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The use of occupational therapy groups as a treatment modality with primary school learners

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THE USE OF OCCUPATIONAL THERAPY GROUPS AS A TREATMENT MODALITY WITH PRIMARY SCHOOL LEARNERS

Submitted by

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Science in Occupational Therapy

Johannesburg, 2019

I, Susan Margaret Dacre, declare that this Research Report is my own work. It is being submitted for the Degree of Master of Science in Occupational Therapy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.

_____

Susan Margaret Dacre

____3rd_____day of ____February__ 2020__ in ____Johannesburg___

Dedicated to my mother

Margaret Grodner

1943 – 2016

Abstract

This research report describes the current use of occupational therapy groups as a treatment modality in primary schools, looking at various schools within the South African context. It explores whether this treatment modality could be used in under-resourced and under-serviced schools where accessibility to occupational therapy services is limited. It is a mixed methods explanatory study, making use of a survey as well as interviews of 6 participants. It explores the benefits and challenges experienced by therapists who have run groups. Findings are that groups and simultaneous treatment sessions are beneficial due to curative group factors, the ability to manage caseloads and the ability to carry over skills into the classroom. Challenges when using groups as a treatment modality include management of the session, admission criteria, effective assessment and measurement of progress and the ability to address specific aims with each child. The importance of the implementation of existing South African legislation, and particularly inclusive education is highlighted. In addition, the Occupational therapist's active collaboration with teaching and management staff is essential to successful implementation of group treatment protocols.

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Nomenclature

Abbreviations

DBE	The Department of Basic Education which is responsible for primary and high school level education in South Africa. It was previously named as the Department of Education and is still sometimes referred to by this title.
HPCSA	Health Professions Council of South Africa. Occupational Therapists practicing in South Africa are required to be registered with this body.
ISASA	Independent Schools Association of South Africa, the body with which the majority of private schools are affiliated.
LSEN schools	Schools that provide for learners with special educational needs that may previously have been referred to as ‘special schools’. Children enter an LSEN school via a referral from the LSEN coordinator in the local school district.
OTASA	Occupational Therapy Association of South Africa, the professional body supporting the interests of the profession in South Africa and worldwide.
SBOT	School Based Occupational Therapists – in the South African context this therapist may be employed by the school or run a private practice within the school
SIAS	Policy on Screening, Identification, Assessment and Support released by the Department of Basic Education in 2014
CRPD	United Nations Convention on the Rights of Persons with Disabilities

Definition of Terms

Occupational Therapy Groups	For the purpose of this research, this includes a treatment session with two or more children, either using individual aims (treatment code 307 – simultaneous treatment) or group aims (treatment codes 301 or 305), and collective or different activities (OTASA, 2108)
Curative Group Factors	Sometimes referred to as therapeutic factors, these are benefits that are only achieved when in a group setting and are used in occupational therapy as well as numerous other settings to enhance the therapeutic process.
Push In vs Pull out therapy	Push in therapy is where therapy is provided at the child's place of activity, for example in the classroom or on the playground and may involve interaction with the child or adaptations / modifications to the environment. Pull out therapy is where a child is taken to an allocated therapy venue, for example a classroom or therapy department allocated for treatment.

Chapter 1

Introduction

This chapter outlines the background that led to the development of the research question, as well as the aims, objectives and justification for the study

1.1. Background

Learning barriers, both extrinsic and intrinsic, affect many children in South Africa. The National Department of Basic Education has adopted a policy of inclusive education to assist in the removal of barriers related to learning difficulties (Department of Education, 2001). Occupational Therapists play an important role in working with children who have various learning difficulties that affect their ability to participate fully in the classroom. This could include cognitive, perceptual-motor, sensory or social difficulties (American Occupational Therapy Association, 2014). “The global challenge (facing all role players in the field) to provide cost effective, accessible services remain, and previous studies indicate the difficulty in addressing educational needs sufficiently” (Holt, Kuperstein, & Effgen, 2015).

School based Occupational therapists render services in schools to assist children in achieving their learning potential. However, in South Africa, mainstream government schools are mostly served by occupational therapists in private practice, resulting in schools situated in poorer communities not being able to access the services of an occupational therapist.

While traditional models of school based practice have made use of individual treatment sessions, models of practice need to become responsive to the available resources and current best practice (Camden et al 2012). Occupational Therapists, in alignment with stakeholders in education, need to explore ways that their services can be brought to a greater number of children within their school environment.

As will be described further in the problem statement, the challenge exists to develop effective needs based occupational therapy services that can reach the communities in greatest need of their services.

1.2. Problem Statement

The researcher's experience as a paediatric and community based therapist since 1995, and as a school based occupational therapist in various settings since 2001, has been that some private schools and well-resourced government schools have occupational therapists based on site in a part or full-time capacity. These therapists may be employed by the school, but usually run private practices and offer services at specific schools while billing parents or caregivers directly for services rendered. The parents may or may not have medical aid, which may or may not cover the cost of the therapy. Parents who cannot afford to pay for occupational therapy services rely on the goodwill of the therapists to provide pro bono treatment, or access limited services offered by the Department of Health, universities or private organisations. Limited occupational therapy services are offered by occupational therapists employed by the Department of Education, who are largely based in schools catering for learners with special educational needs. There is an under provision of accessible occupational therapy services to the broader primary school population. Group therapy (as opposed to individual therapy) is one way to provide therapy to larger number of children at a lower cost. However, it is unknown at present what, what the current situation of occupational therapy groups in the primary school population is in South Africa and what the facilitators and barriers may be to implementing group therapy as an intervention strategy to the broader population.

The lack of literature on school based occupational therapy groups run in the South African context versus anecdotal information highlights the need to ensure that services are measurably effective in terms of their therapeutic value as well as their ability to form part of a school based support programme.

1.3. Research Question

How are Occupational Therapy groups being used in primary schools by school based occupational therapists (SBOT) as a treatment modality, and what role do SBOT perceive occupational therapy groups may play in providing services to a wider range of children in under-serviced schools?

1.4 Aim of the Study

The aim of the study is to explore and describe the use of occupational therapy groups in primary schools by school based occupational therapists as a treatment modality, and to explore what role group occupational therapy may play in providing services to a wider range of children in under serviced contexts.

1.5 Objectives of the Study

- To describe group interventions being carried out by occupational therapists in the mainstream primary schools.
- To explore the benefits and challenges of group interventions for children in mainstream primary schools experienced by school based occupational therapists.
- To explore the perceptions of school based occupational therapists about the role of occupational therapy groups in extending group interventions to more children in under serviced contexts.

1.6 Justification for the Study

This research aims to generate qualitative and quantitative information from school based occupational therapists regarding the use of groups as a treatment modality. While research exists on the implementation of inclusive education in South Africa, there is limited literature on how school based occupational therapists are delivering services in South Africa. The study will provide information on whether and how groups are being used in primary schools. It will allow the researcher to benchmark data with literature on the use of groups by other professionals in South Africa as well as paediatric occupational therapy services abroad.

The collation and interpretation of the information gathered will allow the researcher a clear idea of current practice, with a view to further developing a practice framework for occupational therapy groups in mainstream primary school settings.

By doing this research, there will be an improved understanding of how or whether groups may be used as a potentially outcomes-, time- and cost-effective way of improving access to occupational therapy services. This has the potential to facilitate the implementation of occupational therapy groups in schools where parents may have limited funds and opportunity to access occupational therapy services.

The following chapters include a description of existing literature around the topic of access to school based occupational therapy and the use of groups as a treatment modality. The researchers mixed methods study is detailed and suggestions are made around ongoing research and action emerging from the project.

Chapter 2

Literature Review

The literature review describes legislation around education for children with special educational needs and barriers to learning, as well as the role of occupational therapy services within the education system.

Literature was sourced from journals in the field of occupational therapy and the allied health professions, education and psychology. Relevant policies were sourced from organisational or government websites, as well as from role players within the South African educational context.

2.1 All Children have the right to education

In South Africa many children experience barriers to learning. These barriers occur due to both extrinsic and intrinsic factors. This has a direct outcome on both a child's ability to learn effectively as well as to their potential (Walker et al., 2007).

