose and flexible interview guide. They further postulated that this gives rise to a rich body of data as these are expressed in the participants own words and context. Focus groups are popular with action research as it requires the participants to become part of the process.

Focus groups were chosen for this study to encourage participants to engage in discussions with one another about issues and learn from one another's experiences. Kitzinger (1995) believes

that with open ended questions used in focus groups, participants can explore areas that are important to them, ask questions, clarify issues and engage with each other. In this study the physiotherapists participating in the focus group discussions were from different special schools and they were encouraged to share their experiences and practices with each other. With the assistance of the facilitator the group dynamics can lead to new interesting data becoming available. In this way focus group participants are able to delve deeper into issues of concern that other research methods cannot.

They also have the advantage, according to Kitzinger (1995), of being suited to a small number of participants as well as being a quick and convenient way to collect data from participants who have busy schedules. Participants in this study were of a small number and there were difficulties experienced in getting some of them together again especially after the initial focus group discussion. In this study alternate methods were employed to collect data from participants that were too busy to attend focus group discussions in order to proceed to the next stage in the action research process which was the implementation of the intervention. These methods are described Section 5.2.1.

Focus group participants can also facilitate criticisms by the participants and look at possible solutions and this is particularly important if one is looking to improve services. Physiotherapists in this study were critical of the implementation of EWP6 and what they perceived to be the expectations of DOE as regards their role in special schools. Focus group discussions in this case were used as an effective technique for exploring attitudes and needs of physiotherapists in order to facilitate services within the inclusive education paradigm.

A disadvantage of focus groups is that some participants may not participate unless actively brought into the discussion. Conversely the “safety in numbers factor” encourages people to participate especially if they are shy or wary of the interviewer (Lederman, 1983, as cited in Kitzinger, 1995). In the focus group discussions I was aware of participants that tended to dominate the discussions as well as those who only participated if they were asked for their opinion. With this in mind every effort was made to get all participants to actively participate in the discussion in order to get as many opinions, views and experiences as possible to give rise to a rich body of data.

In this study there were two focus groups with participants from five different special schools. Focus Group One consisted of four physiotherapists and Focus Group Two had five physiotherapists.



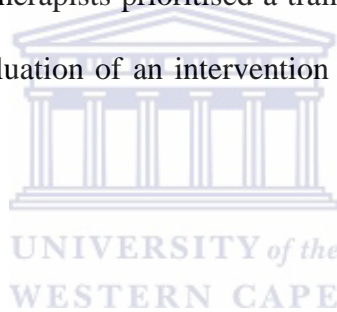
3.6.2 Interview guide

The interview guide is of crucial importance as it sets the agenda for the focus group discussion and its purpose is to provide direction for the discussion (Stewart et al., 2007). The guide was therefore set up using the research question and covered the objectives of the study. The interview guide was developed to cover Objectives One to Four. Open-ended or relatively unstructured questions were used to encourage participants to discuss the issues broadly and to explore various aspects. I used my judgement in guiding the discussion if it appeared to deviate from the relevant topic. See Appendix I for the interview guide.

3.7 PROCEDURE OF THE STUDY

A letter was submitted to the Western Cape Education Department (WCED) requesting permission to conduct research at specific special schools. Approval was granted in the form of a letter which contained regulations as to how to conduct research in educational institutions in the Western Cape. (Appendix II)

The procedure of the study will be discussed in two parts. The first part, which follows, will present the initial focus group discussions. The second part, which will be covered in Chapter Five, will explain how the physiotherapists prioritised a training need and thereafter discuss the planning, implementation and evaluation of an intervention based on addressing the prioritised need.



3.7.1 Focus group discussions

Prior to the first focus group discussion taking place, an introductory meeting was planned with all participants to introduce the study and its objectives and to enlist participation in the study. This unfortunately did not take place due to the physiotherapists' busy work schedules, so instead each participant was informed telephonically of the study's aim and objectives. This was followed with the participant information sheet (Appendix III) which was faxed to them with an invitation to participate in the focus group discussion.

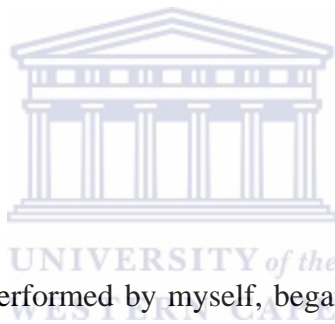
Prior to the commencement of the focus group discussion a brief introduction was made during which the outline of the study and its objectives were explained to everyone. To give people a chance to think about this information, to ask questions and to allow them to collect their thoughts about the topic, refreshments were served. Before commencement of the group discussion participants were informed of their rights as regards participation. They were at this stage informed that they were allowed to withdraw if they so wished but none present chose to do so. Permission to audio record the focus group discussion was obtained and as regards the confidentiality, physiotherapists were assured that what was said during the focus group discussion would be dealt with in strictest confidence and if discussed with others for research purposes it would be done with anonymity. They were also assured that if at any stage they felt that something they said needed to be deleted from the transcripts this would be done. They would also get another opportunity to do this, as the transcripts would be made available to them at various stages in the research process. No participants in this research requested this to be done.

The first focus group discussion was held on 5 August 2008 at school 1 and was attended by four physiotherapists from schools 1 and 2. Present at this discussion were the participants, myself and a person to take notes. An interview guide consisting of relevant questions was used but the discussion was allowed to flow and gently directed to cover the relevant areas of interest pertaining to the objectives that needed to be met. English was chosen by the participants as the language of communication. Participants were encouraged to talk to one another and not to the researcher as recommended by Kitzinger (1994). The session lasted for 90 minutes, at the end of which the participants were given a little gift to thank them for their participation in the study.

Their signed consent forms for participation in the study were collected before they left (Appendix IV). They were also informed that they would be contacted again following the analysis of the discussion in order to discuss the next stage which would be to prioritise their needs and discuss an intervention strategy.

Similarly a second focus group discussion was held at School 5 on 19 August 2008. This focus group discussion was attended by five physiotherapists from Schools 3, 4 and 5 and lasted for 75 minutes. These participants were also informed that they would be contacted again after analysis of these data in order to proceed to the next stage in the research process.

3.8 DATA ANALYSIS



Analysis of the data, which was performed by myself, began by transcribing verbatim the tape recorded focus group discussions. As recommended by Lincoln and Guba (1985), the transcripts of the data collected were made available to the participants to ensure that it was an accurate portrayal of their views thereby minimising the possibility of misinterpretation. These were delivered to the participants and after a period of two weeks they were contacted for their responses. Nobody queried or requested any changes. The transcribed notes were also compared to notes made by myself as well the scribe to ensure accuracy. The tape recorded sessions were listened to repeatedly and the transcripts read a number of times in order to immerse myself in the data before beginning the coding. According to Miles and Huberman (1994), coding allows one to identify meaningful data and this sets the stage for interpretation and drawing conclusions. To encourage dependability the code re-code procedure was employed, whereby a segment of

data was coded and then the same segment is re-coded after a period of two weeks and the results compared (Lincoln & Guba, 1985).

The analysis of the written transcripts began by coding segments or phrases as this, according to Coffey and Atkinson (1996), is one way of organising qualitative data. These codes which link different segments of data were then grouped together to form categories. These categories in turn gave rise to themes either in groups or standing alone depending on the content covered. An example of how this was done is given below (please note this is an example to illustrate how the analysis was done and uses only a portion of the data).

3.8.1 Codes to categories



Table 1: Codes to categories

CODES	CATEGORIES
<ul style="list-style-type: none"> ▪ Types of indirect support(consulting, giving advice and health promotion). ▪ Working with organisations in the communities. ▪ Educating people (teachers, parents, others) on different disabilities. 	Physiotherapists understanding of indirect support
<ul style="list-style-type: none"> ▪ Physiotherapists’ workload at special schools. ▪ Sympathy for parents and teachers, anxiety, fear, duty to learners at special schools, lack of time, expectations of teachers and parents. 	Physiotherapists’ attitude to indirect support

<ul style="list-style-type: none"> Teachers, learners, parents, community members, classroom assistants, staff at special schools. 	Recipients of indirect support
<ul style="list-style-type: none"> Schools, classrooms, homes, communities, clinics 	Places at which indirect support will take place
<ul style="list-style-type: none"> Parents non-compliance Lack of time 	Disadvantages of indirect support
<ul style="list-style-type: none"> Education of parents and teachers, Lasting effects of therapy 	Advantages of indirect support
<ul style="list-style-type: none"> Positioning Application of splints and appliances Feeding techniques 	Providing skills and / or training
<ul style="list-style-type: none"> Poor communication Training in inclusive education practices Expectations of the DOE 	Involvement of DOE
<ul style="list-style-type: none"> Learners' needs monitored so changes can be accommodated 	Monitoring change
<ul style="list-style-type: none"> Chest physiotherapy Post operative rehabilitation 	Direct therapy
<ul style="list-style-type: none"> Evenings Over weekends 	Time to do indirect support



3.8.2 Categories to themes

Table 2: Categories to themes

CATEGORIES	THEMES
<ul style="list-style-type: none"> ▪ Physiotherapists' understanding of indirect support ▪ Providing skills and training ▪ Recipients ▪ Places at which indirect support will take place 	<p>Physiotherapists' understanding of indirect support</p>
<ul style="list-style-type: none"> ▪ Physiotherapists' attitude to indirect support ▪ Monitoring change ▪ Direct therapy 	<p>Physiotherapists' attitude to indirect support</p>
<ul style="list-style-type: none"> ▪ Advantages of indirect support 	<p>Advantages of indirect support</p>
<ul style="list-style-type: none"> ▪ Disadvantages of indirect support 	<p>Disadvantages of indirect support</p>
<ul style="list-style-type: none"> ▪ Time to do indirect support 	<p>Difficulties experienced with indirect support</p>
<ul style="list-style-type: none"> ▪ Involvement of DOE 	<p>Involvement of DOE</p>

3.9 STRATEGIES TO ENSURE TRUSTWORTHINESS

The following strategies were employed to ensure trustworthiness namely credibility, member checking, peer review, dependability and transferability (Lincoln & Guba, 1985).

3.9.1 Credibility

I was closely associated with the participants and the environment in this study as the school that the first focus group discussion took place was at my place of employment and two of the physiotherapists that participated in this focus group discussion were colleagues. I believe my experience of working in special schools, both pre and post introduction of inclusive education, enhanced my knowledge, awareness and sensitivity to the challenges faced by physiotherapists with inclusive education. This background and my relationship with many of the participating physiotherapists assisted me in gaining the co-operation of the participants in this study. However, as it was possible for me to fail to interpret findings objectively or to let bias and personal experience affect the process of data collection and interpretation, field journal was kept to record reflexivity (Lincoln & Guba, 1985). Reflexivity refers to the assessment of the influence of the investigator's own background, perceptions and interests on the qualitative research process. Notes were made in this diary throughout the research process recording: experiences before, during and after focus group discussions; communications made to participants, school principals, education district managers and others; meetings with my supervisor and very importantly my feelings at different stages in the research process, this

helped me to see the “positives” and “negatives” in the research process and enhanced objectivity.

3.9.2 Member checking

As described in section 3.8, the transcripts of the data collected were made available to the participants to ensure that it was an accurate portrayal of their views thereby minimising the possibility of misinterpretation (Lincoln & Guba, 1985).

3.9.3 Peer review

The research process and findings were discussed with colleagues who had experience with qualitative studies (Lincoln & Guba, 1985). They included physiotherapists from special schools and lecturers from the University of the Western Cape.

3.9.4 Dependability

The assistance of my supervisor was sought in coding the data in order to ensure dependability (Lincoln & Guba, 1985). The code re-code procedure was also adopted to ensure dependability.

3.9.5 Transferability

As recommended by Lincoln and Guba (1985), detailed background information of the participants, the research context, the settings and the procedure are provided in this study in order for others to be able to repeat a similar study in a similar setting.

3.10 ETHICAL CONSIDERATIONS

Written permission to proceed with the study was obtained from the University of the Western Cape Research and Ethics Committee (Appendix IV). Permission was also obtained from the Western Cape Education Department to conduct research at selected special schools. Principals of special schools were contacted to obtain permission for physiotherapists to participate in the focus group discussions.

The research objectives were articulated verbally and in writing in the participant information sheet to ensure that they were clearly understood by the participants. I explained that the data would be used for research purposes only and if published all efforts would be made to ensure anonymity. The participants were told that I would delete any part of any transcripts that they were not happy with. My contact details and that of the University of the Western Cape were also provided.

Participants were assured that the information obtained would be dealt with in strictest confidence and that their identities would not be divulged at any stage. Participants were also

informed that they could withdraw from the study at any stage and that there was no risk in participating in the study. These measures were employed to ensure confidentiality throughout the research process.

Permission to tape record the focus group discussions was obtained from the participants. They were informed that the tapes would be stored in a locked cupboard and would be destroyed when the study was completed. Transcripts of the data collected as well as results of the data analysis were made available to the participants for verification.

3.11 SUMMARY

This chapter described the reasons for the choice of research design and the choice of study sample. The reasons for using focus group discussions as the method of data collection are described in detail together with the study procedure. Attention is also given to strategies to ensure trustworthiness and the chapter ends with ethical considerations employed in the study. The results of the study will be presented in Chapter Four.

CHAPTER FOUR

RESULTS

4.1 INTRODUCTION

This chapter presents the results obtained from the analysis of the focus group discussions. The aim of the focus group discussion was to meet the following objectives:

1. To determine the physiotherapists' perception of indirect support.
2. To determine the physiotherapists' perception of their role in the DBST.
3. To determine the barriers physiotherapists' experience in providing indirect support.
4. To determine the needs of physiotherapists to provide appropriate support in the inclusive education framework.

Included in the introduction is a brief background on the composition of the focus groups, profiles of the participating physiotherapists as well as a description of the special schools that they came from. The focus groups consisted of physiotherapists from five different special schools. The first group consisted of four physiotherapists from schools 1 and 2 and the second group consisted of five physiotherapists from schools 3, 4 and 5.

Table 3: Profile of special schools that participants were employed in at the time of this study

Type of special school	Number of learners in the school	Number of physiotherapists (WCED posts)	Number of physiotherapists (school governing body posts)
1. Learners with physical and intellectual impairments.	170	2	Nil
2. Learners with physical and learning disabilities.	350	3	Nil
3. School for learners with neural handicaps.	350	3	2
4. School for learners with epilepsy, physical and learning disabilities.	550	2	Nil
5. School for learners with severe intellectual impairments.	365	2	Nil



Table 4: Profile of physiotherapists that participated in the focus group discussions

Physiotherapist	Age	Gender	Qualifications	General physiotherapy experience (years)	Experience in special schools (years)
A	50	female	BSc Physio	15	26
B	32	female	BSc Physio	4	5
C	48	female	BSc Physio	27	5
D	36	female	BSc Physio	8	5
E	26	female	BSc Physio	2	3
F	58	female	Dip Physio	3	14
G	61	female	Dip Physio	12	26
H	30	male	BSc Physio	-	8
J	31	female	BSc Physio	6	2

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The results obtained from the analysis of the focus group discussions are presented in the under - mentioned sections, each of which is related to an objective.

4.2 Physiotherapists' perception of indirect support.

4.3 Physiotherapists' perception of their role in the DBST.

4.4 Barriers physiotherapists experience in providing indirect support.

4.5 Physiotherapists' needs to provide appropriate support in an inclusive education framework.

4.2 PHYSIOTHERAPISTS' PERCEPTION OF INDIRECT SUPPORT

The following themes emerged with regard to how indirect support is perceived by physiotherapists.

4.2.1 Physiotherapists' understanding of indirect support.

4.2.2 Physiotherapists' attitude to indirect support.

4.2.3 Advantages of indirect support.

4.2.4 Difficulties experienced with indirect support.

4.2.1 Physiotherapists' understanding of indirect support



Physiotherapists see their role in indirect support provision in special and ordinary schools as being consultants where they provide education and training on aspects related to physiotherapy to various stakeholders. They understand education as providing information, and training as providing, enhancing and or developing skills. The majority of physiotherapists indicated that providing information on various disabilities and how the disability affects the learner was an important aspect of indirect support.

The stakeholders that physiotherapists will be consulting with in indirect support included teachers, learners, parents, members of the community, drivers, kitchen staff, caregivers, class assistants and volunteers. These people may be based at special, ordinary or full service schools. Caregivers are people other than parents that take care of learners, for example hostel staff at

special schools, staff at aftercare centres and other family members that assist the learners in the absence of parents.

Physiotherapists believe teachers and parents are very important in the process of indirect support and to a lesser extent the other stakeholders who are involved with the learner. Therefore how physiotherapists perceive indirect support will be discussed under the following sub-headings:

4.2.1.1 Indirect support to teachers.

4.2.1.2 Indirect support to parents.

4.2.1.3 Indirect support to other stakeholders.



4.2.1.1 Indirect support to teachers

Physiotherapists indicated that indirect support for teachers could take the form of:

- Providing information on different disabilities.
- Training on positioning and use of assistive devices.
- Adapting the curriculum.
- Providing information on services available at special schools.
- Giving advice to teachers at ordinary schools on addressing barriers to learning.

Providing information on different disabilities

The majority of the physiotherapists agreed that teachers are overwhelmed with work and one should not expect them to take on too many responsibilities. However they also said that in order for indirect support to be effective the co-operation of teachers is crucial. The physiotherapists said that if teachers understood more about the disabilities that the learners had, then their co-operation in making adaptations and accommodating learners experiencing barriers to learning would be easier and better. Teachers may then see making adaptations in their class as part of their teaching and not as part of therapy.

“I found that if we train the teachers to understand the disabilities they are more likely to be involved and to understand the child’s problems” (A)

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Training on positioning and use of assistive devices

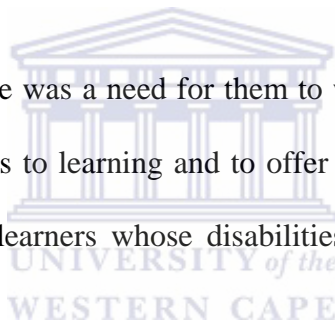
Physiotherapists said that teachers can be given skills training to enable them to position learners in ways that encourage good posture. Good posture in this case refers to learners sitting in their wheelchairs or normal chairs with good spinal alignment that would allow them to view the teacher easily and free their hands for schoolwork. Good posture allows learners to concentrate for longer periods without tiring and can lead to an improvement in fine motor skills such as writing, drawing and cutting. Physiotherapists suggested that with this training, teachers may appreciate the effect of good posture on learning outcomes.

“But they [the teachers] are realising now that investing in the kid’s (*sic*) motor skills is worthwhile” (A)

Similarly they indicated that a learner can continue with normal school work while being on a tilt table in the classroom. (A tilt table is an apparatus used by therapists to position people that cannot stand or walk independently, in order to benefit from being in an upright position against the force of gravity).

Adapting the curriculum

Physiotherapists also said that there was a need for them to work more in classrooms in special schools in order to identify barriers to learning and to offer intervention strategies. They found that queries from teachers about learners whose disabilities impede their learning often only required advice and not therapy.



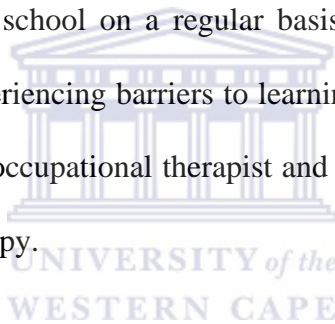
“So you go in and assess the child and find that positioning is all that was required and you do not have to actually treat the child” (G)

Physiotherapists also said that while in the classroom they could offer indirect support by adapting the curriculum for example in the Life Orientation learning area, the physiotherapist could assist the teacher to assess movement abilities of learners with disabilities. They said this would be particularly useful to teachers who have learners with physical disabilities in the class as their movements may be impaired or restricted as a result of disease or disability. For example a learner with cerebral palsy may have movement patterns that are jerky, uncoordinated, stiff or

severely restricted and teachers need to be trained in specific handling techniques in order to assist these learners.

Providing information on services available at special schools

Some physiotherapists said that they had sent letters to principals of ordinary schools explaining to them the services that special schools could offer. This has in some cases led to the development of working relationships between the special and ordinary school. A team from the special school visits the ordinary school on a regular basis to assess learners that have been identified by their teachers as experiencing barriers to learning. The team in the case mentioned consisted of a physiotherapist, an occupational therapist and a speech therapist and they provide mainly advice and sometimes therapy.



“We go out and support two ordinary schools, we try and do some therapy or at least evaluations, of certain age groups, see what problems there are and give the teacher advice on positioning etc. One physiotherapist, an occupational therapist and a speech therapist” (C)

Giving advice to teachers at ordinary schools on addressing barriers to learning

For learners that have transferred from a special school to an ordinary school the physiotherapists said they could offer indirect support to the teacher in the form of advice and guidance to support learners who experience barriers to learning due to their disability. The physiotherapists believed

that it was important to monitor the learner's physical progress at the new school because the learner's needs change as they grow older and the advice given may no longer be appropriate.

4.2.1.2 Indirect support for parents or guardians

The physiotherapists felt that parents' involvement in their child's treatment was very important in all aspects of care but particularly so in the area of indirect support as this involved giving advice and teaching simple treatment techniques that would make things easier for both parent and learner in the home environment. It was suggested that indirect support could therefore take the form of workshops or training sessions for parents on various aspects related to their child's needs. Indirect support could focus on feeding and positioning techniques, correct use of assistive devices such as splints, crutches and wheelchairs as well as providing information on their children's disabilities. Splints are appliances that are worn by learners to position joints in as normal a position as possible where their ability to do so is compromised by disease or disability. This serves to prevent and or minimize joint deformities. Splints can also be worn to improve function for example splints worn in the lower limbs can assist with walking.

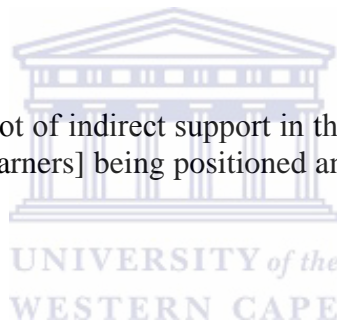
Physiotherapists said that they could also become involved in educating parents on their responsibilities as there was a perception among the physiotherapists that parents think the school is responsible for all the learners' needs. The following statements illustrate some difficulties experienced with parents not taking responsibility.

“We need to make parents aware that they are going to be responsible for their children”
(G)

“Say if you ask the parent to take the child to the orthopaedic clinic during the holidays to pick up an appliance for which you have already made all the prior arrangements. They just do not do it”(G)

Physiotherapists said that home visits are also a form of indirect support especially for learners with severe disabilities, to advise parents, guardians or caregivers on positioning, feeding and making adaptations in the home setting to make it more accessible. This is done so the learner can have a carryover of therapy into the home as well as to make things easier for the caregiver in the home environment.

“We used to administer a lot of indirect support in the home, looking at the environment at home, where are they [learners] being positioned and how they [parents] can utilise the things at home” (B)



4.2.1.3 Indirect support involving all other stakeholders

The physiotherapists said that besides the parents and teachers they would also like to offer indirect support to other members of the community that are involved in some way with the learner. This could include staff at the school hostel that care for the learners while they are at school, drivers at the special school that provide transport for learners to and from school, kitchen staff at special schools that provide meals for the learners and community organisations that assist the learners or their families. Physiotherapists said that indirect support offered in this respect needs to be tailored slightly differently to that which is offered to teachers and parents.

The advice, training and information provided needs to be simple and concise as the people being addressed in this case are often not professionals trained to work with learners.

Holding workshops to provide information on disabilities and skills training

Physiotherapists said they could hold workshops for other stakeholders including staff at special schools (kitchen and hostel staff and drivers) as well as for members of the community. These workshops would focus on providing information on disabilities and skills training on matters like the use and care of splints and orthopaedic appliances, principles of good posture and how this can be achieved with learners with disabilities. This would include positioning in wheelchairs as well as seating in buses and classrooms. They said that this information and training needed to be regularly reviewed. The reason for this was that as learners grow, their needs change therefore caregivers need to be able to recognise and accommodate these changes.

“Our therapy was directed to indirect therapy where we did a lot of training of caregivers, teachers and class assistants on various aspects in things like appliances, splint usage, positioning in class, use of standing frames and wheelchair seating ” (B)

“And you empower everybody from the bus driver to the parents to hostel staff, sometimes even to the kitchen staff if you want to get a child who is severely disabled to lose weight and the staff are not understanding, then you go and explain to them what cerebral palsy is and what happens if the child gets too heavy” (A)

Working with organisations in the community

Physiotherapists said that indirect support could also be facilitated by getting involved with organisations in the community to assist with training of volunteers as well as making people in the community aware of what their rights are. Indirect support could also serve to empower the community by giving them additional and appropriate skills. An example of this was demonstrated by staff members of a special school that ran a workshop on wheelchair repairs and maintenance. This provided people in the community with skills to possibly start their own wheelchair repair shop.

Supervision of university students

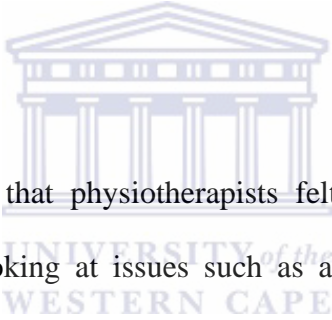


Supervision of university students was also seen as a form of indirect therapy as the students would work with learners, teachers and parents. All participating physiotherapists were involved with supervision of university students. Students that came to the special schools as part of their undergraduate training included physiotherapy students, nursing students, medical students and social work students. Physiotherapists said that physiotherapy students concentrated mainly on the rehabilitative aspect of therapy and not much emphasis was placed on how rehabilitation is linked to the educational needs of the learner. The physiotherapists said that this was due to the students training and it was what was expected by their lecturers.

Telephonic support to people

Another area of indirect support that physiotherapists are involved in, is providing telephonic advice to people who phone with queries. This is most often from family members to find out about assistive devices; if there are problems with the learner's wheelchair; to query a hospital appointment date or to consult if the learner sustained an injury at home that the parent wants the physiotherapist to know about.

Advocacy



Another area of indirect support that physiotherapists felt they could get involved in was advocacy. This would involve looking at issues such as accessibility of disabled adults and children into buildings and to public transport, making people aware of their rights as well as promoting physiotherapy services to parents, teachers and other stakeholders in the education sector.

“We could look at transport for example and accessibility into buildings, public transport” (G)

“We need to make people aware of what their rights are and we need to do this in conjunction with disabled peoples organisations. I think the big thing is advocacy” (G)

4.2.2 Physiotherapists' attitude to indirect support

There were negative and positive attitudes that emerged in the discussions on how indirect support was perceived by physiotherapists and a neutral attitude by those that were minimally involved with indirect support.

4.2.2.1 Positive attitudes to indirect support

Physiotherapists from one special school said they had shifted their focus from direct to indirect support when the number of learners needing individual therapy increased. According to these physiotherapists indirect support has the advantage of a larger number of learners being offered therapeutic intervention. This is where parents, teachers and caregivers are trained in simple programmes consisting of exercises as well as advice on how to maximize the learners' potential using things that are available in the classroom and home environment. The physiotherapists said that they came up with systems that were sustainable and empowered people that were involved in the process. The skills training and information provided on different disabilities empowered teachers, parents and caregivers and the physiotherapists said that this resulted in them getting better co-operation from parents, teachers and others who understood why they were being asked to do certain things. One of the physiotherapists said that she gave a talk on cerebral palsy to the kitchen staff at the special school where she worked because she wanted them to understand the condition so they would assist more willingly when requests were made for specific diets for these learners.

Physiotherapists also said that providing indirect support forced them to come up with programmes that were sustainable and in the end they were proud of the sustainable programmes that they were able to develop. The example they gave was with regard to teaching parents correct feeding techniques. They said that with these skills therapeutic impact continued long after the physiotherapist had left.

“And that when you are gone some part of what you did is staying on and that’s why I have found that indirect therapy to still have an impact” (B)

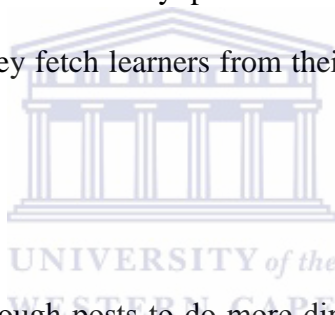
Another positive attitude towards indirect support was displayed by physiotherapists that were actively involved in indirect support to ordinary schools in their community. These physiotherapists assisted teachers in identifying barriers to learning, curriculum adaptation and treatment techniques and this was on a consultative basis. The physiotherapists that offer indirect support now talk very positively about the transfer of skills to teachers, parents and other stakeholders that accompany indirect support.

4.2.2. 2 Negative attitudes to indirect support

The negative attitudes that were displayed by some physiotherapists were closely linked to the barriers identified to provision of indirect support. These included the lack of time to engage in indirect support, inadequate training in inclusive education practices, inadequate staff, high workload of physiotherapists, expectations of inclusive education policies, the DOE’s handling of the implementation of EWP6, inappropriate referrals for indirect support and poor

communication between the various stakeholders in education. These points are discussed in more detail in Section 4.4 on barriers to indirect support.

Some physiotherapists in the study did not have much to contribute to the discussion on indirect support as they did not practice much indirect support. It was not expected of them at their special schools. This was either due to them working according to strict timetables for therapy sessions for individual and groups or the special school concerned was able to employ additional physiotherapists in governing body posts so that learners could have access to direct therapy. Some of these physiotherapists said that they provide indirect support when they can, for example check on seating when they fetch learners from their classrooms and advise teachers at the same time.



“At our school we have enough posts to do more direct therapy but we also do indirect therapy in the form of seating in wheelchairs , in classrooms, in buses, car seats for the little ones” (D)

“Here with us we do mostly direct therapy, we do not usually get a chance to go to a class to spend time there. I usually check on positioning, seating when I go to fetch children from the class. Our timetables have specific slots for pupils for each period” (H)

4.2.2.3 Summary of physiotherapists’ attitude to indirect support

All physiotherapists participating in this study confirmed being involved in some form of indirect support but not all of them in a structured manner. By this they meant that they did not

have a specific time that was allocated for indirect support but they offered indirect support as the need arose. (Only physiotherapists from one of the special schools had a regular weekly session for outreach work with ordinary schools in the community). There was a general consensus from all physiotherapists, irrespective of their involvement in indirect support, that the education of parents, teachers and other stakeholders is an important aspect of indirect support. Education would involve providing information and skills training on various disabilities and explaining the role of physiotherapy in inclusive education. They indicated that this would lead to a better working relationship between physiotherapists, parents, teachers and other stakeholders resulting in a transfer of skills and sustainable programmes, where the effects of the physiotherapist's input are long lasting.



4.3 PHYSIOTHERAPISTS' PERCEPTION OF THEIR ROLE IN THE DBST

The DBST according to the physiotherapists should comprise of therapists, psychologists, teachers, nurses and remedial teachers and should be based at the district office. They see their role as being in an advisory capacity and although some physiotherapists see the special school staff as being part of the DBST others believe that it is not a realistic plan.

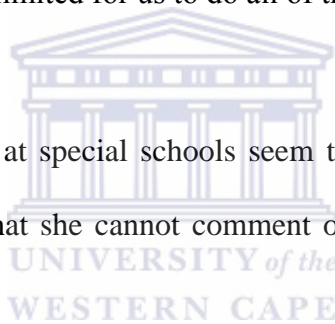
“teachers, psychologists, therapists (occupational therapists, speech therapists, physiotherapists), nurses, remedial teachers” (G)

“We would actually go and see what the teacher is talking about. This again comes to working in a more advisory capacity after you have assessed and all that” (H)

The physiotherapists stated that they have, in meetings with educational authorities, voiced concerns about staff shortages and the need for more posts at district level. It would appear that the more experienced physiotherapists have an idea of what is expected of them in the community as well as at district level but feel that they will not be able to meet the needs of the community and special school given the workload they have at present. This perception is shared by the other less experienced physiotherapists who also said that they will not have enough time to do their work at the special school as well as have time to do outreach work in the community.

“Will we have enough time to do an outreach programme as well as finish our work load? I think the time will be too limited for us to do all of that” (J)

Newly employed physiotherapists at special schools seem to know even less about the DBST with one physiotherapist stating that she cannot comment on something that she has not been involved in.



“ This is not a concept that has actually started working so there is not much to comment on, this is not something we have been involved in” (B)

The physiotherapists indicated that the DBST at present was not fully representative of all educational support services and the special schools did not have a working relationship with them. Physiotherapists said that if they were not represented on the DBST then their services would not be effectively utilised.

“there are psychologists mainly and speech therapists and that is not representative of all the disciplines so we really are not part of that DBST and for us to know our functions” (A)

“Each DBST is to include one therapist of each discipline. But at the moment it is not happening” (A)

4.4 BARRIERS TO PROVIDING INDIRECT SUPPORT

This section describes the barriers to providing indirect support. Details of each barrier are described in the following sections. These barriers include:

4.4.1 Lack of resources.

4.4.2 Poor communication between various stakeholders in education.

4.4.3 Teachers’ attitude to physiotherapy.

4.4.4 Physiotherapists’ high workload as a barrier to indirect support.

4.4.5 Language barriers.

4.4.6 Time management.

4.4.7 Lack of guidance from DOE.

4.4.1 Lack of resources

The lack of resources includes:

4.4.1.1 Insufficient physiotherapy posts.

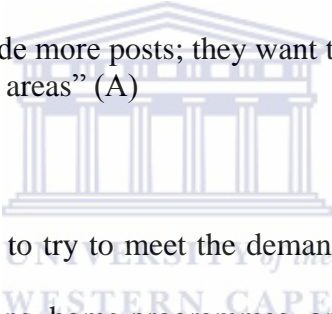
4.4.1.2 Poor socio-economic circumstances of people receiving indirect support.

4.4.1.3 Funding by government departments for structural changes.

4.4.1.1 Insufficient physiotherapy posts

There was a belief among physiotherapists that there needed to be more posts available to meet the needs of the special schools as well as the communities they served. Some physiotherapists have voiced these concerns at meetings with officials from the Education Department and were told there were no funds available for this.

“They not prepared to provide more posts; they want the posts that are in the district to be applied in all these different areas” (A)



The physiotherapists indicated that to try to meet the demands of their schools, which included individual and group therapy sessions, home programmes, organising clinics, sporting activities, hospital visits and acquiring appliances for learners, and to offer a similar range of services to the community around them would be very difficult. One physiotherapist said that she had to meet the needs of her school by herself for many years and it was just a year ago that the school acquired the services of another physiotherapist.

4.4.1.2 Poor socio-economic circumstances of people receiving indirect support

Physiotherapists said that poor socio-economic circumstances of people gave rise to informal settlements, overcrowding, poverty and high incidence of crime and these conditions made it

unsafe for physiotherapists to work in these communities. Trained physiotherapists did not go into these areas due to safety issues and yet there was a need in such areas. Some organisations train volunteers to try to meet this need but their success was dependent on the availability of these volunteers.

“People who are trained, there are barriers to them going into these areas. I am looking at a place like Khayelitsha, how many physiotherapists actually service that area?” (G)

4.4.1.3 Funding by government departments for structural changes

Structural changes and adaptations require money to implement but according to the physiotherapists this was not always available from government departments. Structural changes refer to issues such as building of ramps and widening doorways of schools, homes and public facilities in order to make them more accessible.

“Also with the management of establishments, they are going to tell you that adaptations cost money and if the government is not going to pay for it, then who is?” (H)

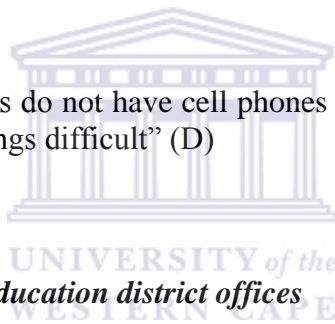
4.4.2 Poor communication as a barrier to indirect support

Lack of or poor communication between the various stakeholders in education was mentioned as a barrier to providing indirect support.

4.4.2.1 Communication with parents

Physiotherapists have said that poor communication with parents is often a barrier to indirect support. They accept however that it is not always of the parents making. Parents were often unable to keep appointments at school because many of the pupils did not live in close proximity to the special schools they attended. In one school they had pupils from as far away as Namibia. Other reasons were that parents could not get time off from work to come to school, or they could not afford to pay for the trip to school, or they could not be contacted due to them not having a telephone or fixed home address at which they could be contacted.

“We also find that some parents do not have cell phones or home phones or they do not stay in one place and that makes things difficult” (D)



4.4.2.2 Communication between education district offices

Physiotherapists said that the education district offices work in isolation from one another and this has led to unnecessary duplication of work. An example of this was when physiotherapists in various districts in the Cape Metropole were asked to provide information on the role of motor skills in literacy and numeracy. The physiotherapists said that the same information could have been used in the various districts with others making relevant changes to it to suit their learner base, instead of physiotherapists from each district developing their own programme.

“EMDC East did it, North did it, Central did it, each one did their own thing” (A)

4.4.2.3 Communication with the community

The physiotherapists said that communication with the community which includes communication with ordinary schools is an important part of indirect support. The physiotherapists said that they found that communication with ordinary schools whether telephonically or written received poor or no response from school principals. Staff at special schools sent letters explaining how they could assist teachers in ordinary schools with learners who experienced barriers to learning. The physiotherapists said they then expected teachers to respond with requests with their needs as the physiotherapists did not know exactly what the needs of teachers in ordinary schools were. Some special schools get responses but they were not for the right reasons, for example a school asking for information on admitting disabled pupils into their schools in order to qualify for additional funding. There was no information at the time of this study on whether schools qualified for extra funding if they admitted learners with disabilities.