Statistics on the prevalence of learning disabilities in South Africa, a significant barrier to learning and participation in school and the area of focus in this study, are not categorically available. In 2007, Abosi noted that around 8% of children in African schools had learning difficulties and in 2011, the overall national disability prevalence rate in South Africa was recorded by the national census to be 7.5%. In the census, 4.2 % of children were noted to have cognitive difficulties, ranging for mild to severe, and 2% with difficulties with performing activities of daily living (Statistics South Africa, 2011).

A number of treaties, legislature and policy guidelines exist both internationally and nationally that focus on ensuring the right to education and related services of children with disabilities and / or barriers to learning. Internationally, the Salamanca Declaration (1994) promoted inclusive education in order to prevent the discrimination of children who experienced barriers to learning and continues to guide policy on inclusive education (Hunt & Hunt, 2018). While not focused exclusively on children, the United Nations Convention on the Rights of Persons with Disabilities (CRPD), brought into force in 2008, directs countries who have ratified the CRPD to act to promote and protect the rights of persons with disabilities (Statistics South Africa, 2011). Locally, the Constitution of South Africa, as well as

the South African Schools Act states that children should have equal access to education, without discrimination based on learning disabilities (Constitution of South Africa, 1996) and the White Paper on Special Educational Needs further outlines the importance of support programmes (including specialist support such as occupational therapy) which are collaboratively designed to assist the learner and create a good learning environment (Department of Education, 2001).

The aforementioned White Paper was a formative document in post-apartheid South Africa and was designed to transform the South African educational system. It aimed to build an integrated system for all learners (not a separate system of special and ordinary/ mainstream schools), using a curriculum that was more flexible and suitable to the needs and abilities of learners. It further described the intention to develop district-based support teams to provide systemic support for teachers, and also strengthen the skills of teachers to cope with more diverse classes (Muthukrishna & Schoeman, 2000). The National Curriculum Statement also adopted an inclusive approach, specifying minimum requirements for all learners, stating that “the special educational, social, emotional and physical needs of learners are to be addressed in the design and development of appropriate learning programmes” (Department of Education, 2005). In the “Schooling 2025” plan developed by the Department of Basic Education, the goal was to strengthen the implementation of Inclusive Education and to ensure greater access for all learners, especially the poor, to educational support in their local neighbourhood schools (Department of Education, 2005).

More recently, in 2014, the Department of Basic Education released the Policy on Screening, Identification, Assessment and Support (SIAS policy) which gives detailed guidelines around support for children with barriers to learning. As this quote by the Department of Education states, “The successful implementation of the SIAS Policy will be an important step towards meeting the obligations of government in respect of the United Nations Convention on the Rights of Persons with Disabilities as ratified by Cabinet in November 2007, in terms of ensuring an inclusive education system at all levels (Article 24)” (Department of Basic Education, 2014).

There are additional policies and conventions which guide education policy, including the Integrated School Health Policy, National Curriculum and Policy statement,

Guidelines for Responding to Learner Diversity in the Classroom through Curriculum and Assessment Policy Statement, Convention on the rights of the child and the Convention on the rights of the disabled person, which revolve around creating diverse and responsive environments which minimise barriers to learning and maximise support available to children who may experience barriers to learning The policy goes into certain practical details, such as who might supply an assistive device or how an accessibility issue might be resolved (www.education.gov.za, , 2015).

An ideal legislative framework, therefore, exists to promote the access to quality education for all children. When an inclusive education system is successfully implemented it will identify barriers to learning, intervene, and respond to diverse needs, resulting in increased participation in the classroom and their broader life experience. A study conducted by Bissel and Cermak (2015) looked at the frameworks used by school based occupational therapists in the United States. It describes how the 'No child left behind act' has allowed the implementation of various tiers of occupational therapy within the school population with the goal of improving a child's participation in and benefit from their years of schooling. This has allowed the development of plans including individual, group and classroom based intervention. South Africa policy such as the SIAS policy also allow for the development of these plans. Thus, the established principle of inclusion seeking to achieve education for all exists (UNESCO, 1999, Eleweke & Rodda, 2010). The question remains whether these policies and principles have actually created tangible change in schools on the ground.

In South Africa, the implementation of inclusive education has had challenges due to insufficient funding, lack of capacity to implement and lack of clear national guidelines, funding norms and standards (Pather, 2011). As a result, many mainstream government schools have insufficient intervention from special needs programmes. This is in terms of practical intervention and ground level support services, despite these programmes being entrenched in policy (Department of Basic Education, 2014).

The Policy on Screening, Identification, Assessment and Support (SIAS) (2014) emphasises the principle that, where possible, assistance to learners who

experience barriers to learning, should be given at their current school and that changes that are focussed on systemic adaptation rather than individual focus are preferable. The policy, first published in 2008 and then developed over a number of years and finalised in 2014, aims to provide a policy framework for identifying learners with barriers to learning, and pinpointing action to provide appropriate support (Department of Basic Education, 2014). As stated in the full service guidelines, inclusive schools find ways to ensure learners are able to progress in the general curriculum receiving individual support and attention where necessary (Department of Basic Education, 2009).

One of the avenues that the SIAS policy suggests as a way of ensuring progress, is making use of specialist services, including psychologists, occupational therapists and speech therapists amongst others. Occupational Therapy has a significant role to play in the successful implementation inclusive education, in the form of intervention for particular children, support of the classroom and teaching environments and programmes to facilitate the prevention of barriers to learning, and is noted in the various policy documents on inclusive education.(Department of Education, 2001; Department of Basic Education, 2014), and this is explored in the next section of this literature review.

2.2 The role of Occupational Therapy within the implementation of Inclusive Education.

Inclusive education is the policy of the National Department of Basic Education, and where possible, children should receive classroom and school-based intervention at their nearest /chosen school. Specialised services, in particular Occupational Therapy, are an important part of effective inclusive education

The Screening, Identification, Assessment and Support (SIAS) policy includes a screening that is done with all learners entering Grade R or Grade 1 in order to identify possible barriers to learning. This forms the basis from which interventions or modifications are decided upon, and forms part of the learner profile (Department of Basic Education, 2014). Once this screening is done, the school and district team are in a position to recommend services to assist affected children. The SIAS policy expresses that differentiation of learning, teaching and assessment should happen at lesson plan level for those needing additional support and that those involved in this

planning should include teachers, parents, school and district based support teams, and where necessary, consultation from other professionals. These professionals could come, if necessary, from the surrounding community (Department of Basic Education, 2014). As a result, classroom teachers remain the core implementers of inclusive education. However, successful education of children who experience barriers to learning, and in particular learning disabilities, requires the involvement of a variety of professionals who assist in referral, diagnosis, treatment, recommendations and related services (Eleweke & Rodda, 2010).

Occupational Therapy is a profession that is occupation focused, and in the school, environment promotes occupational performance of learners within the education, sensory-motor skills, social and play sphere. The practise of occupational therapy involves the creation or facilitation of opportunities to engage in occupations which allows for participation in a variety of environments and situations (American Occupational Therapy Association, 2014). A developmental frame of reference is used, facilitating development and growth as an essential task of childhood.

The Occupational therapist further plays a role in inclusive education due to their ability to facilitate participation in education. By intervening at an individual and classroom level they are able to address motor, perceptual, cognitive and social issues that affect a child's ability to learn in a particular environment. This underpins the goal of inclusive education by creating the correct environment in which a child can master occupational performance areas.

Occupational therapists are in a position to involve themselves in school-based support services due to their detailed knowledge of human development, occupation and activity analysis. They are also aware of the barriers created by inadequate stimulation and lack of resources for even typically developing children and how these factors can affect a child's ability or potential ability (Ratcliffe, Franzsen, & Bischof, 2011). Yamanashi explains the importance of occupational therapists as being part of the process of developing individual education plans, a cornerstone of inclusive and specialised education (Yamanashi, 2017) for the reasons mentioned above. Occupational therapists use a variety of treatment approaches and frames of references when working with the paediatric population (Rodger, Brown, & Brown, 2005).