“We also found that sending out letters to surrounding schools; we just do not get replies”
(D)

4.4.2.4 Communication between physiotherapists and staff members at the special schools

Communication between physiotherapists and staff members, especially teachers and management, at special schools concerning the changing roles of physiotherapy have also posed problems. According to the physiotherapists this was due to management and teachers at special schools not being informed by the DOE of the changes that accompany the implementation of

inclusive education practices. They did add that sometimes effective communication between themselves and teachers at the special schools was dependent also on the personalities of the individuals involved and their willingness to accept change.

4.4.2.5 Communication between special schools

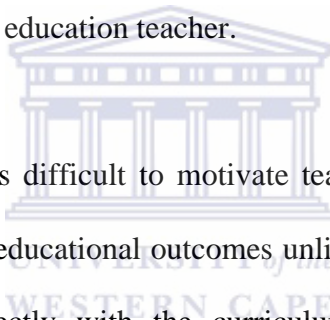
According to the physiotherapists communication between physiotherapists at different special schools as well as between physiotherapists and other therapists is lacking. The physiotherapists said that they could assist as well as learn from one another if they were dealing with similar issues. For example if special schools had similar discipline problems and one school had found an effective way with which to deal with the problem then these ideas could be shared. One physiotherapist said that Nu Thera, which is a body formed by therapists from special schools in order to facilitate better communication between schools, could help in this regard.

“Sometimes we might have a problem that is new to us but not to another school say with discipline or something. We could learn from them. It would save us a lot of trouble if someone has already worked out something” (G)

4.4.3 Teachers’ attitude to physiotherapy

Teachers’ attitudes pose a barrier to indirect support for several reasons and are described in the following section.

The physiotherapists said that changes in education policies brought about by EWP6 and the inclusive education and training policy have put tremendous pressure on teachers. In special schools teachers now have to cope with larger classes and also learners with many different disabilities. The physiotherapists are sympathetic of their plight and do acknowledge the difficulties that the teachers experience. However they also feel that teachers have very high expectations of them. They say that teachers in special schools expect physiotherapists to see to the physical needs of all the pupils even if they are not physically disabled. Although teachers learn about gross motor function in their training they seem reluctant to put it into practice as they see this as the physiotherapist's function. According to the physiotherapists the teachers expect them to replace the physical education teacher.



Physiotherapists also said that it is difficult to motivate teachers because they do not see the direct impact of physiotherapy on educational outcomes unlike occupational and speech therapy where these therapists work directly with the curriculum. There is a perception among physiotherapists that because teachers do not see the relevance of advice on seating and posture to their teaching, the advice of physiotherapists on classroom adaptations is seen as an added burden. The physiotherapists suggest that it may be for this reason that teachers do not heed the advice of the physiotherapists. They feel that because of this fragile relationship they constantly have to be guarded in their approach to teachers. They also indicated that some teachers expect them to be available on demand but physiotherapists said that with their workload this was not always possible and that teachers needed to take ownership of suggestions made by physiotherapists related to the learners' physical needs.

“The current teachers need to be informed and it does not help them going to a meeting and being told that they have to now accept that the role release of the therapists is now a reality. They do not accept it, they have got to understand where we are coming from” (A)

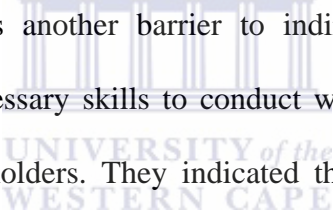
4.4.4 Intrinsic barriers experienced by physiotherapists’ as a result of their training and workload

There are many barriers related to physiotherapists’ training and workload that prevent them from providing indirect support and some of these reasons are set out below.

Most of the special schools have only a few physiotherapists who are required to see to the needs of a large number of learners. Some physiotherapists at certain special schools said that their workload is high due to them providing individual therapy to most of the learners and they say that this is necessary because group therapy would not be suitable for the type of learner at their school.

The physiotherapists believe that the demands placed on them with the inclusive education policy are too high and they feel that the education department has expectations of them which are unrealistic. According to the physiotherapists the policy states that they must make their services available to ordinary schools and the community. It frustrates them that they sometimes have to do token things to satisfy the department like making calls to ordinary schools offering their services when they know from past experience that the schools will not respond.

Physiotherapist's lack of knowledge of the curriculum is another barrier to providing indirect support as they say that the inclusive education policy requires them to work within the curriculum and they are not trained for this. According to the physiotherapists they view treatment from a medical perspective because of their medical background. Therefore they indicated that physiotherapists working in education needed a shift in mindset in order for them to function in an educational setting. The physiotherapists recommended that universities include specific training for physiotherapists in educational settings into their undergraduate programme and that physiotherapists already working in special schools should have in-service training in inclusive education practices.



According to the physiotherapists another barrier to indirect support is that they are not adequately equipped with the necessary skills to conduct workshops and training sessions for parents, teachers and other stakeholders. They indicated that this did not form part of their undergraduate training but is an essential requirement of indirect support.

4.4.5 Language

Language has proven to be a barrier to indirect support as physiotherapists are sometimes unable to communicate effectively with parents, caregivers and community members in their spoken language.

“We do sometimes have language barriers because we are getting more and more Xhosa speaking kids and we do not speak Xhosa”

Translators have been used but are not always effective as often the physiotherapists are not certain that the translator is explaining correctly as they cannot follow what is being said.

4.4.6 Time

There are barriers to providing support to ordinary schools as well as to the community as regards the time during which the support can be provided. According to the physiotherapists intervention at mainstream schools can only occur after the learners have gone home so as to not interfere with the teacher's teaching schedule for the normal school day. School hours are from 8am to 2.30pm and staff at special and ordinary schools, which include teachers and therapists, have an hour of administration time which could be utilised for purposes such as giving or receiving training. The physiotherapists suggested that this time could be used to provide support to teachers in both special and ordinary schools but also felt that it was insufficient time to provide an effective service.

“Because to work with the teachers it would have to be done outside of contact time which is about an hour after the kids (*sic*) have left” (G)

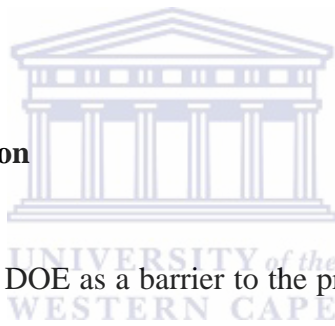
Physiotherapists perceive work in the community to be most effective in the evenings and over weekends when parents, volunteers and caregivers are available and not otherwise engaged in work or other commitments. This physiotherapists say, would mean looking at issues like working overtime or flexi-time as well as safety issues concerning staff working in the community at night.

“In our own time and it would have to be done at night and over weekends as this is when the community is available” (H)

Physiotherapists also said that parents of learners at special and ordinary schools have been known to make appointments and not keep them resulting in a waste of time that could have been utilised for other purposes.

“My experience of working in schools is that you spend a lot of time waiting for people to arrive and very often they do not” (G)

4.4.7 The Department of Education



The physiotherapists identified the DOE as a barrier to the provision of indirect support because they have not been able to provide clear and concise information and advice nor the relevant training to facilitate the transition to inclusive education practices. According to the physiotherapists the training provided was inadequate and not always appropriate to their needs. Furthermore special school staff has not been provided with relevant information on how to function as resource centres. The physiotherapists perceived the department as making more of an effort with the training of teachers than they do with therapists.

“I would think that to an extent the department [DOE] is a barrier” (H)

“They [DOE] are arranging things like computer classes and so forth but these are few and far between” (G)

4.5 NEEDS OF PHYSIOTHERAPISTS TO SUPPORT INCLUSIVE EDUCATION

The needs that were identified by physiotherapists in order to support inclusive education are discussed in the following sections. These include:

4.5.1 Training of physiotherapists

4.5.2 Physiotherapists' role in the training of others

4.5.3 Resources

4.5.4 Improved communication between education districts and special schools

4.5.5 Advocacy

4.5.6 Time for inclusive education practices



4.5.1 Training of physiotherapists

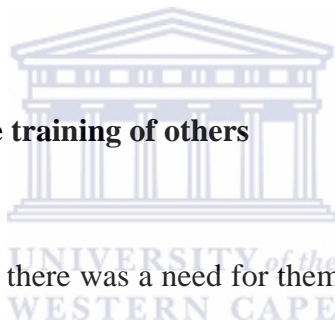
Physiotherapists said they require skills' training on holding workshops and seminars as this was not part of their training and it is one of the tools needed to become proficient in indirect support.

They also indicated that they required good communication skills as they worked with parents, teachers and members of the community. They also said that they needed to be able to deal with conflict management, to motivate teachers, parents and other stakeholders as well as provide positive re-inforcement when needed.

Physiotherapists said that as they were working in an education setting they needed training in the curriculum in order to be more effective in inclusive education practices. They said this could be covered in the under-graduate syllabus at university, but for physiotherapists already working in schools this training needed to be provided. Some physiotherapists felt that the education department provided some training but others felt that this was inadequate.

The physiotherapists also said that they required advice and training from the DOE on EWP6 and the inclusive education policy with specific reference to the role of special schools as resource centres.

4.5.2 Physiotherapists' role in the training of others



The physiotherapists indicated that there was a need for them to become involved in the training of teachers (at special and ordinary schools), volunteers and learners from ordinary schools in order for them to begin implementing inclusive education practices.

4.5.2.1 Teachers

According to the physiotherapists teachers need training on identifying barriers to learning and information on different disabilities and this training needs to be ongoing as teachers from special and ordinary schools are constantly facing new challenges with inclusivity. The physiotherapists suggested that they could become involved in this training which could be to provide information on the various disabilities and how these disabilities result in barriers to

learning. The physiotherapists said that special schools are now accepting learners with a wide variety of disabilities and they have noticed that teachers struggle to identify the different disabilities.

The physiotherapists said that teachers also required training in inclusive education practices and this should be provided by the DOE. According to the physiotherapists providing indirect support means working closely with teachers and they therefore suggested that teachers need to be workshopped on inclusive education practices as well as the implications thereof on the work of therapists in education. They said that older teachers have certain perceptions of what the physiotherapists do because of past practices where learners were taken out of class to have physiotherapy sessions and the teachers did not have to concern themselves with the learners' physical needs. Learners are now expected to have minimal disruptions to school work and for this to occur the physiotherapists have to make suggestions to the class teacher to make adaptations in the class to accommodate learners who experience barriers to learning. The physiotherapists said that they found that older teachers were more resistant than younger teachers to accept these changes.

Much of the physiotherapists' discussions were focused on special school teachers but the physiotherapists also said that teachers at ordinary schools also have to learn about the different disabilities especially if they are going to have learners with disabilities placed in their classes. This training is also important for teachers who are moving from an ordinary school to work in a special school.

4.5.2.2 Volunteers

Volunteers are often used in the community by various organisations when there are insufficient trained personnel to meet the needs of that community. Physiotherapists suggested that they could get involved in volunteer training and help equip the volunteers with skills to identify barriers to learning experienced by children in the community. Physiotherapists indicated that they could also become involved in day-care centres, crèches and disabled peoples organisations to assist with advice, assessments and therapy programmes on a consultative basis.

4.5.2.3 Learners in ordinary schools



Physiotherapists suggested that they could get involved in educating learners in ordinary schools about disabilities and accepting others with disabilities; this could be done in preparation for the placement of learners with disabilities into their classes.

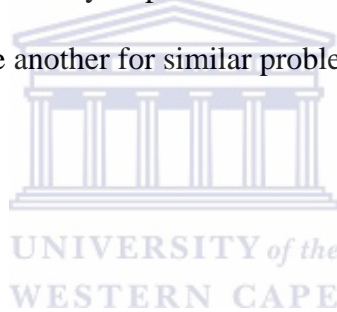
4.5.3 Resources

Resources required by physiotherapists to provide indirect support were as follows: more physiotherapy posts at special schools to meet the needs of the community as well as the special school and a resource data base that contained standardised presentations that education support services could adapt for use in different districts. This would serve to eliminate duplication of similar programmes by various individuals. Physiotherapists also suggested resources such as

larger classrooms and smaller class sizes may be required to accommodate apparatus such as standing frames and larger tables.

4.5.4 Improved communication between education districts and special schools

The physiotherapists felt that there was a need for improved communication between staff of the different education districts and between physiotherapists based at special schools. This would lead to the sharing of information and facilitate physiotherapists learning from one another's experiences and also prevent unnecessary duplication of work. The physiotherapists said they could also seek assistance from one another for similar problems.



4.5.5 Advocacy

Physiotherapists said that as part of indirect support, they needed to get involved in advocating the rights of the disabled child and this would imply getting involved in public transport and accessibility issues for disabled persons. There was also a perception among the physiotherapists that some parents were ignorant of their children's' rights to education especially when children experienced barriers to learning that stemmed from a physical disability.

4.5.6 Time

The physiotherapists said that they needed to make time available to offer indirect support and this involved a change in their mindset on what their role is in inclusive education. They also suggested that they needed to view their role in indirect support and acting as consultants to be just as important as doing direct therapy. Furthermore they were of the opinion that the DOE needed to make time available for them to become involved in training sessions with parents, teachers and other stakeholders.

4.6 SUMMARY



This chapter presented the findings of the focus group discussions with reference to Objectives One, Two, Three and Four which were:

1. To determine how physiotherapists perceive indirect support.
2. To determine how physiotherapists perceive their role in the DBST.
3. To identify barriers physiotherapists experience in providing indirect support.
4. To identify the needs of physiotherapists to provide appropriate support in the inclusive education framework.

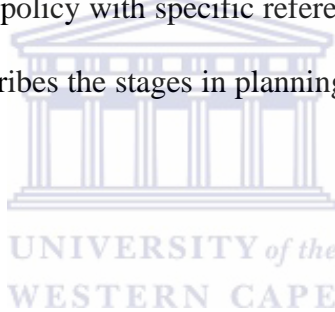
The results of Objective Five which was to plan, implement and evaluate the intervention, based on a need that was prioritised by the physiotherapists, is presented in Chapter Five.

CHAPTER FIVE

RESULTS

5.1 INTRODUCTION

Objective Five which was to plan, implement and evaluate the intervention, is presented in this chapter. As presented in Chapter Four the physiotherapists identified a list of needs to provide appropriate support in the inclusive education framework. From this list of needs the physiotherapists were asked to prioritise one need in which they would like to receive training immediately. The need that they chose was to receive advice and training from the DOE on EWP6 and the inclusive education policy with specific reference to the role of special schools as resource centres. This chapter describes the stages in planning, implementation and evaluation of the intervention based on this need.



5.2 INTERVENTION

The intervention was in four phases.

Phase One describes the process by which the physiotherapists prioritised a need to support inclusive education.

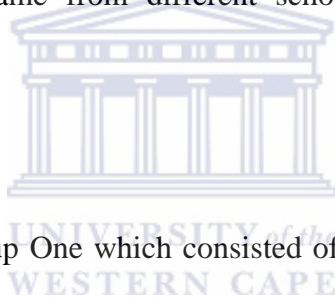
Phase Two was planning of the intervention: a training workshop.

Phase Three was implementation of the workshop.

Phase Four was evaluation of the workshop.

5.2.1 Phase One: Prioritisation of a need to support inclusive education

Objective Four was to determine the needs of physiotherapists to provide appropriate support in the inclusive education framework. In the focus group discussions the physiotherapists identified needs to support inclusive education; these needs were presented in 4.5 of Chapter Four. In order for the physiotherapists to prioritise one of these needs, for the purpose of implementing the intervention strategy, a second round of focus group discussions was planned. The planning for the second round of focus group discussions commenced in the first term of the school year which was from January to March 2009. Difficulties were experienced in getting a date that suited all participants as they came from different schools and had school and personal commitments to contend with.



The participants from Focus Group One which consisted of four physiotherapists from special schools 1 and 2 were easier to accommodate and a focus group discussion was held with them in February 2009. During this focus group discussion the findings from the first focus group discussion with specific reference to barriers to indirect support and needs to support inclusive education was presented to the physiotherapists for discussion. The list of needs to support inclusive education was put up on sheets of newsprint on the walls for the physiotherapists to look at and discuss in order to prioritise one in which they would receive training.

The participants from Focus Group Two were more difficult to gather together as they came from three different schools and had commitments even after school hours. Consequently a focus group discussion was organized with participants from special schools 3 and 4 and an interview

with the physiotherapist from school 5. On the day of this focus group discussion I arrived at the agreed venue, School 3, only to be told that of the two physiotherapists from this school one was away on a course and the other had to go home for personal reasons. As a result I had an interview with physiotherapist C in the school reception area.

Telephonic communication was made with the four physiotherapists who had been unable to attend the second round of focus group discussions as it was too difficult to arrange a meeting with them. The process was explained to them and they were told what was required of them, this was followed up with more details via e-mail where they had to look at the list of needs and choose one that they felt they needed training in. One physiotherapist from the four that were contacted in this manner replied, one had resigned and the others promised to reply but even after being reminded more than once they still failed to do so. I was thus forced to work with the responses from six of the original nine participants.

The need that was prioritised by the physiotherapists was to receive advice and training on EWP6 and the inclusive education policy with specific reference to the role of the special school as a resource centre. It was an easy decision to come to because it was the unanimous first choice of all participants that responded to the second round of focus group discussions. Signed ethical consent was received from five participants and verbal consent from one participant.

5.2.2 Phase Two: Planning of the workshop

Phase Two will present the procedure followed in planning of the workshop as well as the barriers and facilitators experienced during the process.

5.2.2.1 Procedure followed in planning of the workshop

Ethical permission to conduct this part of the study was included in the original permission from the University of the Western Cape and the WCED. The workshop was planned to take place in the second term of 2009 but eventually took place on 15 September 2009 which was in the third school term. Firstly permission to involve physiotherapists in a workshop of this nature was obtained from relevant authorities at the education districts. Thereafter participants of the study were contacted telephonically to get a date for the workshop that would suit everybody. When this was done the venue and speakers were confirmed.

The content of the workshop was based on the need that was identified by the physiotherapists.

The aim and objectives of the workshop were as follows:

Aim: To improve competencies (knowledge, skills and attitudes) of physiotherapists in providing indirect support.

Objectives of workshop:

1. To learn more about EWP6 and the inclusive education policy.
2. To gain an understanding of the implications of this policy for physiotherapists.

3. To explore ways in which physiotherapists can begin to shift from direct to greater indirect support.

Expected outcome of workshop

The outcome of the workshop was for physiotherapists in special schools to have a better understanding of EWP6 and how it affects their role in special schools as well as to learn more about indirect support and how it can be achieved in the present circumstances.

An official from the Education Department was approached to provide information on the inclusive education policy with specific reference to the role of the physiotherapist in special schools. This was followed with a second more interactive session on indirect support which focused on what is indirect support, the barriers and facilitators to provision of indirect support and the challenges experienced with the shift from direct to indirect support. This session was facilitated by an educational psychologist from the University of the Western Cape.

Invitations were sent out to the participants as well as to other physiotherapists that were employed by the WCED in all districts with an attached programme for the workshop (Appendix VI). It was decided to invite other physiotherapists employed at special schools as well as those that participated in the study to this workshop because they would have similar experiences and would therefore also benefit from such a workshop. Seventeen physiotherapists confirmed that

they would be attending the workshop. The venue for the workshop was the special school at which I was employed at the time of this research.

5.2.2.2 Barriers experienced in planning the workshop

There were difficulties experienced with getting permission from education authorities in the Western Cape to hold the workshop. Much time and effort was spent writing letters of motivation to officials in the Education Districts only to be sent from one person to the next. As the researcher I began to despair as schools were now entering the third term of the school year and I could not confirm facilitators to assist with the workshop as I still did not have permission to proceed with the workshop. The reason for my concern was that schools do not allow workshops of this nature in the last term as it is a busy time for staff with end of year exams and progress reports. When permission was eventually granted I had approximately two weeks to secure a venue, confirm speakers, decide on format of the workshop and submit relevant documentation to the education department.

Another barrier was that many of the physiotherapists complained that they had not received the invitation as often faxes are not directed to the relevant people and are often “lost” at the special schools. As result I had to phone and re-fax the invitation to physiotherapists in order to get confirmation from the physiotherapists as to how many of them would be able to attend the workshop. The physiotherapists needed the fax to show to their principals to get permission to attend the workshop. Even after sending the faxes again I still had to phone some of the physiotherapists for confirmation of attendance.

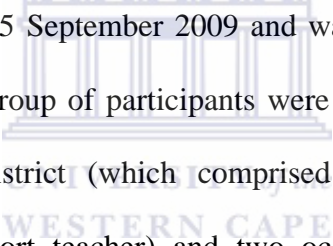
A further barrier was that although the speakers had agreed to do the presentation for the workshop, it was difficult to discuss with them the content of their presentations as they had busy work schedules so most of the communication was via email. I was concerned about whether the content of their presentation would adequately cover the need identified by the physiotherapists.

5.2.2.3 Facilitators experienced in planning the workshop

- The special schools co-ordinator, at the education district to which I was affiliated as an employee of WCED, assisted me in obtaining the necessary permission to hold the workshop when I experienced difficulties with getting permission from the WCED to hold the workshop.
- The presenters that were contacted were available on the date that was set and they fortunately readily agreed to do the presentations.
- As to a venue to host the workshop, the principal of the school that I was employed at was kind enough to allow me to host the workshop at the school at no extra cost. This venue was suitable as it was easily accessible for most people and it was easy for me to make all the necessary arrangements for catering and to source other workshop presentation equipment such as projectors, screens, newsprint and a computer.
- When physiotherapists were contacted about the workshop they seemed very interested and I received positive responses from many participants as well as other physiotherapists with regards to the need for workshops of this nature.

- My colleagues were very helpful in organising the catering, setting up the presentation equipment and in preparing the venue. One colleague assisted by taking detailed notes at the workshop as it was not being recorded.
- My supervisor from the University of the Western Cape was also very helpful with advice on content of the workshop, suggestions of possible presenters and securing funding for some of the cost of the workshop.

5.2.3 Phase Three: Implementation of the workshop



The workshop took place on the 15 September 2009 and was attended by a total of seventeen physiotherapists. Included in the group of participants were the inclusive education team from the Metro Central Education District (which comprised of an occupational therapist, a psychologist and a learning support teacher) and two occupational therapists from special schools. The inclusive education team members were invited by the special schools co-ordinator from Metro Central Education District who was one of the speakers at the workshop. The members of the inclusive education team were known to me and to many of the physiotherapists present, so their presence did not impact negatively nor did it inhibit the physiotherapists present. The inclusive education team members did not contribute actively during the workshop, they listened to the presentations and some of them left before the workshop concluded. The two occupational therapists attended the workshop due to a miscommunication at their school and they thought they had to attend as well as the physiotherapists. The occupational therapists

participated in the small group discussions and indicated that they would like to be involved in future workshops.

There were five of the original nine physiotherapists from the two focus groups that were able to attend. Of the four participants unable to attend one person was on leave, one had resigned and the other two were unable to attend due to their busy schedules. These participants did not send apologies and failed to arrive on the day of the workshop.

5.2.3.1. Introduction to workshop

The afternoon's programme began with registration and tea to allow the therapists a chance to relax and acquaint themselves with those present. I began by presenting an outline of the research process which included the purpose of the study and the research procedure up to the present stage (Appendix VII). I explained that the information obtained in this workshop would be used for research purposes and for this I required their permission. They also had the choice not to participate if they so wished. None of the participants objected to the information being used for research purposes. This was followed by a description of the findings especially with regard to barriers to inclusive education and the needs to provide appropriate support within the inclusive education framework.

The purpose of this introduction was to remind the participants of the purpose of the study and the procedures followed thus far and also to provide an insight into the purpose of the research for those that were new to the study. I ended my presentation by explaining how I had reached this stage in the research process: which was to hold a workshop to address a need that was

prioritised by the participants. The physiotherapists had requested advice and training on EWP6 and the inclusive education policy with specific reference to the role of the special school as a resource centre.

5.2.3.2. Information on policy

This presentation was given by the special schools' co-ordinator from Metro Central Education District. He presented aspects of EWP6 that were relevant to the therapists and how this should guide their functioning in an inclusive education setting. His presentation focused on change and he advocated using EWP6 as a guide on how therapists should function in special schools. He encouraged the therapists to see the extension of their services to a wider client base as being possible if they increased the roles that they played. Their roles could include: a leading role, a collaborative role and a consultative role.

The leading role refers to working with high needs learners and involves direct therapy. The collaborative role involves working with learners of medium to low level of need and involves working with the DBST in assessing, advising and occasionally providing intervention to learners in full service and ordinary schools. The consultative role is supporting learners with low level of need in ordinary schools by providing support to institution level support teams and management thereby enabling them to support the learners with strategies to overcome barriers to learning. Both collaborative and consultative roles involve indirect support therefore therapists could meet the demand for increased services by practicing indirect support in addition to the direct support that they are presently engaged in.

Discussion among physiotherapists following the presentation on policy

There were questions from the therapists about their involvement with the DBST and the role of special schools as resource centres. The response was that neither the policy nor can anyone prescribe exactly how this arrangement should work. The EWP6 provides the guidelines and the therapists have flexibility within the requirements of the policy to decide how they are going to shift the balance between direct and indirect support in order to extend their services to the community. Therapists were encouraged to embrace change and accept inclusive education principles.

There were questions from the physiotherapists regarding their role in the DBST and with the response they received: the physiotherapists said that it looked like they could be overloaded with work from the DBST. On the existence of DBSTs, the physiotherapists were informed that there is no fully functional DBST at the Metro Central Education District, but there is a newly appointed inclusive education team that could be viewed as the beginning of a DBST.

5.2.3.3 Indirect support

The second presenter facilitated an interactive session on indirect support and this covered both barriers and facilitators to providing indirect support and the challenges experienced in shifting the balance from direct to indirect support. The session commenced with information on what constitutes indirect support, the need for physiotherapists to engage in personal change in order

to embrace inclusive education principles and the responsibility of the DOE to provide support and training for staff at special schools to equip them for their new roles (Appendix VIII).

The speaker explained that indirect service delivery refers to: provision of services to clients through a third party, is consistent with the framework that considers environmental and systems factors as key to intervention and treatment, and it is more cost effective because new skills and concepts are applied to other situations thus extending the impact of the initial service provision. Some examples of indirect support are consultation with staff and parents, designing interventions that are carried out by others, in service training, research, programme evaluation activities and working collaboratively with the DBST, including providing support to staff at full service schools and mainstream schools in curriculum adaptation, addressing barriers to learning and professional development. With regard to change, the therapists were asked to embrace the changes that inclusive education entails; they were asked to look inside themselves and understand their own personal philosophy and this will assist them in the direction that they need to follow.

The second and greater part of this session was working in small groups to facilitate discussion, debate and sharing ideas on areas of concern with regard to indirect support. The therapists worked in groups and discussed firstly what they thought direct support was and then what they understood indirect support to be. They were also asked to discuss what they are presently doing and how can they begin to work differently. Some of the challenges to indirect support were discussed with a view to addressing some of the challenges and to look at the way forward. The

session ended with the therapists being asked about concerns that they have regarding their role in special schools within the inclusive education framework.

Discussion among physiotherapists following the presentation on indirect support

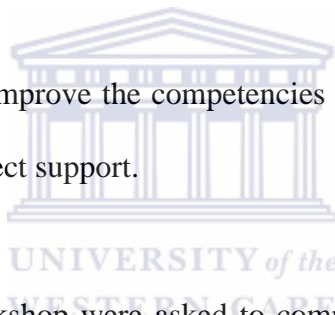
The physiotherapists said they were surprised at just how much indirect support they were presently engaged in and expressed agreement with the speaker that direct therapy was very important and that indirect support could not exist without direct support. The physiotherapists had many questions about indirect support especially when it involved offering services to ordinary schools in the community. Some of the concerns were time to work with ordinary schools, insufficient staff, and the expectations of the DOE. The speaker was able to relate personal experiences that were similar to those experienced by the physiotherapists and empathized but also emphasized the need for physiotherapists to move in the direction of inclusive education. The physiotherapists were encouraged to find the balance between direct and indirect support by following the guidelines of EWP6 and to also ensure that they do not become overloaded with work. They were reminded of the DOE's responsibilities with regards to training them for their new role. Those present were encouraged to engage with education authorities over areas of concern especially with regard to the provision of support to ordinary schools in the community.

Many of the questions were aimed at getting clarity on their role in special schools as resource centres. Again the physiotherapists, like in the first session, were informed that they need to define their role within the broader constraints of the inclusive education policy.

The physiotherapists also indicated that they were unhappy that physiotherapy was being marginalised in education and that other disciplines such as occupational therapy were playing a bigger role than physiotherapy and were being allocated more posts at schools and at district level. This particular concern was shared by many and had the room buzzing with consensus on this point. It was suggested that the physiotherapists speak out about this to relevant authorities and that physiotherapists need to promote the importance of their role in education.

5.2.4 Phase Four: Evaluation of the workshop

The aim of the workshop was to improve the competencies (knowledge, skills and attitudes) of physiotherapists in providing indirect support.



Participants that attended the workshop were asked to complete an evaluation form (appendix VIII) at the end of the workshop and 14 forms were collected from a total of 17 physiotherapists that attended. The inclusive education team and the occupational therapists did not complete the evaluation forms.

Table 5: Evaluation of the workshop

QUESTION	YES %	NO %	ABSTENTION %
Did you find the content of the workshop useful?	93	-	7
Did you find the information on the education policy relevant and useful?	100	-	-
Did you learn anything new about indirect support?	86	14	-
Do you think the information provided will assist you in providing indirect support?	100	-	-

The responses to the open ended questions were as follows:

What did you dislike about the workshop?

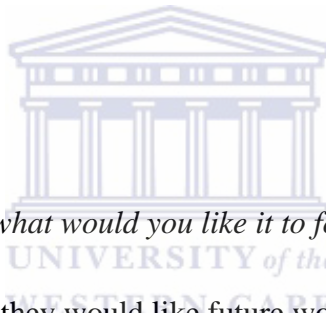
Most of the participants enjoyed the workshop, but some felt that it was too long and they could not concentrate for such a long period. Others also felt that a morning session rather than an afternoon session would be more suitable.

Did you find the information on policy relevant and useful? If not please tell us why?

All the participants found the information relevant and useful.

Do you think that the information provided will assist you in providing indirect support? Please tell us how?

Many of the physiotherapists said that the information provided gave them more clarity on what indirect support was all about. It also made them realize how much indirect support they were already providing. The physiotherapists expressed a sense of relief that the information provided showed them that they were on the right track. They also learnt more ways to provide indirect support such as the importance of creating awareness in parents, teachers and caregivers. They saw the benefits of indirect support and it made their role in outreach programmes clearer. The physiotherapists indicated that they needed to know their capacity to provide services as well as their limitations.



If there were follow up workshops what would you like it to focus on?

The physiotherapists indicated that they would like future workshops on the following: the role of therapists in inclusive education; how do policy makers see the role of therapists; to what extent do physiotherapists provide indirect support to the community and how do they go about setting their boundaries and limitations. Workshops should include therapists of all disciplines such as occupational therapists, speech therapists and physiotherapists where they could together discuss difficulties, concerns and challenges with inclusive education, logistics around resource centres, look at how their role needs to change in inclusive education, and find ways to improve communication between special schools and between education districts. They also requested workshops where they could receive workshop presentation skills and practical advice on outreach programmes and providing indirect support to ordinary schools. The physiotherapists

said they could get together to look at the reasons behind the lack of or decreasing number of physiotherapy posts at special schools as well as at district level.

5.2.4.1 Objectives of the workshop

Objective 1 which was to learn more about EWP6 and the inclusive education policy was met with all participants indicating that they found the information on the policy relevant and useful.

Objective 2 was to gain an understanding of the implications of the policy on the role of physiotherapists and this would include their roles in both resource centres and DBSTs. This objective was not fully met as physiotherapists were still unclear regarding their role in a resource centre and as part of the DBST. Judging by the lively debates and discussions that ensued over this topic it seems that more sessions of a similar nature are required before consensus is reached.

Objective 3 was to explore ways in which physiotherapists could move away from direct to indirect support. This objective was also met with 86% of the participants indicating that they had learned something new about indirect support and all of them indicating that the information received will assist them in providing indirect support. Some physiotherapists said this workshop made them realize just how much of indirect support they were presently involved with and this showed them that they were on the right track (Most of these physiotherapists are practicing indirect support in the special schools only and not in the community). Reference was made to

some of the successful outreach initiatives that were made from special schools and the positive response that it received from mainstream schools.

Most of the physiotherapists present were happy with the information on indirect support as it gave them clarity on what it involved; they appreciated the important role that indirect support could play; they saw the link between direct and indirect support and they saw the benefits and limitations of indirect support. The therapists said that they needed to know their limitations as well as their capacity to deliver services to the communities beyond their special school in order to become proficient at providing indirect support.

5.2.4.2 Reflection on the workshop



The outcome of the workshop was for physiotherapists in special schools to have a better understanding of EWP6 and how it affects their role in special schools as well as to learn more about indirect support and how it can be achieved in the present circumstances.

The responses received confirmed that the physiotherapists learned about the policy as well as indirect support, but it is difficult to say if this will result in any changes in practice. Another evaluation needs to be done after a period of time to see if anything has changed especially with the provision of indirect support and the role of physiotherapists in resource centres. However all therapists present wanted more workshops of a similar nature and requested that future workshops include therapists from all disciplines (occupational and speech therapists as well). The reasons for this is that therapists share common issues of concern such as logistics around

resource centres, what constitutes a “high needs child”, how do policy makers view therapists’ role in inclusive education, workshop presentation skills, how to provide support to ordinary schools and communication difficulties between special schools and education districts. They could come together to discuss their role in inclusive education and to discuss difficulties, concerns and challenges and assist one another by sharing experiences from the different special schools. The physiotherapists said that all therapists could together present issues of concern to the WCED and this would be more effective as a united force, rather than each group working independently. This augurs well for the promotion of collaborative practices and shows keenness from physiotherapists to want to change in order to improve their situation.

Future workshops specifically with regard to the role of physiotherapists in inclusive education could focus on how to facilitate the change to indirect support and how physiotherapists could go about setting boundaries or limitations as to what they can offer to communities outside special schools without overworking themselves. The physiotherapists said that they also needed to look at the reasons behind the lack of or decreasing number of physiotherapy posts in special schools as well as at district level.

5.4 SUMMARY

This chapter covered the stages in planning, implementing and evaluating the intervention strategy which was the training workshop. Both the barriers and the facilitators experienced in planning the workshop are presented as are the aim, objectives and outcome of the workshop. The discussion of the results presented in Chapters Four and Five will be presented in Chapter Six.



CHAPTER SIX

DISCUSSION

6.1 INTRODUCTION

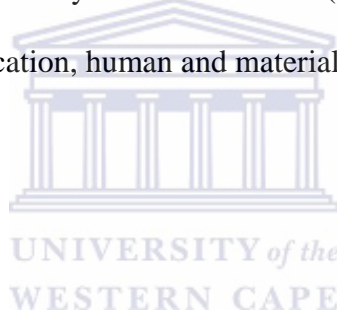
This chapter discusses the findings, which indicate that physiotherapists have an understanding of indirect support but are unclear as to the implementation thereof. They are also unclear as to their role with respect to the DBST. This addresses Objective One and Two which were to determine how physiotherapists perceive indirect support and to determine how physiotherapists perceive their role in the DBST. Thereafter a discussion is presented on the barriers physiotherapists experience in providing indirect support and their needs to provide appropriate support in the inclusive education framework, which addresses Objectives Three and Four. The chapter ends with a discussion on the intervention or training workshop which addresses Objective Five.

Section 6.2 presents indirect support provision currently practiced by special schools, section 6.3 presents a discussion on the physiotherapists' understanding of indirect support and section 6.4 discusses the physiotherapists' attitude to indirect support. These sections address Objective One which was to determine how physiotherapists perceive indirect support.

6.2 INDIRECT SUPPORT PROVISION CURRENTLY PRACTICED BY TWO SPECIAL SCHOOLS

6.2.1 Introduction

In this section examples are given of indirect support provision that is currently practiced at two special schools. The physiotherapists from two special schools made mention of staff that have made inroads into indirect support and outreach work. Of the two schools that provided indirect support to the community, one was an affluent well-staffed school and the other was a small school in a semi-rural area that was poorly staffed and served a large community. Both these schools provided indirect support for very different reasons. (The physiotherapists considered the school to be affluent in terms of location, human and material resources relative to the number of learners in the school).



6.2.2 Present practices

The staff at the more affluent special school felt that they were well resourced and needed to share their resources with the poorer communities around them. They identified two ordinary schools in poor socio-economic communities and now have regular weekly sessions with these schools. A team of therapists from the special school visit these schools and assist the teachers in identifying and overcoming barriers to learning by assessing learners, adapting the curriculum and sometimes providing therapy.

The therapists at this same special school, in an effort to engage regularly with parents (of learners at the special school), invite the mothers once a term to tea at school and they use this as a forum to meet and learn more about the parents, answer questions and give home advice.

The second special school mentioned by the physiotherapists started practicing indirect support to cope with the increasing number of learners at the special school requiring therapy. They indicated that the number of learners requiring therapy had increased in the last five to six years and they could no longer cope with direct therapy alone. Direct therapy restricts the number of learners that can receive therapy as this depends on the number of therapists that are available to offer therapy. The staff at this special school in an effort to offer therapeutic intervention to a wider client base engaged in “empowerment” workshops for parents of learners, members of the community and teachers. They did home visits to advise parents on therapeutic interventions in the home. They trained teachers and classroom assistants in positioning and incorporating therapy into their class routines and they taught people in the community how to fix wheelchairs so they could possibly run their own community wheelchair repair shop.