A school based occupational therapist plays a role in facilitating a learner's performance in school-based tasks which allows them to benefit from the learning experience (Fingerhut, Madill, Darrah, Hodge, & Warren, 2002). There are children appropriately placed within mainstream education but who are not able to participate fully at school due to intrinsic or extrinsic barriers to learning. For example, developmental coordination disorder affects 5% to 8% of the population, and impacts on children's perceptual skills, fine motor skills and concentration, amongst other developmental tasks. This would be commonly seen in a mainstream school, as children would have a typical intellectual range, not needing additional specialist cognitive-educational input. Without intervention, children with potentially minor learning barriers will not attain their potential due to the knock-on effect of not introducing support or assistance (Brenner, 2008).

Additionally, Benbow et al mentioned handwriting as one of the developmentally and occupationally significant skills frequently addressed by Occupational therapists. (Benbow et al, 1992) When not addressed early, difficulty with handwriting will impact every area of school performance (Wong & Fisher, 2015; Peterson & Nelson, 2003). Case Smith has measured the effectiveness of school based occupational therapy, and therapists interviewed also reported measurable changes in the children they were seeing, though South African research directly comparing two groups of children in similar environments was not found. The children who received services made significant progress in the areas of in-hand manipulation skills and motor accuracy (Case-Smith, 2010). In addition, Case-Smith refers to the benefit of using groups as a treatment modality due to curative groups factors. One example she gives is that children tend to be more willing to engage in repetition of actions (in order to master a particular skill) in a game-like atmosphere in a small group than in an individual session with a therapist. (Case-Smith, 2010.).

Pillay and Terlizzi (2009) described the experience of learners who moved from mainstream to special schools and indicated how they benefitted from the special school environment. This was ascribed to the fact that resources to address academic, social and psychological needs that were not available in their former mainstream schools, including human resources in the form of occupational therapists, physiotherapists, speech therapists and remedial teachers were now available (Pillay & Terlizzi, 2009, Pather, 2011). The goal of emerging policy and

practise is that learners should be able to receive services of this nature within their existing school environment. The infusion of support services, including occupational therapy services, allows children to better access educational opportunities (Department of Education, 2001). It also facilitates a normalisation of varying levels of ability and promotes an understanding amongst learners of barriers their fellow students may face, and in fact barriers that they as students may create.

The SIAS policy indicates that specialist support staff are one of the 5 areas provided for in the policy, and the provision of Occupational therapists is recommended at circuit level, with the stated goal of establishing and strengthening these services between the 2016 and 2018 financial years. There is also provision in the policy for services to be accessed outside of the schools existing network, for example, a private practitioner. The Department of Basic Education, while varying from district to district and province to province, is typically offering occupational therapy services at special schools. Schools where there are resources sufficient to warrant it, may offer parents the services of a private on-site occupational therapist. Human resources, including the availability of occupational therapists in under-resourced areas, remains a challenge in the implementation of the SIAS policy (Department of Basic Education, 2014).

Support is essential to teachers implementing inclusive education. This would take the form of a range of measures including training, parental support and importantly professional advice and support. In a study done on integrated education services in Uganda in 1997, teachers were noted to have knowledge of the identification of learning barriers, and even an understanding of support strategies, but there was limited implementation of these strategies (Arbeiter & Hartley, 2010). Pillay and Terlizzi, in a study done on South African inclusive education, further point out, that while inclusive education is broadly accepted as a philosophy, the practical implementation requires ongoing effort (Pillay & Terlizzi, 2009). As part of this support, Forlin emphasised the importance of specialist support personnel, in addition to teachers with specialised training, to work collaboratively with class teachers in providing support to learners. This both reduces potential stressors for the teacher, as well as improves the educational outcome for all students in the class (Forlin & Forlin, 2010). In an assessment of schools belonging to the Independent Schools Association of South Africa (ISASA) who are implementing various levels of

inclusive education, at least half of the schools had an occupational therapist, as well as other specialised services on site, the financial resources of the school and parent body allowing for this. This was perceived to be of benefit to both the learners and educators (Walton, Nel, Hugo, & Muller, 2009).

Inclusive education support would need to be most effective and minimally disruptive to the entrenched classroom routine, and as per the SIAS policy, would need to include curriculum adjustment to ensure sustainability of this support (Department of Basic Education, 2014). School based occupational therapists and occupational therapists that take their services to the local school environments are ideally placed to practise within this model of practice.

In a study conducted by Peterson evaluating whether occupational therapy intervention improved academic outcome using 59 Grade 1 children in an urban low socioeconomic area, the hypothesis that occupational therapy 'makes a difference' in the school setting, was confirmed. Vertes, in a Canadian study examining parent and teacher perceptions of occupational therapy intervention, also emphasised the benefit of working with a child in their 'natural environment'. As children spends a substantial portion of their day at school, this venue is occupationally important, and is a relevant point to render occupational therapy services rather than at a separate, centralised venue. It also allows for greater interaction between the occupational therapist and teacher, and this is a core tenet of the 'skills transfer' section of the SIAS policy (Peterson & Nelson, 2003, Vertes et al., 2014). This confirms what has already been outlined in terms of policy around both curriculum and venue based intervention, as opposed to removing a child from their local environment (Department of Basic Education, 2014). Contextual based services allow for collaboration with teachers and even children, and occupational therapists can provide valuable assistance in maximising a child's education, assisting with transitions from one school phase to another and provide appropriate intervention towards meeting educational and developmental goals, as discussed in the Occupational Therapy Practice Framework (American Occupational Therapy Association, 2014).

While these benefits are described in policy and research, the reality of broad based Occupational Therapy services throughout public schools in South Africa remains unachieved as outlined in the next section.

2.3 Accessibility of School based Occupational Therapy services

Access to educational support services, including occupational therapy, is not equally distributed through all sectors of the school community, and health care professionals (the group under which occupational therapists are formally registered) are inequitably distributed between the private and public sector(Walker et al., 2017) Children from poorly resourced communities frequently perform poorly at school, can have poor developmental outcomes and may require more support than those in well-resourced communities. (Pienaar, Barhorst, & Twisk, 2013). These, however, are typically the communities with the least access to school based occupational therapy services.

Statistics obtained via email communication with a therapist employed by the Gauteng Department of Education indicate that in 2018 there were 195 Occupational therapists employed by the Department of Education in Gauteng province. According to the statistics provided, 194 of these therapists were employed by schools catering for learners with special educational needs. Only one therapist was 'office based' and thus able to provide district services (email communication N. Dube, February 2019). Statistics were not available on the number of public and private schools that have occupational therapists providing on site services in either a part of full time capacity.

Inequity in service distribution is a worldwide phenomenon. Peterson noted that children in the United States who came from economically disadvantaged backgrounds were rarely receiving occupational therapy services due to the 'Individuals with Disabilities Act' excluding a number of environmental, cultural and economic factors that may lead to barriers to learning (Peterson & Nelson, 2003). In South Africa, children from poor backgrounds are at significant academic risk (Walker et al, 2017), but due to insufficient resources as well as lack of policy implementation are not often able to access support services, either at or near their school. This was described in Eloff and Kgwete's article on teachers voices within inclusive education in South Africa (Eloff & Kgwete, 2012). Daniels, when reviewing

the implementation of inclusive education in South Africa noted that specialized support, such as that provided by school psychologists, social workers, remedial teachers, therapists and medical personnel, was found to be still only provided for a small percentage on a racial basis (Daniels, 2010).

A challenge in developing countries such as South Africa, is that mainstream schools struggle to address the needs of even the typically developing learner due to barriers such as class size, inadequate teacher training and others (Arbeiter & Hartley, 2010). This means that resources for children with special educational needs are also neglected. In a study that looked at teachers' experiences following the implementation of the inclusive education policy and its roll out in the Gert Sibande district of Mpumalanga, participants noted that there was insufficient support personnel and that there was not sufficient access to the district support team which affected the roll out of appropriate learner support and barriers to learning(Eloff & Kgwete, 2012). This study demonstrates the gap between what the policy states is needed in terms of support, and actual support available on the ground, in this case in a school district that is rural and peri-urban in nature.