6.2.3 Facilitators of these indirect support practices

How were staff members (including physiotherapists) at these special schools able to make this transition to inclusive education practices? They would have required the permission and support of school and district management, initiative on the part of those involved, both therapists and management (principal), a willingness on the part of therapists to try something new (i.e. to impart skills and knowledge to others) as well as a willingness to put in extra work and time to

prepare workshops, notes and presentations. These requirements were met as a result of the school management and therapists working together. This form of indirect support has become a regular feature with the one special school. A team of therapists from this special school has a regular two hour session once a week with the ordinary school.

Kotze (2009), in her research in the Western Cape, found that school principals can act as facilitators as well as barriers to indirect support. She also maintains that without the assistance of school management it is difficult for therapists to initiate and maintain indirect support in the community. This shows that success in providing indirect support to the community would require the collaboration of staff and management.

The examples of indirect support set by these schools need to be acknowledged and seen as pockets of excellence so that other physiotherapists may be encouraged by these successes and realise that indirect support to the community is not unrealistic but requires some creative thinking and commitment.

6.3 PHYSIOTHERAPISTS' UNDERSTANDING OF INDIRECT SUPPORT

The physiotherapists indicated that they understood indirect support to be education and training on physiotherapy techniques for teachers, parents, learners, caregivers, class assistants, volunteers, special school staff as well as members of the community.

6.3.1 Indirect support to teachers

Physiotherapists were of the view that indirect support to teachers could take the form of providing information on different disabilities which will enable teachers to identify barriers to learning experienced by some learners. They said that if teachers understood more about the disabilities, it would be easier to get their co-operation in making adaptations in class to accommodate learners who are experiencing barriers as a result of their disabilities. Mahon and Cusak (2002) in the UK found in their research, that teachers lacked knowledge of different disabilities in their training and that teachers indicated that the physiotherapists had a role to play in providing information on disabilities. However cognisance needs to be taken of the fact that the barriers to learning are not always situated within the learner but could also be as a result of barriers within the education system such as an inaccessible environment, inflexible curriculum and inappropriate language and communication channels (DOE, 2001). Therefore teachers, therapists, learners and parents need to work together to identify the specific barriers to learning for each learner and to find ways to overcome these barriers to allow learning and teaching to take place (Struthers & Lewis, 2004).

Physiotherapists said teachers could also be given skills training in positioning and use of assistive devices for learners with disabilities. Positioning refers to encouraging good posture within the constraints of the disability and this would include learners in wheelchairs as well as in those in normal chairs. According to the physiotherapists good posture can lead to improvement in fine motor skills such as writing and drawing and allows the learner to concentrate for longer periods of time without tiring. They said if teachers saw these advantages then they may appreciate the importance of physiotherapy on learning outcomes and not see it as

an added burden or more responsibilities. According to Mahon and Cusack (2002) teachers in the UK saw their difficulties with disabled learners as being due to a lack of training and knowledge of disabilities and they saw physiotherapists as having a role in teaching those handling skills. Struthers (2005) in South Africa and Kashimba (2005) in Zambia also found that teachers in ordinary schools indicated that physiotherapists have an important role in assisting them to cope with learners with disabilities in the classroom.

Physiotherapists also said that they needed to work more in the classroom in order to identify barriers to learning and offer intervention strategies and if necessary to assist the teacher in adapting the curriculum. An example given was that they could assist teachers in the Life Orientation learning area to assess and work with learners whose disabilities affect the way they move and communicate. Struthers and Lewis (2004) maintain that the curriculum is the primary vehicle through which support in the inclusive education setting needs to be given. They said that therapists can facilitate this by designing learning programmes, sharing ideas for classroom activities, using alternate teaching methodology or ways of presenting information and identifying the most appropriate assessment or evaluation tool for use in class.

Physiotherapists also said that they could provide information on the services they offer to teachers in ordinary schools and in this way offer assistance to teachers in ordinary schools. This has, in some instances, started a relationship between special schools and ordinary schools where therapists visit the ordinary school on a regular basis to offer consultative support to teachers on identifying barriers to learning, assessments and curriculum adaptation. According to Masin and Valle-Riestra (2007) teachers said that the information supplied by physiotherapists provided

valuable insight into what they (physiotherapists) do in the educational setting and the rationale behind the intervention. They also said that this information demystified the role of physiotherapy in education.

6.3.2 Indirect support to parents

The physiotherapists said that indirect support to parents was very important as this would make it easier for both parent and learner in the home environment and would ensure continuity of therapy even when the child was not at school. Indirect support could take the form of training sessions for parents on feeding and positioning of disabled learners, correct use of appliances such as splints, crutches and wheelchairs as well as providing information on their children's disabilities.



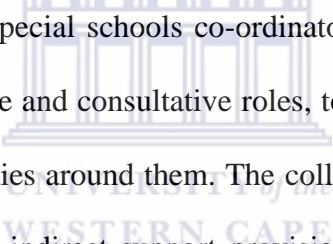
Physiotherapists said they could provide skills training for parents on adapting feeding techniques for learners with disabilities such as cerebral palsy and spinal muscular dystrophy, where the learner's ability to feed independently is compromised. Positioning refers to aligning the learner's body, whether lying down or sitting, in such a manner that it maximises the learner's functions and reduces the chances of developing joint deformities. Physiotherapists said that it is also important to train parents in the correct use and maintenance of assistive devices such as splints, crutches and wheelchairs. These appliances are used to reduce deformities, improve function as well as assist with mobility in learners with disabilities and the physiotherapists maintain that parents need to be able to monitor the care and use of such for maximum benefit. Many of these skills need to be applied in the home setting and

physiotherapists mentioned the need to do home visits especially for the learners with severe disabilities. Physiotherapists said that they could advise on how to make the home more accessible for the learner as well as making tasks easier for the caregiver.

The physiotherapists also said that it was important to provide information on different disabilities and they indicated that parents would require information on their child's disability unlike teachers who require information on disabilities in general. There was a perception that this information would get better co-operation from parents as they would understand why they were being asked to perform certain activities with their children. According to research in the Western Cape in South Africa, therapists presently provide information on disabilities and train parents in skills to facilitate communication, movement and life skills with their children (Struthers, 2005; Kotze, 2009). According to Struthers (2005) parents also requested information on the type of support provided by the different therapists (occupational and speech therapists as well as physiotherapists). They also requested that therapists provide emotional support and to be understanding of children and parents from different cultural backgrounds for there to be effective communication between the therapists and themselves.

Physiotherapists said they also needed to become involved in educating parents on their rights and responsibilities as they get the impression that parents assume that the school is responsible for seeing to all of the learners' needs. In all the examples of indirect support with parents that were mentioned by the physiotherapists there was talk of "training", "providing", "advising", "educating" and little mention was made of "sharing", "consulting" and "collaborating" that would indicate a more collaborative partnership between parents and physiotherapists. The

physiotherapists' use of such terminology could indicate an unequal power relationship between parents and therapists with the therapist in the professional role and the parent in a more passive role. According to Sekerak et al (2003) collaboration and consultation with parents are essential for indirect service delivery. They maintain that parents need to understand and agree with the use of indirect support in order for it to be successful. McKenzie and Muller (2006) in South Africa concur and go on to add that that the collaborative vision should be one that is jointly developed by parent, child and therapist using the specific skills of the therapist to its best effect. Parents can be empowered in their decision-making to such an extent that therapists become a resource to be called on to achieve certain goals.



In the intervention workshop the special schools co-ordinator encouraged therapists to take on different roles, namely collaborative and consultative roles, to assist them in offering services to ordinary schools and the communities around them. The collaborative and consultative role was advocated, with parents as part of indirect support provision. This would enable therapists to offer their services to learners in ordinary schools by providing information and skills training to empower parents to provide the therapeutic intervention.

6.3.3 Indirect support to other stakeholders in the education setting

Physiotherapists indicated that indirect support to other stakeholders involved with the learners would include people like drivers, kitchen and hostel staff at specials schools, caregivers, community members, students and volunteers and they could be based at special or ordinary schools. Recipients could receive information sessions on different disabilities and also skills

training workshops. The physiotherapists indicated that these sessions needed to be tailored differently in a more simple and user friendly manner as these sessions were directed at people that were not trained to work with learners with disabilities. According to Schoeman (1997) in South Africa, terms like “special education” and “special education teachers” have created the impression that this is a highly specialised field that can only be performed by highly qualified specialists of whom there are only a few in developing countries. Therefore, according to Saleh (1996), there needs to be a demystification around the skills required to work with disabled learners as many of these skills can be learned by families, volunteers, community workers and staff who do not have formal qualifications or training.

Physiotherapists said workshops, for other stakeholders who work with learners, could focus on providing information on disabilities and skills training on matters like the use and care of splints and orthopaedic appliances, principles of good posture and how this can be achieved with learners with disabilities. This would include positioning in wheelchairs as well as seating in school buses and classrooms. According to Sandler (1997) an advantage of this training is that learners have therapeutic input from people who have contact with them during everyday routines at home and at school. Another advantage is that this intervention could also assist in the event of a shortage of physiotherapists (or occupational and speech therapists) as well as assisting when therapists and teachers do not have enough time to implement these interventions (Sandler, 1997).

Physiotherapists also said that they could work with organisations and people in the community to assist in training volunteers to identify barriers to learning, development of children with

disabilities people and to offer simple therapeutic interventions. Physiotherapists said they could also assist with empowering members of the community with skills and the example given was when some community members were taught skills in repairing wheelchairs so that they may thereafter open their own wheelchair repair shop to assist people in the community.

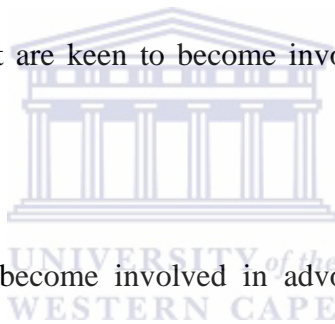
Another area of indirect support involves supervision of students from universities who come to special schools as part of their undergraduate training. The physiotherapists indicated that the students' focus was mostly based on the medical model of support and often directed at the medical needs of the learner and not enough attention was focused on how the learner's medical condition impacts on their ability to learn. The physiotherapists said this needed to be brought to the attention of the universities as they could not intervene if the university lecturers did not make the necessary changes to the curriculum. According to Struthers and Lewis (2004) for many South African tertiary training institutions, the medical model is still the focus and basis of training. These authors say that the medical model can be the basis of training but the focus of training should be based on a good understanding of the whole picture of the learner in order to provide the most appropriate support.

Another form of indirect support that physiotherapists engage in is telephonic support to parents and other people involved with the learners. This is often in response to queries regarding assistive devices such as splints, wheelchairs and crutches. It also could be to advise people on the types of support that they could have access to at various hospitals, special schools and clinics. Physiotherapists said that people, phone with queries about placement of learners in special schools, to enquire about their child's therapy or progress in school or to bring something

that happened at home to the attention of the physiotherapist. Physiotherapists said a great deal of time was spent on responding to telephonic requests by parents and others.

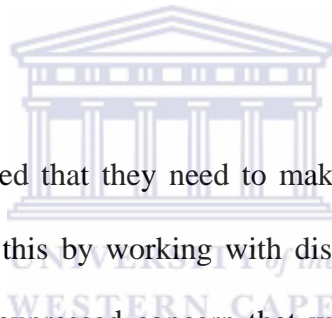
6.3.4 Advocacy

Physiotherapists indicated that another area that they could become involved in was advocacy where they could work with parents, teachers and members of the community. This would involve advocating for accessibility of and at schools, public facilities and transport, promotion of physiotherapy services and rights of parents. This is not an area that physiotherapists are actively involved in at present but are keen to become involved in as part of indirect support provision.



Physiotherapists said they could become involved in advocating for accessibility of and at schools, public facilities and public transport. This would involve them working with government departments to secure funding for structural changes such as erecting ramps and widening doorways. Some of the physiotherapists in this study suggested travelling on public transport themselves to assess which routes are most suitable for people with disabilities. This could assist them in advising people with disabilities on which modes of public transport are presently most suitable as well as making these findings available to the relevant government departments for assistance in improving accessibility. According to Mahon and Cusak (2002), physiotherapists and occupational therapists, by virtue of their training are experts in making the environment (school and home) accessible for the disabled.

Physiotherapists have also indicated that they need to promote their services and make people aware of the type of support that they are able to provide. They said this would facilitate appropriate referrals for physiotherapy services and teachers and parents would have a clearer idea of the role of physiotherapy. Physiotherapists said they could educate people on indirect support to show them that physiotherapy is not “necessarily hands on”. They made reference to teachers at special schools expecting them to replace physical education teachers and expecting them to plan all physical activities even for learners that had no physical disabilities. Many studies have indicated that there is a need for physiotherapists to promote their services and to explain their role in education (Kashimba, 2005; Masin & Valle-Riestra, 2007; Mahon & Cusak, 2002).



The physiotherapists also mentioned that they need to make parents aware of their rights and they indicated that they could do this by working with disabled peoples’ organisations in the community. The physiotherapists expressed concern that when learners left the special school (where they received assistance with medical needs and obtaining assistive devices) and went to an ordinary school, they often lost contact with the learners. They said that by making parents more aware of their child’s rights in areas such as health care, disability grants and assistive devices, learners will continue to have the necessary support from other sources e.g. Cerebral Palsy or Spina Bifida organisations as well as state Health and Welfare departments.

Physiotherapists in this study did not talk of them being advocates of the inclusive education policy but they do talk of advocating the use of indirect support as part of their role which is inextricably linked to inclusive education. According to Struthers and Lewis (2004), therapists

also need to see themselves as advocates of inclusive education as they are in the perfect position to speak to parents about inclusive education. They maintain that having greater knowledge and understanding of the inclusive education policy will enable the physiotherapists to provide parents with relevant information. In the USA, Rapport (2002) also maintains that therapists in the education sector needed to have knowledge of relevant education policies to be able to offer an effective service.

6.3.5 Summary of physiotherapists' understanding of indirect support

This information on what indirect support is and how it could be implemented was provided by the physiotherapists involved in the study. However the majority of the physiotherapists only practiced indirect support to learners, teachers, staff and parents at special schools and their reason was that they did not have time or there were not enough physiotherapists to also become involved in outreach programmes. Similar findings were made by Struthers (2005) and Kotze (2009) in research studies that involved therapists in special schools in the Western Cape. They indicated that therapists were more focused on providing direct and indirect support to learners, staff and parents in special schools than in ordinary and full service schools. Struthers (2005) found that therapists in special schools practiced more direct support than indirect support but had indicated that they would like to increase the amount of time that they spent on indirect support in future. However Kotze (2009) found that three years later the time spent by therapists on indirect support had increased minimally with therapists still spending more time on direct support and still focusing mainly on learners in special schools.

In the USA where inclusive education practices were mandated by law in the 1970's there are still difficulties experienced with use of models of indirect support provision. According to Kaminker et al. (2004) direct services were favoured over indirect support. Sekerak et al. (2003) also indicated that physiotherapists favoured a combination of models that could accommodate the needs of all learners. They chose the integrated model (therapy occurring within the contexts of daily routines in the classroom along with classmates and teacher) supplemented by the traditional "pull out" (direct support) as well as the consultancy model. These physiotherapists went on to explain that the integrated model suited functional goals such as increasing ability to interact in the classroom, play or participate in activities. For purposes of decreasing impairment or fitting an assistive device then the "pull out" model is more appropriate.

After the intervention workshop the physiotherapists indicated that the information provided gave them a better understanding of indirect support and it made their role in outreach programmes clearer. They indicated that they had learnt of more ways to offer indirect support, saw the link between direct and indirect support and learnt more about the benefits of indirect support.

6.4 ATTITUDES OF PHYSIOTHERAPISTS TO INDIRECT SUPPORT

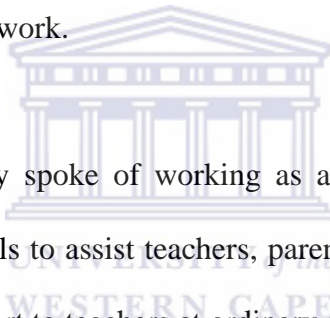
The attitudes displayed by the physiotherapists also address Objective One which was to determine how physiotherapists perceive indirect support.

6.4.1 Positive attitudes of physiotherapists to indirect support

Physiotherapists who were involved in providing indirect support were very positive and upbeat about the advantages of indirect support. They indicated that they were able to meet the needs of a larger number of learners by empowering people, parents, teachers and others who the learners spend more time with in everyday activities in school and at home, and this was done by providing information on different disabilities and skills in positioning, handling and feeding. Rapport (2002), in the USA, agrees with the idea that indirect support models can be used to spread the expertise of a limited number of physiotherapists. However, she warns against the indiscriminate use of indirect support and maintains that the individual needs of the learner should dictate the type of support given and not the availability of physiotherapists.

Some of the physiotherapists were also positive about the carryover of therapy into the home environment and into the classrooms at ordinary schools. They said this carryover resulted from parents, teachers and others being empowered with knowledge and skills to understand why they were doing things and this made them more willing to co-operate. According to Mackey and McQueen (1998) therapists working with parents, teachers and others in the home and in the classroom leads to a better understanding of the aims of physiotherapy treatment and the role of the physiotherapist by these same parents, teachers and others.

The physiotherapists in this study were positive about the indirect support they offered to ordinary schools in the form of consultative support to teachers. This support was in the form of assessments, curriculum adaptations and positioning. In this study physiotherapists said that they do not work in classrooms at special schools as much as occupational therapists and speech therapists but they indicated that they would like to. Some physiotherapists gave advice on positioning, feeding and seating but did not physically work in the classroom. Mackey and McQueen (1998), in the UK, found that integrated therapy was preferred by staff (teachers and classroom assistants) because it allowed them to learn more about the role of physiotherapy in the classroom. It facilitated academic work and learners preferred this approach as it avoided them falling behind in their school work.



The physiotherapists in this study spoke of working as a team to offer support at ordinary schools as well as in special schools to assist teachers, parents and others. Physiotherapists said that they offered consultative support to teachers at ordinary schools with a team from the special school consisting of a physiotherapist, an occupational therapist and a speech therapist. They also mentioned that when teachers came to them with a barrier to learning being experienced by a learner at the special school they often addressed the barrier with input from all therapists. This augurs well for the ability of physiotherapists to work in teams. According to Sekerak et al. (2003) in multidisciplinary teamwork the various therapists are also able to reinforce other team members' interventions when working individually with the learner. A multidisciplinary team is one in which members of the team from different disciplines communicate to share information and their unique perspectives with one another, but may work independently of each other to provide therapy.

At the intervention workshop the physiotherapists requested that future workshops not be restricted to only physiotherapists but should include therapists from all disciplines. This shows a desire for as well as a belief in, multidisciplinary teamwork. The physiotherapists were also more positive about indirect support after they received the information as they now understood more about indirect support as well as the benefits thereof. They also indicated that it showed them that they were already practicing indirect support and this pleased them.

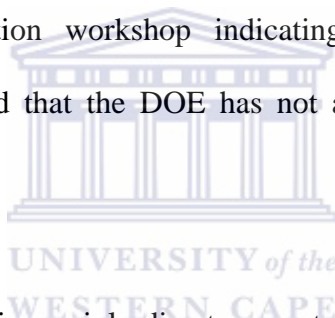
6.4.2 Negative attitudes to indirect support

The attitudes of some of the physiotherapists to indirect support was perceived as negative because of their use of terminology such as “we are medically trained”, “we are not trained to work with the curriculum”, “the DOE has not done much”, “even our unions forget there are therapists” and “we were not trained to train people”. In using this terminology the physiotherapists drew attention to the fact that their training was medically based and that does not prepare them to meet the needs of inclusive education. These negative attitudes were detected when physiotherapists talked of barriers to provision of indirect support. These barriers included lack of time to engage in indirect support, inadequate training in inclusive education practices, inadequate numbers of staff, high workload of physiotherapists, unrealistic expectations of inclusive education policies, the unstructured manner in which the DOE implemented EWP6, inappropriate referrals for indirect support and poor communication between various stakeholders in education. These points are discussed in more detail in Section 6.6 on barriers to indirect support.

What emerged in the intervention workshop when policy was discussed was that negative attitudes of the physiotherapists towards indirect support could be as a result of the DOE not having done enough to facilitate the transition to inclusive education practices. According to EWP6 (DOE, 2001) it was the duty of the DOE to provide support and assurances to the physiotherapists in this regard. The DOE (2005 p 39) states that:

“.... all changes in conditions of service and role functions (e.g. devoting part of working hours to the functions of a DBST) will be duly discussed and negotiated”

Similar barriers to indirect support as those identified in the study were raised by different physiotherapists at the intervention workshop indicating that other physiotherapists are experiencing similar problems and that the DOE has not assisted them in overcoming these barriers.



Some of the physiotherapists practice mainly direct support at their special schools because it is what is expected of them by the school management. Some said that they worked according to strictly scheduled timetables drawn up for individual and group therapy. They said this arrangement left very little time to engage with teachers and parents in indirect support. These physiotherapists said that they offered the teachers advice on positioning and seating and answered questions that teachers posed when they went to the classrooms to fetch learners for therapy. After the intervention workshop, two physiotherapists said that they would schedule time on their timetables for indirect support as they now realised the importance of allocating time for indirect support provision.

Some physiotherapists said that their special school employed additional therapists in governing body posts so that they could offer direct support to the learners. All the physiotherapists at this special school are involved in the provision of direct therapy to their learners and they were minimally involved in indirect support. According to MASPOT (1995) direct support includes individual therapy, working with others to design specific equipment for the learner, accompanying a learner to a clinic and working with others to alter the learning area for the student. Burnett and Ahola-Sidaway (2002) in the USA found that physiotherapists regarded direct support as their area of expertise, it is what they have been trained to do and although they support the consultative model they expressed concern that this model erodes the quality of service offered and that it does not use their expertise optimally.

The preference for direct therapy in South Africa has also been found by Struthers (2005) and Kotze (2009). According to Struthers (2005) the reluctance of therapists to shift to increased indirect support provision may be due to many factors including therapists' confidence in their ability to provide direct support; requests by parents for direct support; lack of appropriate competencies for indirect support provision; fear of loss of professional identity and fear of change. Similar findings were made internationally by Sekerak et al. (2003), Sandler (1997) and Rapport (2002).

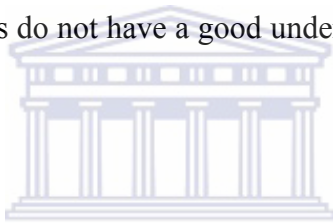
The following section addresses Objective Two which was to determine how physiotherapists perceive their role in the DBST.

6.5 PHYSIOTHERAPISTS' PERCEPTION OF THEIR ROLE IN THE DBST

The physiotherapists said that their understanding of the DBST is that it should include physiotherapists, occupational therapists, speech therapists, psychologists, teachers, nurses and remedial teachers and that this team would be based at the district office. However members of the DBST also include curriculum specialists, institutional or management development specialists, administrative experts, specialist support personnel as well as other health and welfare specialists (DOE, 2005). This suggests that either the physiotherapists do not have a complete picture of whom the DBST should consist of, or it could be due to a lack of clarity by EWP6 which states that that the DBST in different districts may have different team compositions depending on the needs of the district (DOE, 2001).

Some of the physiotherapists indicated that they were not even sure if the DBST existed and others said that they had heard that there were DBSTs but that it did not include all therapists. The special schools co-ordinator at the intervention workshop mentioned that there was no functioning DBST at Metro Central Education District but that the recently appointed inclusive education team could be seen as the beginning of a DBST. Research by Wildeman and Nomdo (2007) found that the establishment of DBSTs is not a reality in all provinces. They found that some provinces reconfigured existing support services to service a larger client base while others had not made similar moves. They also found that in the more rural provinces, the establishment of DBSTs was affected by the inability to attract and retain professionals who make up the team.

The physiotherapists indicated that they would like to be represented in the DBST in order that their services are more fully utilised. They said that only a physiotherapist would be able to make appropriate physiotherapy referrals and would have knowledge of all the services that physiotherapists could offer. This concern makes one question the level of collaboration occurring between therapists in special schools for if collaboration was well developed then this would not be an area of concern. This research has shown that there is teamwork at special schools especially between therapists, but there is minimal collaboration between team members, so that although all members may work towards a similar goal, the methods used by various members are not shared with one another in order to complement each other. Where there is minimal collaboration the therapists do not have a good understanding of one another's roles and functions.



According to Friend and Cook (2002, as cited in Engelbrecht, 2007) there are three collaboration models that exist namely multidisciplinary, interdisciplinary and transdisciplinary models all of which exist on a continuum from lesser to greater collaboration. Multidisciplinary models, which is widely used in South Africa, is where members of the team communicate to share information and their unique perspectives with one another but work independently of each other to provide therapy (Engelbrecht, 2007). On reflection it appears that the physiotherapists in this study, work in a multidisciplinary team approach where collaboration is minimal.

Interdisciplinary collaboration occurs when team members still work independently of one another but communicate regularly and are willing to share separate plans to achieve a common goal and to co-ordinate service provision (Engelbrecht, 2007). This results in interventions that

support and complement one another. Transdisciplinary teams are the most collaborative where team members work together to perform tasks interactively and share ideas and expertise with one another towards achieving a collective goal (Engelbrecht, 2007). In this team any member can be selected to perform the intervention with support from the rest of the team. On reflection this sharing and learning in the more collaborative models are essential in indirect support because it is based on sharing skills and imparting knowledge to others. Therefore if therapists in special schools become more collaborative, they would find it easier to share knowledge and skills with other people e.g. teachers, parents and others in the education sector.

The policy documents propose that there be negotiation between the education district and special schools to look at issues such as therapists in schools being involved in outreach work for a certain number of hours in the week; training therapists in collaboration and consultative skills and providing training in workshop facilitation skills (DOE, 2005). Looking at the list of barriers physiotherapists experience in providing indirect support and in their needs to provide appropriate support in the inclusive education framework, it is clear that the WCED has not met the needs of physiotherapists in special schools.

The information gathered in the focus group discussions suggests that the training of special school therapists for their role in the DBST has been inadequate by the WCED. This has resulted in confusion and resistance from physiotherapists of their role in the DBST, which they perceive as being forced upon them.

The following section discusses the findings relative to Objective Three which was to determine the barriers physiotherapists experience in providing indirect support and Objective Four which was to identify the needs to provide appropriate support in the inclusive education framework.

6.6 BARRIERS AND NEEDS EXPERIENCED BY PHYSIOTHERAPISTS IN PROVIDING INDIRECT SUPPORT

The physiotherapists identified many barriers to indirect support including lack of resources; poor communication between various parties; negative attitudes of teachers; intrinsic factors and time to perform indirect support. The DOE was also named as a barrier to the provision of indirect support. The needs identified to provide appropriate support to inclusive education are inextricably linked to the barriers that were identified and will therefore be discussed together. The needs identified were for: more resources; improved communication between various stakeholders in education; greater involvement of physiotherapists in the training of others; appropriate skills training for physiotherapists for employment in the education sector; time to provide indirect support and advocacy.

6.6.1 Lack of resources

This referred to insufficient physiotherapy posts; the poor socio-economic conditions of the communities where indirect support is needed and the lack of government funding for structural changes.

6.6.1.1 Insufficient physiotherapy posts

The physiotherapists generally agreed that if they were expected to provide services to and in the community, then there needed to be more posts created as they would not be able to cope with the increased workload. According to Kotze (2009) therapists in South African special schools indicated that they did not have enough time to treat all the learners at the special schools let alone have time to become involved with ordinary schools in the community. The shortage of therapists to provide therapy to learners in schools (special and ordinary schools) is a problem that has been extensively covered in the literature (Mahon & Cusak, 2002; Mackey & McQueen, 1998; Effgen, 2006; Rapport, 2002; Sandler, 1997).

Whilst expressing concern regarding the lack of posts to offer services to the community there was no mention by the physiotherapists of a balance between direct and indirect support, nor of offering consultative support to ordinary schools in the community. However there was concern about compromising the quality of service if they were expected to offer services to the community with their present staff complement. Studies by Burnett and Ahola-Sidaway (2002) found physiotherapists in the USA shared similar concerns: that the consultative model of support erodes the quality of service delivered. Rapport (2002) indicated that although models of indirect service delivery such as the consultative, collaborative and monitoring models may assist in coping despite a limited number of physiotherapists, it has the potential to compromise the level of service delivery required to achieve some educational benefit. Burnett and Ahola-Sidaway (2002) added to this by stating that physiotherapists also said that indirect support did not use their expertise to maximum advantage. This could be interpreted as direct therapy being

considered more effective than indirect support and therefore indirect support to the community may result in a compromise in quality.

6.6.1.2 Poor socio-economic conditions of communities that act as barriers to indirect support

According to the physiotherapists, many of the learners that they treat are from poor socio-economic communities and physiotherapists are not keen to go into these areas to do home visits and community outreach work as they fear for their safety. Poverty, unemployment and rural to urban migration in the Western Cape have given rise to informal settlements that are increasing in size and poor living conditions of its inhabitants. These areas are characterised by high degrees of crime, theft and gang warfare. The South African government has identified poor socio-economic conditions as one of the barriers to learning in the home environment (DOE, 2005). South African literature also identifies other barriers related to the poor socio-economic circumstances of parents such as working long hours (unable to attend school meetings), illiteracy of parents which makes it difficult for parents to assist with homework and fatigue that results from parents working long hours and travelling long distances. These factors act as barriers to effective collaboration with parents (Engelbrecht et al., 2006).

6.6.1.3. Lack of funding by government departments for structural changes

Physiotherapists believed that a lack of funding by government departments posed a barrier to improving accessibility in schools, homes and public facilities. The physiotherapists said that as part of indirect support, they could get involved with improving accessibility of disabled people

to public facilities such as shopping malls and public transport but indicated that it was very difficult to source government funding for alterations such as ramps and lifts. According to Wildeman and Nomdo (2007) implementation of a new policy (EWP6) is dependent on funding and capacity of the implementing agencies (special and full service schools) to deliver. Their research showed that provincial budgets were not adjusted to provide increased resources for inclusive education training and practices. According to Wildeman and Nomdo (2007), this resulted in a thoroughly disjointed funding system that has been unable to improve the availability of resources to support the implementation of the inclusive education policy.

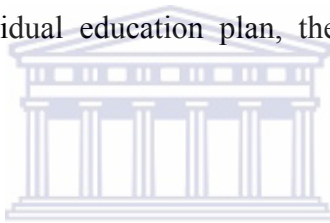
6.6.2 Poor communication as a barrier to indirect support

Lack of or poor communication between various stakeholders (parents, therapists, district offices, teachers, DOE and the community) in the education sector posed a major barrier to providing indirect support.

6.6.2.1. Communication with parents

According to the physiotherapists poor communication with parents posed a barrier to indirect support. The physiotherapists however acknowledge that this is not always the fault of the parents. Sometimes parents are unable to attend meetings due to circumstances that are beyond their control such as the cost of transport, long distances to travel and inability to get time off work. Although the physiotherapists acknowledge these reasons for parents not attending school meetings, literature also points to other reasons for parents' non-compliance.

According to psychologists Prilleltensky and Nelson (2002), professionals in the school environment including teachers, therapists and school management often fail to realise the power imbalances that exist in most relationships. Parents, especially those from disadvantaged backgrounds may feel at a disadvantage in the presence of school personnel whom they see as qualified specialists who come to meetings armed with reports and assessments. The authors maintained that parents needed to be made welcome and made to feel that their input is essential for the learner's success at school. Therefore obstacles that prevent parents from attending meetings need to be identified and strategies put in place to reduce them. Mackey and McQueen (1998) also indicated that parents in the USA felt that although they were part of the process in drawing up of their child's individual education plan, their opinions and needs often went unheeded.



The strategies adopted by some physiotherapists in this study to facilitate parents' involvement in their children's education was to do home visits, provide transport for parents to attend meetings at school and network with people in the community to assist with transport. Some physiotherapists were very creative and used every opportunity to communicate with parents including school concerts and school fetes whilst others even had 'soup and bread' evenings and jumble sales to 'lure' parents to school. This is supported by Kotze (2009) who makes reference to one special school in the Western Cape that enlisted the help of a farmer to provide transport for parents and learners in a farming community to attend school meetings.

Language was also identified as a barrier to providing indirect support to parents. The physiotherapists said that they were unable to communicate effectively with Xhosa speaking

parents, caregivers and community members especially if it was not the physiotherapist's spoken language. According to the physiotherapists they have used translators but did not find it very effective, especially when explaining therapeutic interventions as they were unable to follow the interaction between the translator and family members.

6.6.2.2. Communication between education districts and between special schools

The physiotherapists complained that the different education districts worked in isolation from one another. They described how therapists from special schools in different districts were all asked to design materials for the same programme, namely on improving gross and fine motor skills of learners. The therapists worked in isolation instead of collaborating and sharing resources and ideas. This led to unnecessary duplication of work. According to EWP6 the DBST which is based at the district office is responsible for the co-ordination of education support services by collaborating with staff at special schools (DOE, 2005). One reason for this poor communication between different education districts may be that the DBSTs are either non-existent or not fully functional in most districts (Wilderman & Nomdo, 2007).

Physiotherapists also indicated that communication between therapists from different special schools is poor and this could be a barrier to effective support provision. Physiotherapists said that if they communicated regularly then they could exchange ideas and learn from one another. Struthers and Lewis (2004) state that although the opportunities to share between therapists in the same special school as well as between different schools are not provided for within daily school life, this is not the only obstacle. They are of the opinion that therapists practicing in

schools first need to develop confidence in their own skills before they are able to share their knowledge and skills with others. Kaminker et al (2004) lends credence to this opinion in her research which indicated that the more experienced therapists chose indirect therapy (integrated therapy) over isolated or direct therapy whereas the less experienced therapists chose isolated or direct therapy. These authors stated that the less experienced therapists may have needed to practice their skills in isolated environments before being confident enough to work with learners in a more integrated setting such as in classrooms, homes and on the playground.

6.6.2.3. Communication with the community

Physiotherapists said that communication with ordinary schools in the community to foster relationships and to inform them of services that are available at special schools was met with little or no response. Some physiotherapists said they wrote letters to school principals informing them of the services offered at special schools and offered to assist learners experiencing barriers to learning but did not receive any response. Other physiotherapists got responses but these were inappropriate. A school asked for advice on admitting learners with disabilities but their reason for doing so was to qualify for more funding from the DOE. The physiotherapists said that they asked schools to inform them of the areas that teachers required assistance in, but this request elicited no response. Kotze (2009) suggests that this is often due to the principals of ordinary schools not being adequately informed by the DOE about the inclusive education policy and the role of special schools as resource centres. She further states that therapists' not informing members of the community of their services, is also a barrier because people are not going to use facilities that they do not know about.

Many of these communication difficulties would be overcome if there was networking and formation of partnerships with people from the health and welfare sectors, non-governmental organisations, parents, volunteers and communities (Struthers, 2005; Struthers & Lewis, 2004). Collaboration would be an integral part of this networking process (Sekerak et al., 2003).

6.6.3 Teachers' attitudes to physiotherapy

The physiotherapists perceive teachers as having a negative attitude to indirect support and they attribute this to teachers increased workload, lack of training for teachers to work with disabled learners, unrealistic expectations of what they (teachers) think is the physiotherapist's role and that the teachers are not aware of the benefits of indirect support and fear being burdened with increased responsibilities. The physiotherapists in this study worked mainly in special schools so the attitudes they were referring to were those of teachers in special schools.

6.6.3.1 Teachers' workload

Physiotherapists said that with inclusive education, teachers in special schools have to cope with larger classes and learners with a greater variety of disabilities than in the past when they had smaller classes with learners who had the same type of disability. The physiotherapists were sympathetic to their plight and did acknowledge the difficulties that they experienced. However they also felt that teachers have unrealistic expectations of them. They said that teachers in special schools expect physiotherapists to see to the physical needs of all the pupils even if they are not physically disabled. There have been extensive studies on the impact of inclusive

education policies on teachers as they are considered to be the main role player in facilitating the change to inclusion education practices (Lomofsky & Lazarus, 2001; Engelbrecht et al., 2006; Swart & Pettipher, 2005; Naicker, 2006; Ntombela, 2007; Engelbrecht, 2006).

Inclusive education has brought with it the identification of learners with a greater diversity of learning needs in both special and ordinary schools and the teacher is seen as playing the “lead” role in driving the inclusion process (DOE, 2001). The one way that teachers can cope with the diversity is if they build relationships with people who have a stake in or can assist in the education of these pupils (Stanovich, 1996). By using a collaborative model in the classroom teachers do not need to be experts on every aspect of the child’s educational needs but rather can draw on the expertise and resources of others and so build support networks for themselves. Stanovich (1996) recommends that teachers build collaborative relationships with special education teachers, parents, classroom assistants, principals and support staff (physiotherapists, occupational therapists, speech therapists, nurses, psychologists, mobility and behaviour specialists).

Teachers have expressed concern that they now have to take responsibility for the learner’s health and welfare as well as educational outcomes, adapt the curriculum, make adjustments to classroom plans and sometimes raise funds to support the learner’s needs (Engelbrecht et al., 2003). According to Hall and Engelbrecht (1999) teachers are rarely equipped to deal with learners experiencing barriers to learning, and their large classes pose a further barrier. In addition to barriers related to the primary disability there are also other barriers that can affect all learners including non-disabled learners which could be general health issues such as asthma;

teasing in school; poverty or theft of equipment (Tshabalala, Rushton, Mpurwana, & McKenzie, 2008). The teachers would have previously referred learners who experienced barriers to an outside professional for assessment and sometimes even placement in another institution whereas now they have to take on the added responsibility of co-ordinating activities for learners with disabilities (Engelbrecht et al., 2003).