The Policy on Screening, Identification, Assessment and Support (SIAS) focusses on a range of support programmes that should be made available at, or as close to, the learner's current school as possible, as well as looking at broad services that would be available as a collective strategy rather than focussed on individuals. The policy also allows parents to make use of external private practitioners to access services, but consideration needs to be given to budgetary constraints and offer the most cost effective service (Department of Basic Education, 2014). The implication of this is that Occupational Therapy services should be available, where appropriate, to children in all public schools. Occupational Therapy services are considered moderately rated support provision in the SIAS policy guidelines, and in some cases lower rated provision, which impacts where budgetary provision is made for services. (Department of Basic Education, 2014).

2.4 The Use of Group / Collective Intervention as a treatment modality

Group / Collective Intervention is one vehicle to deliver services to a broader base of children, with effective outcomes. However, barriers exist.

School Based Occupational therapists have historically focussed on the individual, including assessment and individual treatment plans (Sonday et al., 2012). This is an expensive intervention both in time and resource allocation, and inclusive and equitable access to educational support requires a shift in traditional treatment methods.

Group interventions are defined as sessions where two or more clients interact to achieve common goals (Graham & Avent, 2004; Schwartzberg et al, 2008, Camden, Tétreault and Swaine, 2012). Collective intervention need not be limited to only formalised group structures, but also group based activities where children may be seen together, even doing the same or similar activities and tasks, but with individual goals established (La Forme et al, 2007). These studies established that around half of the therapists in their research were using groups of some description in their intervention strategies. There has also been research which indicates a positive response from administrators, teachers and parents who were positive about the perceived benefits of using a collective rather than individual approach (Camden et al., 2012). An occupational therapist is required to consider the fit between the individual and the environment and would not only address the immediate social and physical context of the individual but also actively incorporate the interplay of concurrent institutional and cultural factors (Wong & Fisher, 2015). Groupwork, in many ways, comes naturally to children attending school. They spend much of their day in larger and smaller groups and are frequently accustomed to what might be considered group methods and norms. Research done by American psychologists around the turn of the century did indicate that greater benefit was shown when children with therapeutic needs were attended to in smaller groups versus in whole class interventions (Shechtman, 2002).

Shechtman's article on child psychotherapy groups in 'the new millennium' was able to show measurable improvement for children who had been attending group therapy in addition to regular classroom input compared to those children who were waitlisted. She raised the valid point of needing to have specific and measurable outcomes, being sure of what the group was offering and allocating the appropriate resources to the service. Her article also quoted Barlow's review, saying that much group research was based on adult groups and that ongoing research amongst children was required (Shechtman, 2002). This is reflected in additional studies,

however, examples of which are outlined in this chapter. In a study conducted by Vertes et al between 2007 and 2010, sensory motor groups were run, observed through one way mirrors by parents. This study showed treatment benefits for the children who had traditionally received individual occupational therapy intervention, and parents reflected on the benefit of the group setting. The study also showed how techniques originally designed for individual therapy (in this case sensory integration therapy) could be adapted and implemented through careful clinical observation and analysis (Vertes et al., 2014). It is possible to adapt individual treatment approaches into those suitable for group or collective intervention. There are also particular benefits that only group treatment can provide which originally emerged from the study of psychotherapy groups. Yalom's research, while originally focusing on psychotherapy groups, noted positive group factors that would not be possible in the individual setting which include instillation of hope, universality, imparting of information, altruism, interpersonal learning, socialising and cohesiveness. (DeLucia-Waack et al, 2003). Falk-Kessler et al, in 1991, looked at therapeutic factors in occupational therapy groups (this was in a psychiatric setting, but was focused on task and skills) and noted the presence of therapeutic factors, in particular group cohesiveness, instillation of hope and interpersonal learning (Falk-Kessler & Momich, 1991). Webster and Schwartzberg in 1993 were able to demonstrate that curative factors had a similar effect in occupational therapy groups (task oriented groups), also being run in a psychiatric setting (Webster et al, 1993).

Engelbrecht, in 2004, researched the importance of educational psychologists working within the Department of Education (in South Africa) changing their focus from purely individual intervention to one of collaboration and consultation for both developmental and preventative action in order to meet diverse learning needs, as well as affirm their profession(Engelbrecht, 2004).Group occupational therapy intervention for children may in fact be included in curriculum adjustment, providing, for example a more specialised fine motor programme for at risk Grade R learners, to prepare them for the Grade 1 handwriting curriculum. Collective treatment (including both group and simultaneous intervention) is a practise used in South Africa though information tends to be anecdotal rather than research based and is one potential solution for reaching a wider base of children. Collective treatment is when more than one child is seen for occupational therapy at the same time. A study

was conducted in a paediatric occupational therapy practice in Canada, where the practice shifted all of its occupational therapy intervention to group based intervention and measured the perception of parents as well as the progress made by the children. The study concluded that role players in the occupational therapy process (children, parents, administrators, therapists) felt positive about the use of collective intervention, despite initial reservations (Camden et al., 2012). A study of group intervention by a physiotherapist working with children with developmental coordination disorder at a Johannesburg school for learners with special educational needs (LSEN), concluded that group intervention was noted to have a positive effect with measurable improvement of the children's abilities and would be a beneficial intervention, particularly in under (human and financial) resourced settings (Brenner, 2008). Group intervention allowed the child to further develop a skill while observing others performing that skill rather than over reliance on instruction of the skill (Camden et al., 2012), but further research is required in terms of how to maximize the effectiveness of groups (La Forme Fiss & Effgen, 2007). Koomar emphasised the benefits of groups as part of the intervention strategy in meeting needs such as play, social skills and specific functional skills such as handwriting (Koomar and Bundy, 2002).

Group work or intervention with more than one child at a time is increasingly used as a relevant and age appropriate intervention in school settings (Camden et al., 2012), and occupational therapy groups, smaller and more specific than the classroom, can provide intense skills and occupation based intervention. Children respond positively to social interaction, and a group setting allows for curiosity, observation and competition to serve as motivating factors (Vertes et al., 2014).

The research describes groupwork as an effective form of service delivery, though challenges do exist to streamline this into existing service delivery models and government policies (Camden et al., 2012). The SIAS policy assists by encouraging both curriculum adjustment, as well as collective intervention at the learners' closest school, with support being within rather than separate from normal learning procedures (Department of Basic Education, 2014).

Sonday describes the need for Occupational therapists to make the shift from individual focus and reasoning strategies to a broader focus on a system, community

or population. This shift also allows for a collective focus and strategy when implementing services. This does mean that children may require more occupational therapy support within the education setting, with occupational therapists working within both policy frameworks, as well as the requirements of a particular school (Sonday et al., 2012). There was limited South African research on the use of Occupational Therapy groups, but a study conducted in the Western Cape described the transformation of school psychology services to become more responsive and include group interventions in the manner described above (Daniels, 2010).

2.5 Conclusion

This literature review has shown existing policy and guidelines around inclusive education and the role of the occupational therapist within that system. It has described the unequal distribution of occupational therapy and has described the use of collective intervention as an effective treatment modality in a variety of settings. It has also highlighted the lack of South African research around group based occupational therapy services in mainstream public schools. As contemporary occupational therapists in a responsive profession, we must do to ensure that we remain relevant in allowing children to improve and develop their occupational performance and potential. Our intervention must be sustainable, appropriate and effective within the South African context and contribute towards a successful and evolved community.

This study responds to the need to explore and describe current school based occupational therapy services in terms of group and simultaneous treatment, describing benefits and weaknesses of using a collective approach to intervention in the primary school setting.

Chapter 3

Methodology

This chapter outlines the study design and research methods used in the study. It outlines the two phases of the research, describing data collection and analysis procedures for both, as well as ethical considerations for the study.

3.1 Research Design

The study took the form of an explanatory, sequential mixed method study with a sequential quantitative and qualitative element. There were two distinct phases to the study, with the initial collection and analysis of numeric data, followed up with interviews to explain and expand quantitative data (Creswell, 2009). The use of a mixed methods study allowed the researcher to gather basic information from a broad spectrum of school based occupational therapists. It also allowed the therapist access (by participants providing email addresses if they were willing to participate in Phase 2 of the research) to therapists who could enrich and expand on the data obtained in Phase 1. The use of a mixed method allowed for both inductive and deductive reasoning.