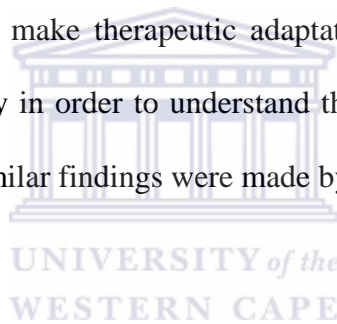
In the less developed countries such as South Africa there are the added problems of large class sizes and limited resources as well as inadequate support system for teachers (Struthers 2005; Engelbrecht et al., 2003; Kotze, 2009). These findings are also confirmed in the international literature by Sandler (1997), Mahon and Cusack (2002) and Whitworth, (1994). Engelbrecht et al (2003) propose that the inclusive education be the shared responsibility of teacher, support providers, families, peers and community members. These authors have drawn attention to the fact that as much as teachers needed to accept these changes, modify their approach and examine their coping strategies, so too must their needs be seen to , the stresses they experience addressed and they be provided with relevant support strategies.

6.6.3.2 Lack of training for teachers to work with learners with disabilities

Physiotherapists said that teachers needed more information on different types of disabilities as this was not adequately covered in their training. They said that the teachers' ability to identify and overcome barriers to learning were compromised as a result of teachers not understanding how different types of disabilities impact on the child's ability to learn. The physiotherapists also said that the older teachers are more resistant to change than the younger teachers and they said

that this may be due to the younger teachers having learned more about working with learners with disabilities in their training.

Sandler (1997) in the USA stated that if teachers are expected to assume responsibility for learners with disabilities in the classroom, then their training in areas such as therapeutic feeding, positioning and handling techniques needs to be thorough and rigorous. Mahon and Cusak (2002) in the UK found that teachers are not adequately prepared in their training for working with learners with disabilities in their classrooms and this has resulted in teachers experiencing fear, anxiety and frustration. In South Africa physiotherapists also found that in order to support the teacher in class as well as to make therapeutic adaptations in the classroom, the teacher needed to understand the disability in order to understand the rationale behind the intervention (Struthers, 2005; Kotze, 2009). Similar findings were made by Kashimba (2005) in Zambia.



6.6.3.3 Teachers' unrealistic expectations of the role of the physiotherapist

According to the physiotherapists in this study, teachers in the special schools are not willing to take on the added responsibility of making adaptations for learners with disabilities in the classroom as they feel that this is the work of physiotherapists and that they are being burdened with extra work. This perception is due to past practices where teachers taught in relative isolation in their classrooms and therapists withdrew learners from classrooms for therapy in separate treatment areas.

Mahon and Cusak (2002) found that teachers had a very poor knowledge and understanding of the role of the physiotherapist in integrating learners with disabilities into ordinary schools. They indicated a need for pre-service and in-service training for teachers with regard to the role of physiotherapy in inclusive education as well as training in collaborative teamwork and communication skills. Kotze (2009) and Struthers (2005) also found that teachers in South Africa did not always understand the role of therapists and this has resulted in misunderstandings, hostility and conflict.

6.6.3.4 Power relationships that exist in a school setting

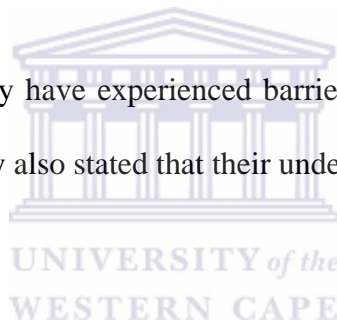
The physiotherapists have a perception of being unwelcome in the classroom and of being viewed as the “enemy” especially when offering indirect support in the classroom. This could indicate a clash of personalities but also suggests the beginnings of a power struggle between the teacher and physiotherapist. Swart and Pettipher (2007) maintain that teachers have become accustomed to working alone in their classrooms. The same can be said of physiotherapists who are also trained to work using the medical model of support which focuses on direct therapy in a clinical setting with little or no consultation or collaboration with teachers or parents (Sandler 1997). When the physiotherapist is in the classroom there are now two professionals who are specialists that have to work collaboratively to build relationships.

According to Hargreaves and Fullen (1998, as cited in Swart & Pettipher, 2007), this is one of the aspects of educational change that requires direct, honest communication and feedback to enhance problem solving and learning. It also requires a high degree of trust, time and space to

develop. Hall and Engelbrecht (1999) advise that professional development should be provided to all educators and support personnel for their new roles. Kotze, (2009) states that if teachers and therapists work well together in special schools, then they are in a far better position to offer services to ordinary schools as a team. Various authors have described the need for skills training for therapists and teachers jointly, with the emphasis on collaboration and communication skills (Sandler, 1997; Forbes, 2003; Mackey & McQueen, 1998; Mahon & Cusack, 2002).

6.6.4 Intrinsic barriers experienced by physiotherapists that limit their provision of indirect support

Physiotherapists indicated that they have experienced barriers to indirect support as a result of the implementation of EWP6. They also stated that their undergraduate training was inadequate.

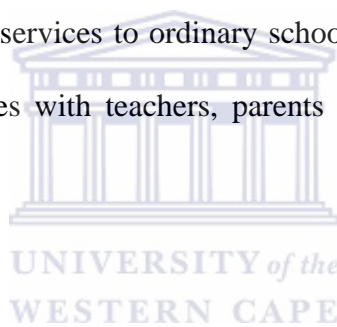


6.6.4.1 Implementation of EWP6

In this study the physiotherapists made reference to EWP6 (DOE, 2001) and that the DOE expects them to offer services to the community. They indicated that they were unable to do so due to a lack of resources. The physiotherapists' comments revealed a vague understanding of the policy in EWP6 as they did not mention how their roles need to change nor did they talk of indirect support, which is contained in the policy document (DOE, 2001). So although some of the more experienced physiotherapists were adamant that they knew what was expected of them, on reflection it appears that the physiotherapists' knowledge of the policy is inadequate. Rapport (2002) states that knowledge of relevant education policies is essential for the provision of

services in a school setting. Kotze (2009) found that therapists in South Africa were unclear about their roles when providing support to ordinary schools: they were unsure of whether they should perform direct or indirect support. According to EWP6 (DOE, 2001) the Education Department has a responsibility to provide staff at special schools (which includes physiotherapists) with support and training to equip them for their new role in inclusive education (DOE, 2001). The results of this study indicate that the DOE has not met this responsibility.

At the intervention workshop the physiotherapists were informed that one of the ways that they could implement policy and offer services to ordinary schools was by increasing time spent on collaborative and consultative roles with teachers, parents and other stakeholders in ordinary schools and the community.



6.6.4.2 Physiotherapy training for employment in the education sector

The physiotherapists said that their training did not equip them with skills to conduct workshops and run training sessions for parents, teachers and other stakeholders in education. Furthermore, they indicated that their lack of knowledge of the school curriculum was also a barrier, as this was not adequately covered in their training. The physiotherapists in this study indicated that this could be solved by universities including specific training skills for employment in the education sector. According to Sandler (1997) therapists often begin their career in public schools without being trained in consultation and collaborative teamwork. This is supported in literature by Hanft

and Place (1996, cited in Swinth & Hanft, 2002); Rapport (2002) and Sandler (1997). Mahon and Cusak (2002) further proposed that the representative organisations of teachers and physiotherapists co-operate to arrange courses and conferences to increase awareness of collaborative teamwork as well as to enable them to learn about one another's roles. Sandler (1997) also proposed that collaborative teamwork can be facilitated by in-service training.

6.6.5 Time as a barrier to indirect support

The physiotherapists indicated that they were not sure when to provide support to the teachers and / or to members of the community.

6.6.5.1 Time to work with the teacher



The physiotherapists said the lack of time to work with the teacher is a barrier as teachers only have an hour after the learners have gone home, during which they are available to attend meetings and training sessions. The physiotherapists said that support to teachers in ordinary schools can only take place during this time. Lacey (1998) indicated that for teachers to be able to engage in collaborative and inclusive education practices they need to be able to consult with outside personnel or support services for example psychologists and physiotherapists. For this collaboration to take place the teachers needed to be supported by their management. Lacey (1998) says the training can be facilitated by school management, freeing teachers to attend meetings and training sessions, by making use of class assistants as well as scheduling time in the week for such consultations. Physiotherapists in the UK also requested more flexibility in

their timetables and daily scheduling, to allow for meetings with teachers (Mahon & Cusack, 2002).

6.6.5.2 Time to work in the community

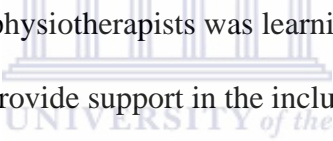
The physiotherapists indicated that in order to work in the community they would have to visit parents and members of the community in the evenings and over weekends as this would be the time that they (parents and community members) would be available. The physiotherapists said this would have implications for their working hours and they would have to look at working overtime and/or flexitime. Many of the physiotherapists in this study indicated that they would be unable to provide indirect support due to a lack of time. The physiotherapists presently work the same hours as educators and do not work overtime or during school holidays. Kotze (2009) in her research shows evidence that time being seen as a barrier to indirect support also depended on the attitude of the person involved. She reveals that some therapists felt that even one hour every month spent on indirect support is enough to network and act as consultants whilst there were others who said that two and a half hours per week were needed to offer indirect support.

6.6.6 The Department of Education

The DOE has been identified as a barrier to indirect support by the physiotherapists who feel that the DOE has not done enough to provide information and training on inclusive education practices nor have they facilitated the conversion of special schools to resource centres. According to the physiotherapists, they had expressed their concerns to the WCED and were not

satisfied with the response that there were insufficient funds for additional resources. There was a feeling of disillusionment with the DOE, as if the physiotherapists perceived the DOE as not heeding their concerns. Kotze (2009) confirms in her findings that physiotherapists perceive themselves as not being involved in the decision-making processes regarding inclusive education. Swart and Pettipher (2007) say that these feelings of confusion, anxiety and frustration are all emotions that are part of the change process and need to be voiced, acknowledged and accepted as healthy responses to change, and then the change process can move on.

6.6.7 Advocacy



One of the needs expressed by the physiotherapists was learning how to become more involved in advocacy as one of the ways to provide support in the inclusive education framework. They said that they could advocate for the rights of children with disabilities as well as for the rights of their parents. They also said they could assist in accessibility and public transport issues for people with disabilities. EWP6 states that there needs to be an advocacy campaign to communicate the policy, and the rights and responsibilities attached to it, to the public, especially parents, who are considered to be important role players in inclusive education (DOE, 2001).

The following section will discuss the findings related to Objective Five, which was to plan, implement and evaluate the intervention aimed at improving physiotherapy support provision in the inclusive education framework.

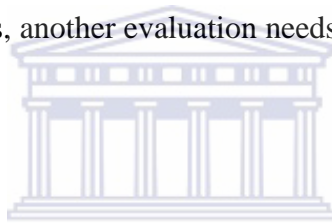
6.7 AN INTERVENTION TO IMPROVE PHYSIOTHERAPY SUPPORT IN THE INCLUSIVE EDUCATION SETTING

As part of the intervention to improve physiotherapy support in the inclusive education setting physiotherapists were provided with information on the inclusive education policy as well as on indirect support. In the discussion that followed, the physiotherapists had many questions and opinions on the inclusive education policy and about providing support to ordinary schools in the community. This, according to Fullen (1993), shows that the physiotherapists are engaging with the core capacities of the change process. To explain the reasons for making this assumption the four core capacities of the change initiative will be explained and thereafter also reveal how the physiotherapists are engaging in some degree, with each of these core capacities.

According to Fullen (1993) the four core capacities of the change process are “inquiry”, “personal vision”, “mastery” and “collaboration”. “Inquiry” is when people question issues that bring about change to their core function or purpose. The core function of physiotherapists prior to the introduction of EWP6 was to provide their services to learners, staff and parents of learners at the special school. With the introduction of EWP6 physiotherapists are expected to provide their services to ordinary schools and the community in addition to providing services to learners at the special school. So for the physiotherapists in this study it was EWP6 (DOE, 2001) that brought about changes to their core function and the physiotherapists had many questions with regard to the content of the inclusive education policy, the implementation thereof and the implications for therapists working in special schools. In the USA similar experiences by physiotherapists led to the American Physical Therapy Association, in collaboration with

education authorities, producing guidelines for physical therapy practice in the educational environment (Blumenkopf et al., 1985).

The physiotherapists also expressed concern over their proposed role in the DBST. This indicates that physiotherapists are engaging with what they consider to be problem areas. According to Fullen (1993) problems are a naturally expected phenomenon in any change process. It is when these problems are ignored or denied that the change process runs into difficulties. The physiotherapists indicated that the information provided at the intervention workshop on EWP6 was relevant and would be useful. However to see if it has had any effect on the provision of indirect support to ordinary schools, another evaluation needs to be done at a later stage, maybe a year later.

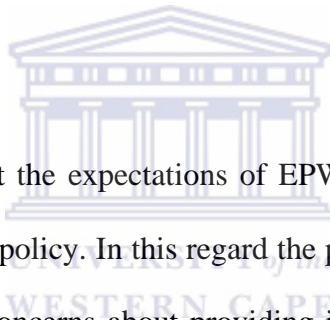


In relation to indirect support the physiotherapists were encouraged to “embrace” the change that inclusive education brings about and to look inside themselves and understand their own beliefs as this will assist them in the direction that they need to follow. This according to Fullen (1993) is the second of the four core capacities of change, which is “personal vision”. This refers to people examining and re-examining why they are doing what they are doing and asking themselves what difference do they want to make. The physiotherapists expressed concern about becoming overloaded with work if they extended their services to ordinary schools in the community. The physiotherapists in this regard were encouraged to be creative and proactive and to use EWP6 to set their own boundaries and limitations when providing indirect support to ordinary schools.

The physiotherapists were informed that the EWP6 was just a guide and therefore did not prescribe how therapists must function in the inclusive education setting. On reflection an advantage of this is that therapists can decide how they are going to adapt their practices to extend their services to ordinary schools. The physiotherapists were encouraged to be creative and to go about setting their own parameters with regard to providing services to ordinary schools. On reflection it would appear that the power to steer change in the direction that they would like, is with the special schools, where management and staff at special schools could critically appraise their workload and look at ways to provide indirect support to ordinary schools in addition to providing direct support to their own learners. This is possible, as demonstrated by some special schools that are already practicing indirect support as described in Section 6.2. Special schools could also utilise a tool such as the “index for inclusion” to critically appraise how inclusive they are and at the same time begin to implement strategies that improve inclusivity in line with EWP6 (Booth et al., 2000, as cited in Engelbrecht, 2006). This is a process which should involve all role players and also take into account the unique circumstances of the school in question and is therefore context specific when planning and developing inclusive education strategies.

The physiotherapists expressed concern about providing indirect support to ordinary schools in the community. Provision of indirect support could be seen as the third core capacity of change which is “mastery” and this is not just about learning a new skill but also knowing when and how to use it (Fullen, 1993). The physiotherapists said that the information on indirect support will assist them in providing indirect support and many said that it showed them just how much indirect support they were already engaging in. On reflection many of the physiotherapists

present at the workshop, appeared uncertain about indirect support but after the intervention workshop when physiotherapists were asked to list areas of direct and indirect support and to discuss concerns and challenges faced with their proposed role in the inclusive education framework, they appeared relieved that indirect support was not something entirely new and many of them voiced their pleasure in knowing that they are already practicing this at special schools. Some mentioned that it was pleasing for them to think that they are heading in the right direction. There were however still concerns about extending their services beyond special schools. According to Fullen (1993) change is a process that is anxiety producing and stressful but it shows that people are engaging with issues that need attention and this holds true for the physiotherapists in this study.



The physiotherapists indicated that the expectations of EPW6 are too high and that they were unable to meet the demands of the policy. In this regard the physiotherapists were encouraged to engage with the DOE with their concerns about providing indirect support to ordinary schools and the community. They were reminded that the DOE has a responsibility to prepare them for their new role in inclusive education by providing support and training. The physiotherapists responded to this with a barrage of questions with regard to the policy that they wanted clarity on. They also spoke of getting together with occupational therapists and speech therapists to discuss their concerns about providing indirect support to ordinary schools, share ideas of best practices and to present issues of concern to the DOE together as a united group. This they said may be more effective than the different disciplines working independently. This points to a willingness as well as a need for collaboration and according to Fullen (1993) “collaboration” is the forth core capacity of the change process that is essential for personal learning.

The evaluation as well as the discussions of the physiotherapists at the intervention workshop showed that the information on the policy was empowering and resulted in the physiotherapists learning more about EWP6 as well as the responsibilities of the DOE in the implementation thereof.

According to Fullen (1993, p23)

“If there is one cardinal rule of change in human condition, it is that you cannot make people change. You cannot force them to think differently or compel them to develop new skills”

Therefore an environment should be created by the DOE that encourages and nurtures these core capacities for change and allow for skills development through practice over time. According to EWP6 (DOE, 2001) the Education Department has a duty to assist schools through the transformation process that would see the adoption of inclusive education practices but they cannot do this alone for

“Change is too important to leave to the experts” Fullen (1993 p39)

Therefore the entire school community consisting of policy makers, principals, administrative staff, community members, parents, learners, therapists, teachers, funders and district officials need to be actively involved in the change process (Swart & Pettipher, 2007). The physiotherapists have demonstrated in this research that they are engaging to some extent with

the core capacities required for change and this augurs well for physiotherapy services in the inclusive education paradigm.

The intervention workshop revealed a desire by the physiotherapists to have more such workshops as they indicated that there are still areas of concern with regard to their role in the inclusive education framework. This demonstrated willingness by physiotherapists to learn new strategies and engage in change practices but that they also require assistance from the DOE to overcome some of the barriers to indirect support that they have identified.

6.7.1 Reflection

During the course of this research I was offered and subsequently took up a post as a therapist in one of the inclusive education teams at Metro Central Education District. The team consists of a therapist (myself), a learning support teacher and a psychologist and we are based at a special school. One of the functions of the inclusive education team is to strengthen special schools in preparation for their role as resource centres. I will therefore be in a position to continue with the action research cycle that was initiated by this study. I plan to work with the WCED to facilitate ongoing workshops aimed at preparing therapists for their role in the inclusive education setting. Future workshops can focus on some areas of concern that were identified in the intervention workshop; together with other concerns that may need to be ascertained from therapists of other disciplines namely occupational therapists and speech therapists. The action research cycle can therefore continue in an effort to improve service delivery in the inclusive education framework.

6.8 SUMMARY

This chapter presented a discussion on the physiotherapists' understanding of indirect support as well as their attitude to it. The role of the school therapist in the DBST was discussed with regard to how physiotherapists perceived their role and this was compared to what was contained in the inclusive education policy (EWP6, 2001). A discussion was presented on the barriers and needs experienced by physiotherapists in providing indirect support in the inclusive education framework. The chapter ended with a discussion on the intervention workshop which was based on a need identified by the physiotherapists to support inclusive education. Chapter Seven will present a summary of chapters, a conclusion, limitations, recommendations and the significance of the study.