3.1.1 Phase 1

The aim of this phase was to establish quantitative data regarding the use of groups by school based occupational therapists, fulfilling the first objective of the study.

- A survey was developed on RedCap. Questions were developed in conjunction with the research supervisor. It was initially sent to 7 Occupational therapists and lay persons for editing and content purposes. The questionnaire was not formally piloted which is described in the study limitations
- An electronic RedCap survey was sent via email to all Occupational therapists who are members of the Occupational Therapy Association of South Africa (OTASA), and they were able to respond via an online link. The survey consisted of demographic information and quantitative information. The

survey was circulated once, and 91 responses were obtained.

- 89 responses were completed fully and were able to be used in the data analysis. Two surveys were discarded as the survey was incomplete. Data was cleaned, and statistics analysed using Statistica.

3.1.2 Phase 2

The purpose of this stage was to enrich and elaborate on numerical data by gathering qualitative information of perceptions and experiences of school based occupational therapists, answering the second and third study objectives.

- Participants indicated their willingness to be interviewed by providing an email contact address. By viewing information provided in the survey, it was possible to interview a range of occupational therapists for this phase of the study. Twelve potential interviewees were approached via email with telephonic follow up, and six agreed to be interviewed.
- Five semi structured face to face interviews were conducted with paediatric occupational therapists in the Johannesburg area, and one semi structured telephonic interview was conducted with a therapist in Kwa Zulu Natal. The participants worked in or had worked in various school based settings, including government and private sector settings.

Interview questions aimed to get more comprehensive information along the same themes as the questionnaire, and included questions around the interviewee's current and previous work settings, types of groups that had been run, reasons for electing to run or not run groups, benefits and challenges that arose out of the treatment modality, and suggestions for taking Occupational Therapy services into under-resourced school including whether or not groups would be a potential treatment modality. The questions were developed in conjunction with the project supervisor and were focused on elaboration of trends noted in the Likert scales and comments made in the survey. Participants were asked for suggestions in terms of using groups as a treatment modality in under-resourced schools, addressing objective 3. A semi-structured interview format was used to allow the researcher both a structure as well as flexibility to gather sufficient information.

While the goal of the study was to explore ways that Occupational therapists might deliver group treatment in under-resourced mainstream contexts, views and data were also obtained from therapists in schools for children with special educational needs (LSEN) schools, where there is experience of delivering various types of Occupational Therapy intervention in under-resourced contexts.

3.2. Research Procedure

Ethical clearance was obtained from the Human Research Ethical Committee and protocol clearance was obtained from the School of Therapeutic Science Assessors Committee before data collection commenced. Following clearance, the researcher commenced with data collection as described in the sections below

3.3 Phase 1 Methodology

3.3.1 Sampling

The population for Phase 1 consisted of self-described school based occupational therapists (SBOT) registered with the Occupational Therapy Association of South Africa (OTASA)

The inclusion criteria included;

- Occupational therapists working part- or full-time within a school. They were also able to give input on previous school based work experience if it was relevant
- Experience in the primary school population.

The total number of school based therapists belonging to the OTASA was unknown, but a study in 2011 sourced 162 SBOTs working within the private sector with learners in the Foundation Phase of primary school. It was thus calculated that a minimum sample of 113 based on this research would provide a sample with a 5% margin of error according to Cochrane's survey formula (Creswell, 2009). In total, 91 therapists completed the survey, and 89 were complete and able to contribute towards the total data.

3.3.2 Data Collection Phase 1

3.3.2.1 Data Collection Tool

A survey (see Appendix 1) gathered demographic data, as well as quantitative information regarding groups as a treatment modality by school based occupational therapists. The quantitative information served to guide the development of Phase 2 of the research and began to describe the perceptions of school based occupational therapists. The questions, developed by the researcher, elicited nominal and categorical data. The researcher used information gained from her own practice in consultation with her research supervisor, and occupational therapy literature discussed in the literature review to finalise survey questions. The survey was circulated by email, together with an information paragraph explaining the purpose of the research (see Appendix 1), to the data base of members of the OTASA

3.3.3.2 Data Collection Procedures

The survey and accompanying information document were developed and administered via RedCap. The link was circulated to the Occupational Therapy Association of South Africa (OTASA) data base via email. Participants implied consent by completing the survey. The data was downloaded off RedCap and identifying links were removed with data stored on a password encrypted hard drive.

3.3.3.3 Data Analysis

Table 3.1. Data Analysis Phase 1

Objective	Variables	Data Type	Statistical Method
Description of group interventions carried out by participants (Questions one to eleven of the survey)	● *Range of experience of therapists* ● *School types, and age ranges of children* ● *Groups offered and inclusion criteria* ● *Treatment types offered*	Categorical data Nominal Data	Descriptive statistics including median, quartile range and percentages.

Explore the benefits and challenges of occupational therapy groups (Question twelve to eighteen of the survey)		Ordinal	Likert type scales
Explore the perceptions of participant regarding occupational therapy groups (Question twelve to eighteen of the survey)		Ordinal	Likert type scales

The Likert Scales were analysed with a five point scale that ranged from strongly disagree to strongly agree. The scale statements were used as starting points for the interviews conducted in Phase 2 of the research. On analysis, the 'strongly agree and agree' points were collated to express positive sentiment about the statement, and 'strongly disagree and disagree' were collated to indicate a different opinion to what the statement expressed. The number of responses for each of these statements was converted to a percentage of the total number of responses to provide data on factors around the provision of occupational therapy groups.

3.4 Phase 2 Methodology

3.4.1 Sampling

During Phase 1, survey respondents were asked to indicate their willingness to participate in Phase 2. Purposive sampling techniques were used to select participants based on criteria in order to ensure rich data.

The criteria for participation was the following:

- Occupational therapists with a minimum of three years' experience in the school based field at primary schools, and fulfilling at least one of the following criteria:
    - were currently running or had previously run occupational therapy groups,
    - had considered and elected not to run occupational therapy groups, or
    - have been prevented from running groups as part of the intervention

services offered in the foundation phase at mainstream schools.

It was initially projected that interviews would only take place with therapists working in mainstream primary schools, but as groups are being run in remedial and similar special schools, this was not part of the final inclusion criteria. Data obtained from Phase 1 of the research indicated that therapists employed by the Department of Education seemed more likely to run groups, and most of these posts are in LSEN schools as described in the literature review. This resulted in the inclusion of therapists with experience at LSEN schools.

The interviewees were as follows

- A school-employed (governing body post) occupational therapist working in a full service primary school
- A private practitioner based at a mainstream private boys' primary school
- A private practitioner employed part time by a school for children with autistic spectrum disorder as well as running an independent private practice.
- A private practitioner working in two 'learner assisted' schools with prior experience in LSEN and mainstream primary schools
- A private practitioner in a co-ed private primary school, coordinator of the School Based OTs group, previous experience in LSEN schools
- A school-employed OT at a government LSEN school.

3.4.2 Data Collection Phase 2

3.4.2.1 Data Collection Tool

Participants who fulfilled the selection criteria for Phase 2 of the study were requested to submit an email address to allow the researcher will be to contact them in Phase 2. A semi structured interview was used for this phase of the study. Participants who agreed to participate in Phase 2, and who fulfilled selection criteria by submitting their email address via the survey were contacted and an interview requested. A projected interview schedule was developed (Appendix 4) and was slightly adjusted as the interview process progressed. Five of the six interviews were conducted in person and one telephonically. An information sheet (Appendix 1), detailing the research project and consent form were emailed to participants prior to the interview, and hard copies presented on the day of the interview. Consent was obtained from all interviewees. Consent from the telephonic interview was obtained

via email. The interviews were scheduled for approximately 1 hour each and were undertaken at a venue that suited the participant. Two interviews occurred at the researcher's private practice, the telephonic interview from Wits OT department and 3 interviews at the participant's place of practice.

3.4.2.2 Data Collection Procedure

The six interviews were representative of all the inclusion criteria for participants. All interviews were audio-recorded, and following the interview, were transcribed. In preparation for data analysis, transcriptions were loaded onto the Max QDA programme.