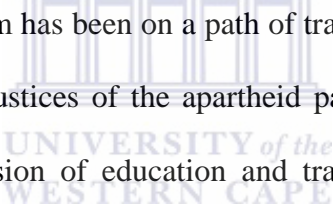
CHAPTER SEVEN

CONCLUSION

7.1 INTRODUCTION

This chapter brings this research study to a close by presenting a summary of the study, followed by the conclusion, the limitations, significance and the recommendations.

7.2 SUMMARY OF STUDY



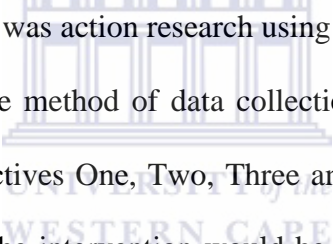
The South African education system has been on a path of transformation since 1994 in an effort to address the inequalities and injustices of the apartheid past. EWP6 arose out of a need for changes to be made in the provision of education and training so that it is responsive and sensitive to the diverse range of learning needs (DOE, 2001). The policy placed the focus on overcoming barriers in the education system that prevent it from meeting the needs of the learner and not on changing the learner, as was the case in the past. The new role of special schools in this inclusive education framework is that they will provide schooling and therapy for the disabled learner on site as well as be a resource centre so that they can provide specialised support to the ordinary schools in the community. The aim of the study was to plan, implement and evaluate an intervention aimed at improving the knowledge, skills and attitudes of physiotherapists in providing indirect support in the education system. The objectives of the study were as follows:

- Objective One - To determine how physiotherapists perceived indirect support.
- Objective Two - To determine how physiotherapists perceived their role in the DBST.
- Objective Three -To determine the barriers physiotherapists experienced in providing indirect support.
- Objective Four -To determine the needs of physiotherapists to provide appropriate support in the inclusive education framework.
- Objective Five -To plan, implement and evaluate an intervention aimed at improving physiotherapy support provision in the inclusive education framework.

The literature review presented inclusive education practices internationally, in other African states as well as in South Africa. The research literature revealed that political policy changes are not followed promptly by changes in educational practices and these trends are evident in both developed as well as less developed countries. The theme that is evident globally is that the role players (teachers, school management, therapists, classroom assistants, parents and community members) in education need new knowledge, competencies, strategies and methods to empower them to implement change. Furthermore these role players need access to the necessary human and technical resources to allow them to develop inclusive education practices.

The second part of the literature review focused on inclusive education practices and how they have affected the way physiotherapists work in school-based settings. Inclusive education policies have necessitated changes in the way therapy is provided in schools. Internationally it saw the introduction of various service delivery models such as the integrated model, collaborative model, consultancy model and monitoring model that advocate a transition from

direct to greater indirect support provision. However, in spite of inclusive education policies being in place in some of these countries since the 1970s, there is still a leaning towards the use of direct therapy or a combination of direct and indirect therapy by most physiotherapists. The literature shows a lack of competencies in physiotherapists to facilitate the transition to inclusive education practices and this was due to the inadequate training of physiotherapists (both undergraduate and in-service training); insufficient communication of and knowledge of relevant education policies; attitudes of physiotherapists to change; lack of resources (human and capital) and a failure to capacitate physiotherapists to enable them to meet the demands of inclusive education.

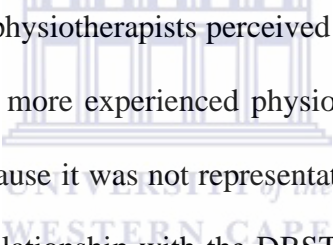


The methodology used in the study was action research using the qualitative methodology. Focus group discussions were used as the method of data collection. The first round of focus group discussions was held to meet objectives One, Two, Three and Four. Thereafter a second round was held to prioritise a need that the intervention would be based on. Relevant strategies were employed to ensure trustworthiness as well as ensuring that ethical considerations and confidentiality was respected.

The findings included how physiotherapists perceived indirect support and their role in the DBST, barriers that physiotherapists experienced in providing indirect support and the needs of physiotherapists to provide appropriate support in the inclusive education framework. Objective Five which was to plan, implement and evaluate an intervention aimed at improving physiotherapy support provision in the inclusive education framework was based on a need that was prioritised by the physiotherapists.

Discussion on the results revealed the following:

With regard to Objective One, all physiotherapists demonstrated some knowledge of what indirect support is and to whom it should be provided. There was however uncertainty which is why it was decided to include a presentation on indirect support at the intervention workshop. The physiotherapists that were not actively involved in indirect support to ordinary schools were not sure of how to make the transition from direct to indirect support that would enable them to become involved in the community as well as perform all of their duties at the special school.



In response to Objective Two, the physiotherapists perceived their role in the DBST to be one of an advisory capacity. Some of the more experienced physiotherapists were sceptical about the role and function of the DBST because it was not representative of all therapists and the special schools did not enjoy a working relationship with the DBST. The physiotherapists' uncertainty about their role in the DBST is as a result of inadequate information and knowledge of the policy, a lack of guidance from officials at district level, inconsistency in the establishment of and composition of the DBSTs in the different education districts and the poor networking and collaborative skills of physiotherapists.

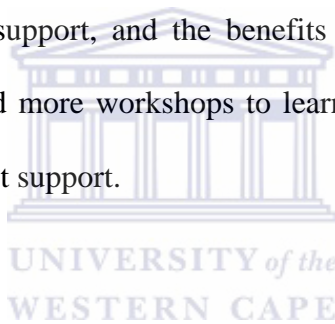
In respect of Objective Three, the physiotherapists identified barriers that they experienced in providing indirect support and these included: lack of resources; poor communication between the various stakeholders in education; teachers' and physiotherapists' negative attitudes to inclusive education; physiotherapists' high workload at special schools; language barriers;

insufficient time to provide indirect support to ordinary schools and the DOE not providing training in inclusive education practices.

As part of Objective Four the needs of physiotherapists to provide appropriate support in the inclusive education framework were identified. It was found that physiotherapists need training in workshop presentation skills, communication and collaborative skills, information and knowledge of the curriculum and information on the policy. They also need to become involved in the training of others such as teachers, volunteers and learners at ordinary schools. There needs to be improved communication between the various stakeholders in education as this would facilitate inclusive education practices. The physiotherapists indicated a need for them to become involved in advocacy programmes to promote the rights of parents and learners. The physiotherapists also indicated a need for them to have a change of mindset so they can make time for indirect support as well as for the DOE to assist by allowing them time to work in the community.

These needs and barriers identified by the physiotherapists in Objectives Three and Four were closely related and this indicates that the physiotherapists are not only looking at barriers to indirect support but also at ways to overcome these barriers. This is an important part of the action research process which involves identifying problems or problem areas with a view to making changes to improve the situation. The next stage in the action research cycle would be the action or intervention and this occurs with Objective Five.

Objective Five was to plan, implement and evaluate an intervention based on a need identified by the physiotherapists to support inclusive education. The intervention was aimed at improving the knowledge, skills and attitudes of physiotherapists in providing indirect support by providing information on the policy (EWP6) and an interactive discussion on indirect support. The evaluation of the workshop revealed that physiotherapists found the information on the policy useful but still had questions on their role in resource centres and the DBST. With regard to indirect support the majority of the physiotherapists said that they had learned something new about indirect support and that this would assist them in providing indirect support. They indicated that they had learned more about the role of indirect support in inclusive education, the link between direct and indirect support, and the benefits of indirect support as well as the limitations thereof. They requested more workshops to learn more about their role in resource centres and the provision of indirect support.



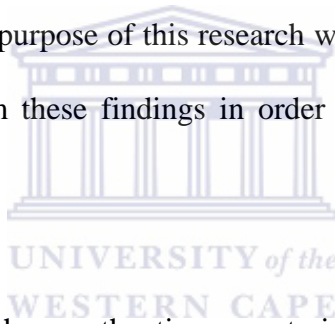
7.3 CONCLUSION

Most of the physiotherapists are practicing some indirect support, some physiotherapists more than others. Many of them experience difficulties in making the shift from direct to indirect support due to them not having access to the necessary support, resources and training to guide the transition to inclusive education practices. This research has shown that physiotherapists have begun to engage with the four core capacities of the change process namely inquiry, personal vision, mastery and collaboration, by raising the implications of the inclusive education policy and looking at how their role in special schools needs to change. The physiotherapists require assistance in the facilitation of a paradigm shift from providing mainly direct support in

special schools to indirect support in an inclusive education setting. They require assistance from school management and the DOE to provide the necessary support, resources and training to facilitate the transition to inclusive education practices.

7.4 LIMITATIONS OF THE STUDY

The study sample was small due to the limited number of physiotherapists employed in Western Cape special schools. However there are some provinces that have fewer special schools and fewer therapists than the Western Cape and therefore the experiences of the physiotherapists may not be generalisable. However the purpose of this research was not to make generalisable claims but to enable others to learn from these findings in order to make changes or improve their situation.



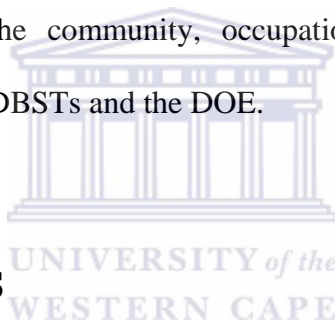
Another limitation of this research was the time constraints that only allowed for a single intervention in the action research cycle. However to create a “learning community” and for action research to have some degree of success, the process needs to be an ongoing one. This has been addressed with a recommendation in Section 7.6.

7.5 SIGNIFICANCE OF THE STUDY

In South Africa, there is limited research that deals specifically with the role of physiotherapy in inclusive education. Such information is necessary to develop strategies to cope with changes brought about by inclusive education. This study therefore provides a starting point for other

physiotherapists to build on and provides the DOE with findings that they could use to inform the training of therapists for inclusive education.

The findings can also be used by the DOE to assess the implementation of the policy with regard to therapists, improve the quality of education support services and assist all role players through the change process thus facilitating the shift to inclusive education. Training institutions such as universities can use these findings to include training in specific skills required to work in the education sector into their undergraduate training for therapists and teachers. The findings of this study provides useful information to all role players in the education spectrum namely learners, teachers, parents, members of the community, occupational therapists, speech therapists, psychologists, social workers, the DBSTs and the DOE.

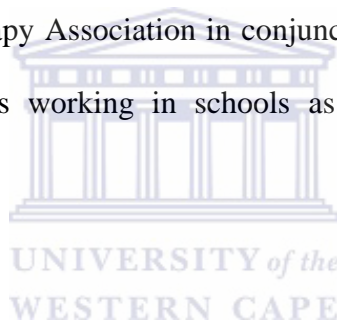


7.6 RECOMMENDATIONS

1. Training institutions in South Africa for physiotherapists and teachers should include in their training, specific skills needed to work in schools where the focus is on achieving educational outcomes. This could include skills in collaboration, teamwork, workshop presentation, networking and effective communication strategies.
2. Physiotherapists already working in schools should have in-service training in workshop presentation skills, collaboration, networking and teamwork skills.
3. The DOE should play a bigger role in facilitating the transition to inclusive education practices by providing the necessary information, support and training to teachers, therapists,

parents, school management and other stakeholders involved in education. All role players in the education sector need to be guided through the change process.

4. The DOE can use the findings of the research study to assist in its training programmes for physiotherapists working in the education sector. With the result that the action research cycle that was initiated with this research study becomes a sustainable initiative. Thus allowing for individuals to constantly engage in the process of change.
5. Physiotherapists in special schools that have achieved success in indirect support provision to ordinary schools need opportunities to share these experiences with others so that others can learn from them.
6. The South African Physiotherapy Association in conjunction with the DOE should draw up guidelines for physiotherapists working in schools as has been done in the USA and Australia.



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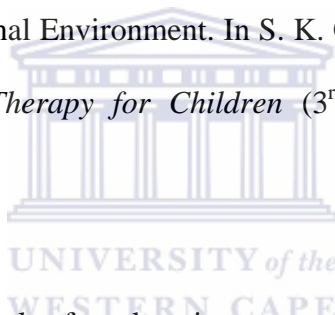
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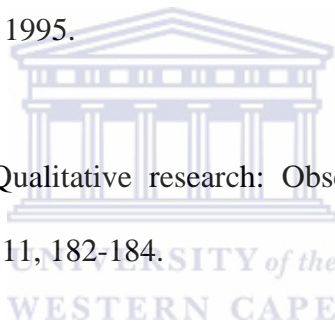
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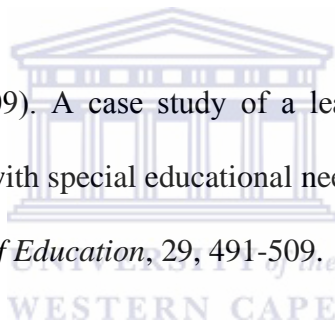
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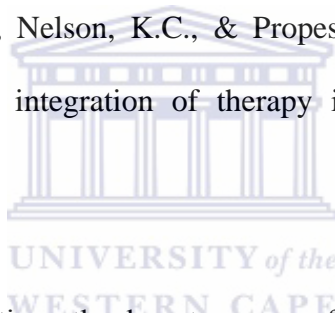
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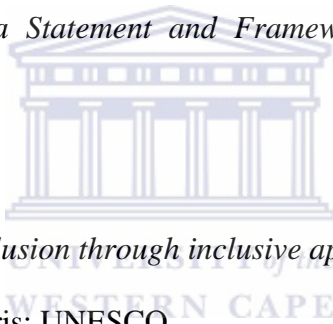
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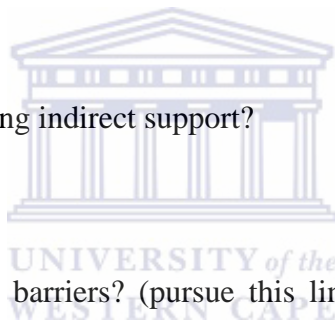


Appendix

Appendix I

Interview guide used in focus group discussions

1. What do you understand by indirect support? (What are physiotherapists actually doing and what would they like to do).
2. What is the DBST and how do you see your role in the DBST?
3. What are the barriers to providing indirect support?
4. How can you overcome these barriers? (pursue this line of questioning to determine the needs of physiotherapists to provide effective support in the inclusive education setting)



Appendix II



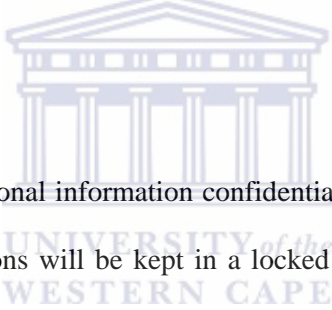
Appendix III

Participant Information Sheet

TITLE: The Role of Physiotherapy in Inclusive Education

This is a research project conducted by S.G.Pillay at the University of the Western Cape. We are inviting you to participate in this research project because of your experiences of working as a physiotherapist in a special school and experiencing the challenges posed by inclusive education.

You will be asked to participate in focus group discussions with other physiotherapists from special schools. The discussions will last for about an hour and will be held in one of the special schools in your EMDC. These discussions will be recorded and there will be a research assistant to assist with note taking.



We will do our best to keep your personal information confidential. To help protect your confidentiality, the taped sessions and the transcriptions will be kept in a locked storage area. Your names will not be included in the transcripts and other data. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. There are no known risks associated with participating in this research project.

This research may not benefit you personally but will shed more light on the problems experienced with implementing the inclusive education policy. We hope that in the future, other therapists will benefit from this identification of problem areas as well learning strategies to overcome them.

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 to withdraw at any point, you will not be disadvantaged in any way.

This research is being conducted by S.G.Pillay, Department of Physiotherapy, at the University of the Western Cape. If you have any questions about the research study itself, please contact:

S.G. Pillay

9 Tecoma Way

Ridgeworth

Bellville

7530

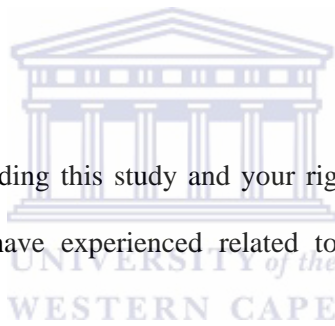
Tel -021-9101551 (h)

021-9340155 (w)

0845929242 (cell)

E-mail: savpillay@gmail.com

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: Head of Department: Prof. Patricia Struthers



Dean of the Faculty of Community and Health Sciences:

University of the Western Cape

Private Bag x17

Bellville

7535

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

Appendix IV



Appendix V



Appendix VI

Intervention Workshop

DATE: 15-09-09

TIME: 13h00-16h00

VENUE: Astra School

AUDIENCE: All Physiotherapists from special schools in the Cape Metropole.

AIM:

To improve competencies (knowledge, skills and attitudes) of physiotherapists in providing indirect support.



OBJECTIVES:

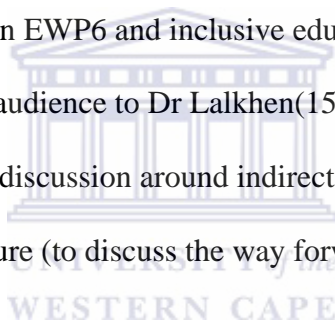
1. To learn more about Education White Paper Six (EWP6) and the inclusive education policy.
2. To gain an understanding of the implications of this policy for physiotherapists. (This should cover their role in a resource centre as well as part of the district based support team (DBST))
3. To explore ways in which physiotherapists can shift from direct to greater indirect support.

OUTCOME:

The outcome of the workshop was for physiotherapists in special schools to have a better understanding of EWP6 and how it affects their role in special schools as well as to learn more about indirect support and how it can be achieved in the present circumstances.

Programme

- 13h00-13h15 Registration and refreshments (15 mins)
- 13h15-13h25 Nalini to present research findings (10 mins)
- 13h25-13h45 Dr Lalkhen to talk on EWP6 and inclusive education policy (20 mins)
- 13h45-14h00 Questions from the audience to Dr Lalkhen(15 mins)
- 14h00-15h30 Nadeen to facilitate discussion around indirect support (1,5hrs)
- 15h30-16h00 Evaluation and closure (to discuss the way forward) 30 mins



Appendix VII



Appendix VIII



Appendix IX

Evaluation of the workshop

☹️ *WHAT DO YOU THINK?* 😊

1. Did you find the content of the workshop useful?

YES / NO

2. What did you dislike about the workshop?

3. Did you find the information on the Education policy relevant and useful?

YES / NO

If not please tell us why?

4. Did you learn anything new about Indirect Support?

YES / NO

5. Do think the information provided will assist you in providing indirect support?

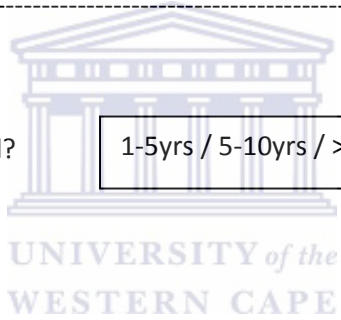
YES / NO

Please tell us how?-----

6. If there was to be a follow up workshop what would you like it to focus on?-----

7. Work experience at a special school?

1-5yrs / 5-10yrs / >10yrs



8. What is the name of your school? (Optional)-----