3.4.2.3 Data Analysis

Table 3.2. Data Analysis Phase 2

Objective	Variable	Statistical Analysis
Explore the benefits and challenges of occupational therapy groups	● *Transcribe Interviews* ● *Organise and sort data,* ● *Coding*	Thematic Analysis MaxQDA
Explore the perceptions of participants regarding occupational therapy groups	● *Transcribe Interviews* ● *Organise and sort data, and gain a general sense of information obtained* ● *Coding* ● *Description of data* ● *Interpretation of data*	Thematic Analysis MaxQDA

Data was organised to gain a general sense of what feedback participants had given, and what trends were emerging from the interviews. The style of analysis was mostly deductive in nature. The process of coding was initially into the broad themes around groups being run, and benefits and challenges, from which subthemes emerged.

3.5 Trustworthiness and Methods for Data Quality Control

To ensure reliability and validity of data, various measures were used. During the interviews, participants were asked questions in a number of different ways and given an opportunity to describe their answers fully with clarification sought to confirm information was correctly interpreted. Information was reflected back to participants to ensure that their message was clearly put across. Rich, thick description was used to give the most accurate picture of the results, and ideas counter to prevalent themes was also noted. Descriptions also attempted to place statements within the context that they were presented, for example the nature of a group being run, or the type of school setting.

The researcher acknowledged her own bias when entering the interview setting, and when performing analysis, and interviewed therapists who both do and don't run occupational therapy groups in order to present a variety of views (Creswell, 2009). When developing the coding, the researcher worked extensively with her supervisor as a form of peer review to enhance the reliability of the themes developed.

3.6 Ethical Considerations

Ethical clearance was be obtained from the Human Research Ethics Committee at the University of the Witwatersrand. (Clearance number M170904 – see Appendix 5)

3.6.1 Phase 1

Participants were provided with an introductory email with the survey and completion of the survey will be considered consent. For those participants who agree to supply an email address for participation in an interview, confidentiality was guaranteed by use of an identifier code, rather than names. The survey information was anonymous.

3.6.2 Phase 2

Participants were provided with an information sheet (see Appendix 1) and asked to sign informed consent for all interview contact. They confirmed that they were participating voluntarily were informed of their ability to withdraw their participation at any time. The aims of the research were clearly explained to them, and they will be offered the results of the analysis. They were also informed that there was no

individual benefit to them for participating, but that they were contributing to the development of school based occupational therapy. Electronic research data was securely stored on a separate hard drive, and transcripts stored securely. Participants were informed that if they elected to withdraw from the research at any time, electronic and hard data would be destroyed.

Participants and the names of the schools at which they are / were based are not identified. Participants were identified by a pseudonym, and the school described rather than named, for example a foundation phase, mainstream, co-educational school.

There were no documented or perceived risks or disadvantages for a participant in this research, as the aim was to collate data which could be used for future practice growth and development.

Chapter 4

Results

The results chapter presents both the quantitative data collected in Please 1 as well as the qualitative data from phase 2. Descriptive statistics have been used to analyse the quantitative data, and thematic analysis for Phase 2. The total number of survey participants was 89, but for certain areas of analysis the number of participants was 65 as it only included those participants with current or previous experience running groups.

4.1 Phase 1

4.1.1 Demographic Information of participants

The initial phase of data analysis involved the analysis of the quantitative data obtained from the survey.

A total of 91 therapists responded via the online link, and 89 surveys were completed and used in the data analysis. All participants were school based occupational therapists in either a full or part time capacity. Of those 89 responses, 65 (73%) were either currently or had previously run groups with children in a school based setting, and demographic as well as descriptive data was obtained from these participants.

More than half of the participants (57%) had some form of post graduate qualification, for example in sensory integration or neurodevelopmental therapy. Of the participants, 13% had a master's degree, and 30% an undergraduate qualification.

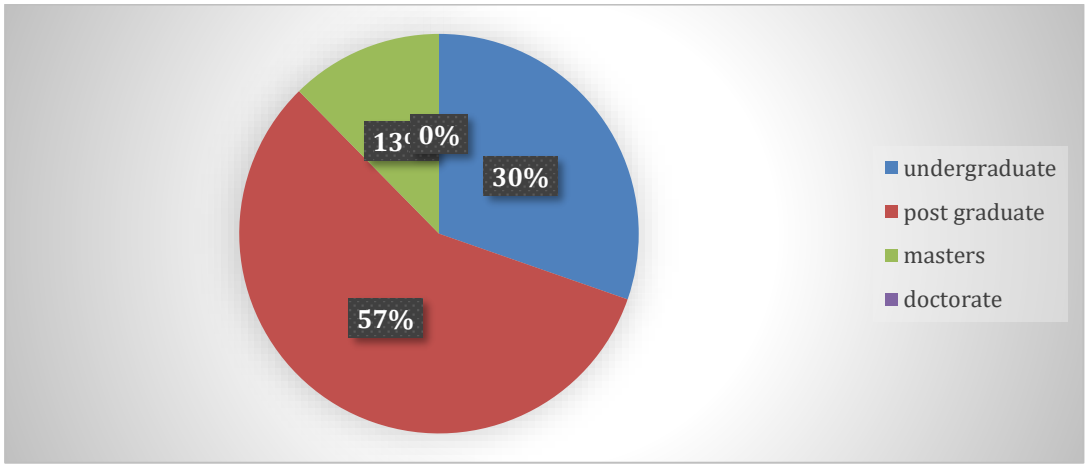


Fig 4.1 Survey Participants' Highest Qualifications (n=89)

The participants' years of experience as an occupational therapist was noted to be more than ten years for 51% of those who completed the survey, and 35% of participants had more than ten years' experience as an occupational therapist. All participants selected for follow up interview had a minimum of 4 years work experience.

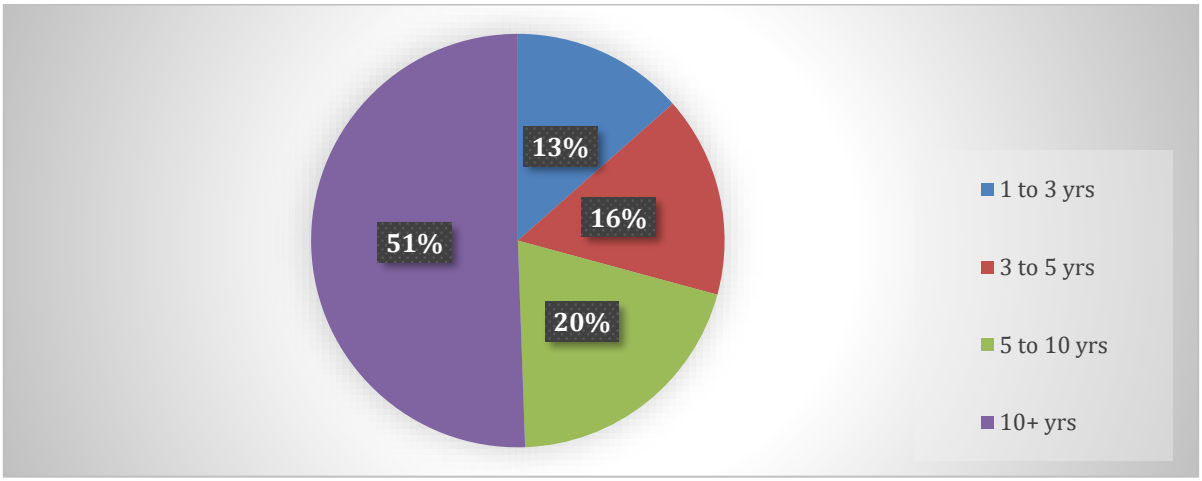


Fig 4.2 *Survey Participants' Years of Experience working as an Occupational Therapist (n=89)*

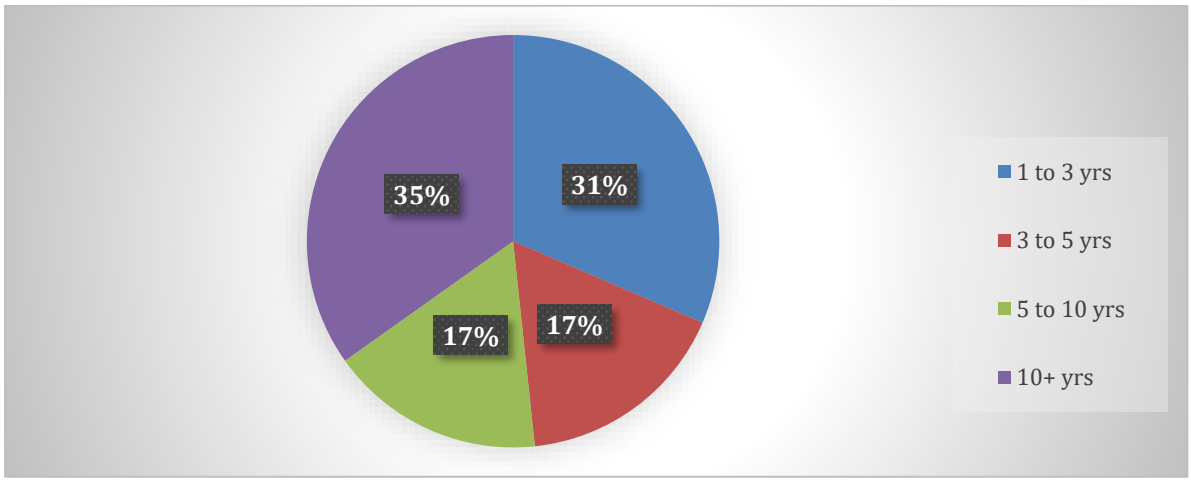


Fig 4.3 *Survey Participants' years of experience as a School Based Occupational Therapist(n=89)*

Practice settings for the participants included being employed by a school, or running a private practice based in one or more schools. Participants reported being employed by a school (33 %, 29 therapists), and 29 (33%) and 41 (46%) of the participants were practicing out of one or more than one school respectively. Some

participants worked in a combination of settings, for example employed by a school for certain hours, and running an additional private practice in an alternative setting. Participants were based either at mainstream private schools (53%), and 42% of participants were based at a mainstream public school. Over three quarters (78%) of these participants were private practitioners where therapy sessions are paid for by parents / private health insurance.

4.1.2 Practice settings of participants

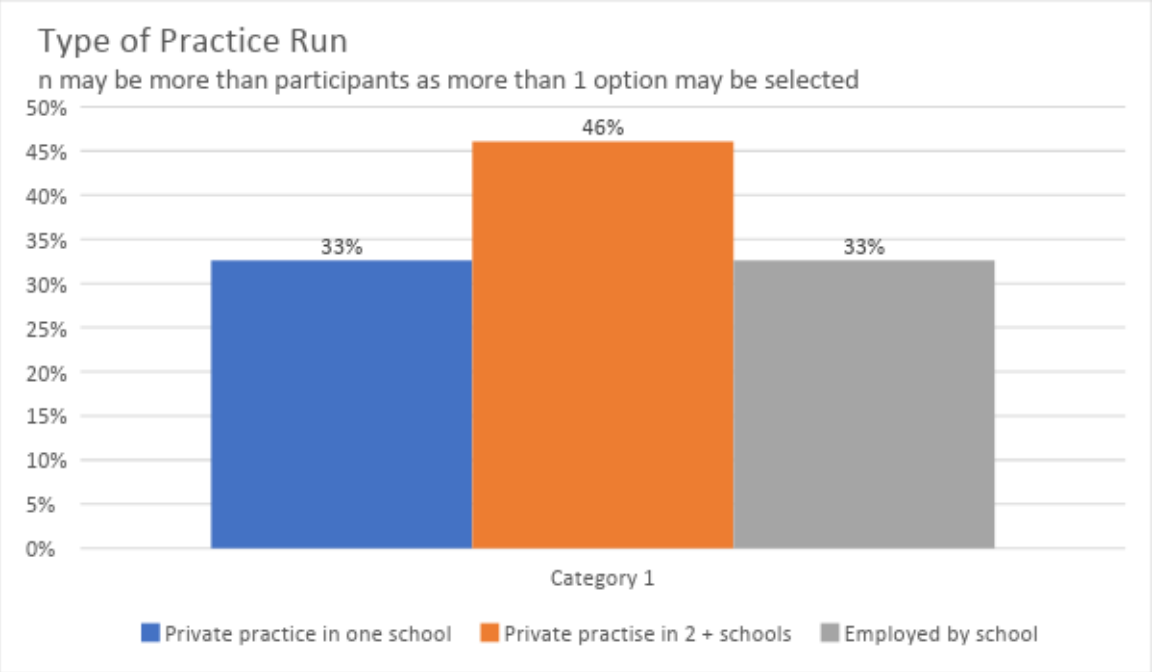


Fig 4.4 Survey Participants' Place(s) of Primary Practice

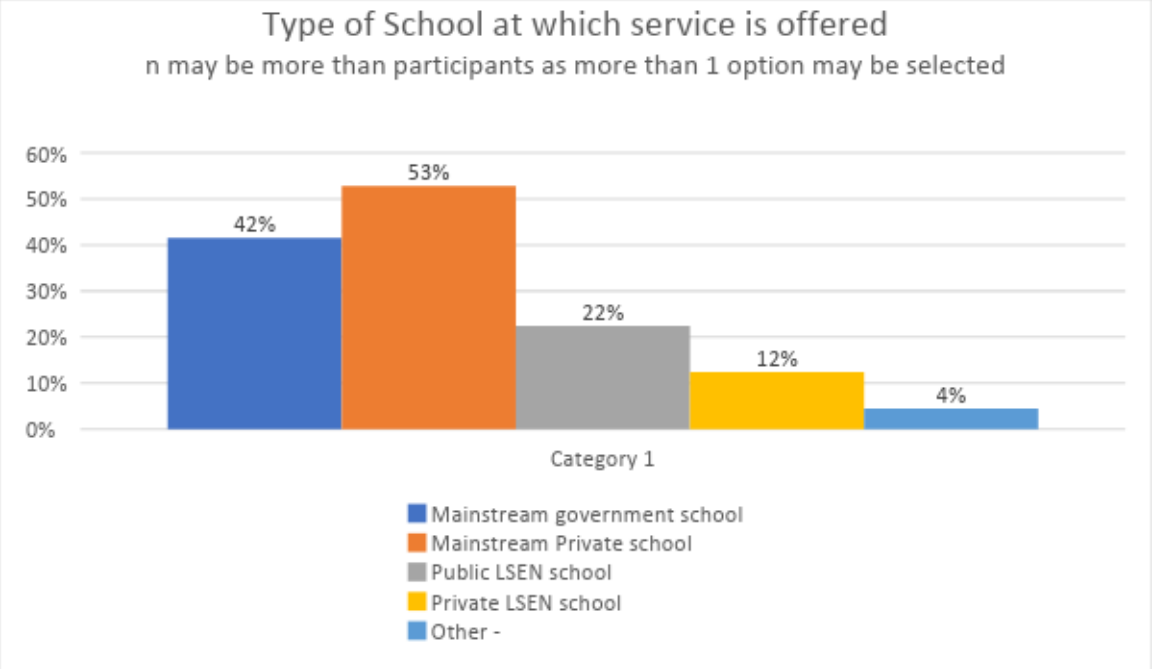


Fig 4.5 Type of school(s) at which survey participant is practicing

4.1.3 Group data

It is important to note that for the purpose of this research, groups were not limited to a strict definition of a groups versus a simultaneous or clustered treatment session, and thus 'groups' included all therapy where two or more children were receiving either treatment simultaneously or doing similar activities.

Groups were currently being run by 52% of participants (46 therapists), and a further 19 had previously run groups, either in their current or previous work setting, while 27% of the participants were not running groups.

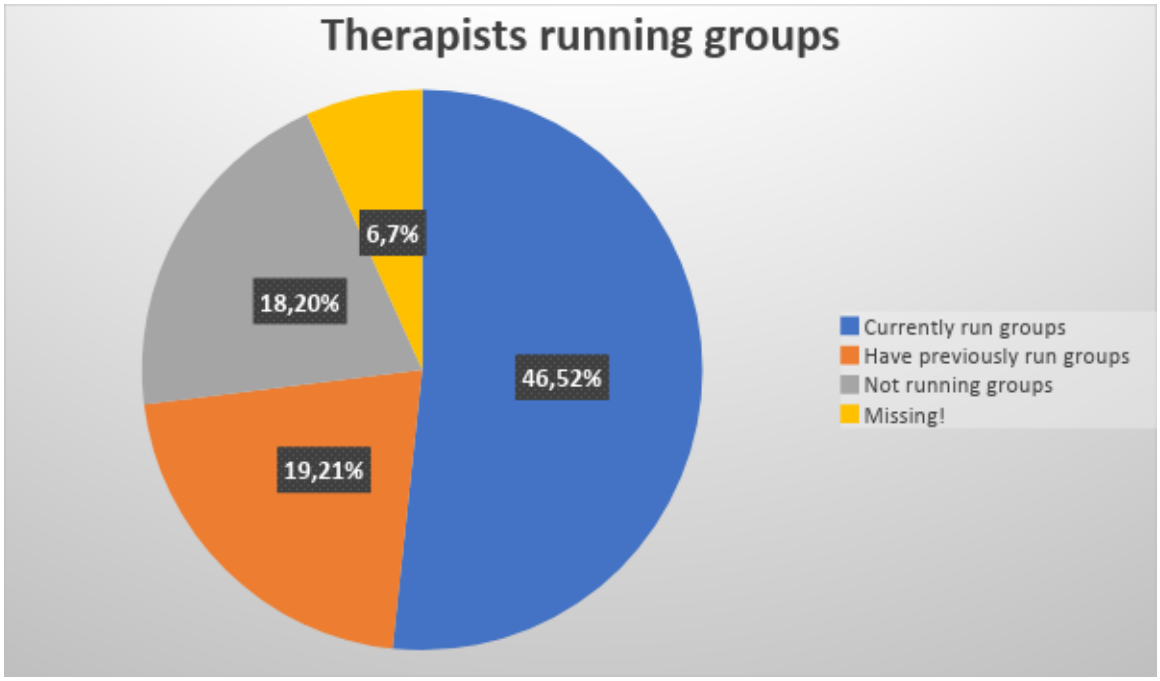


Fig 4.6 Distribution of School Based Occupational Therapists Running Groups

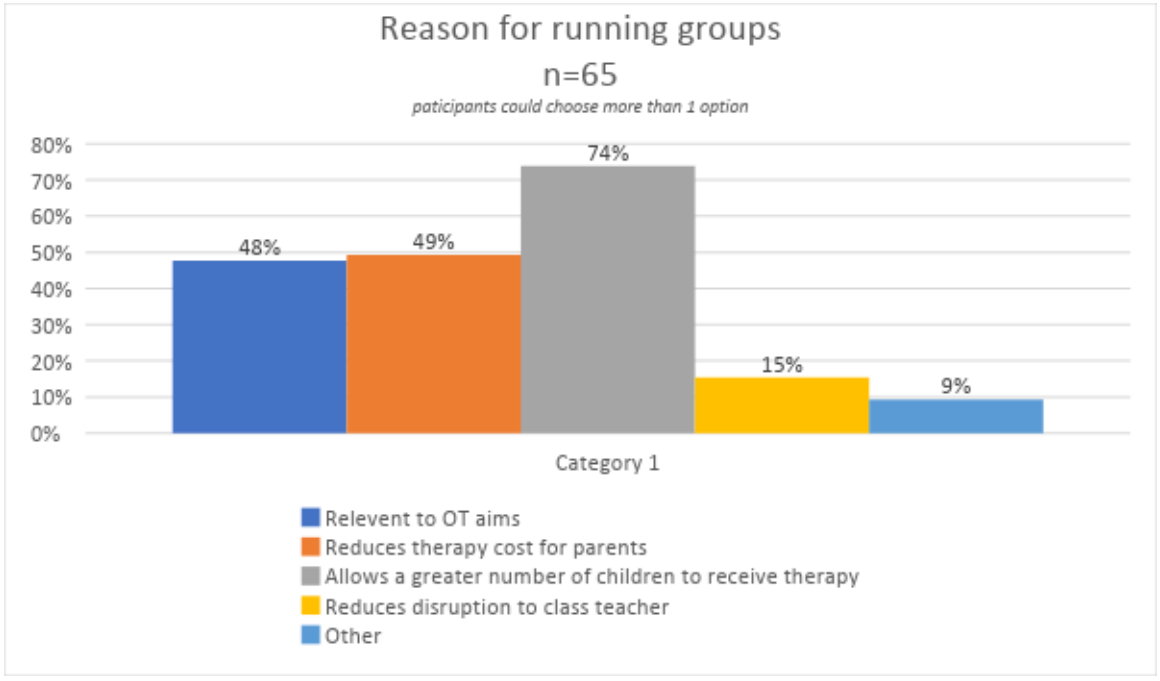


Fig 4.7 Participants Reasons for Running Groups(n=65)

Participants were then able to elaborate on their reasons for electing to run or not run groups. These are summarised in table 4.1.

Table 4.1 Additional reasons and enablers for running groups

Additional Reasons / Facilitators for running groups	No. of participants
● *Limited time to see a large number of children*	2
● *The school pays for a weekly group with the whole class*	2
● *Groups are run to 'therapise' the curriculum*	2
● *Groups assist the transition and carry over of skills into the classroom situation*	1
● *Assists with timetabling*	1
● *Groups are run in the class setting or in the gross motor room (6-9 learners per class), and are run by the OT, educators and assistants and continue even when the OT is not present. This only happens after educators and assistants have been trained by the therapists on the specific activities and targets. This allows intervention to reach all learners of the school on regular basis despite the limited time available for the OT to see each child*	1
● *Usually one initiates the goals individually and then if and when needed provide group structure and then after monitoring and then phase the child out. I prefer two children in the group as the needs and goals have to be similar and age appropriate and the functional transfer to classroom and home environment is essential.*	1
● *I provided group sessions out of necessity, as I was only able to visit a pre-primary school once a month for a morning during my community service year in the Southern Free State (the public school indicated). The private school that I am currently working at has the necessary time resources to make group work more effective, although I do not present treatment in groups.*	1
● *Group therapy with 2 children works best*	2
● *We run stimulation groups*	1
● *It's difficult to always address all the aim of each individual in a group. We run a lot of simultaneous therapy at our practice. We work together with another OT or two who are treating their children. It's*	1

great for social skills, problem solving etc. and then we can break away or manipulate the session according to our own clients' needs.	

The participants most prevalent reason (74% gave this reason) for running groups was to allow a greater number of children to receive therapy, in effect increasing the accessibility of OT services. Almost half of the therapists suggested that the groups allowed a lower cost for Occupational Therapy. These reasons were explored in Phase 2 in greater detail. Again, around half of the participants (48%) suggested that groups were relevant to OT aims. Additional reasons are summarised in Table 4.1 below.

Table 4.2 Reasons against / barriers to running groups

Reasons / Barriers against running groups	**No. of participants**
● *Experiences vary greatly from school to school in terms of ease of running groups, client base etc.*	1
● *Groups are very specific to the team that you work with*	1
● *It is very difficult to establish a group that is a good fit for each child in terms of aims of treatment, how the children fit together, timetable constraints etc.*	1
● *I haven't really considered it*	1
● *An effective method of recording groups is needed*	1
● *Groups work well but parents dislike them. I work at a school where cost of therapy is seldom an issue. Parents would rather their child attends one-on-one, so I have had to terminate all groups*	1
● *I would prefer individual therapy, especially when working using an Ayres SI approach (though do group therapy due to the case load)*	1
● *Running groups can be challenging but is effective in managing the demands of both case load within a government school. For some children it is not the ideal method of treatment though.*	1

• *Groups have been attempted, but could not be run consistently due to absenteeism, school disruptions and workload.*	

The most common age band seen for group intervention was children between Grade R and 3, though 25% of participants running groups were seeing older children. One participant described how a stimulation group was being run for children in school readiness preparation including fine motor skills and spatial organisation.

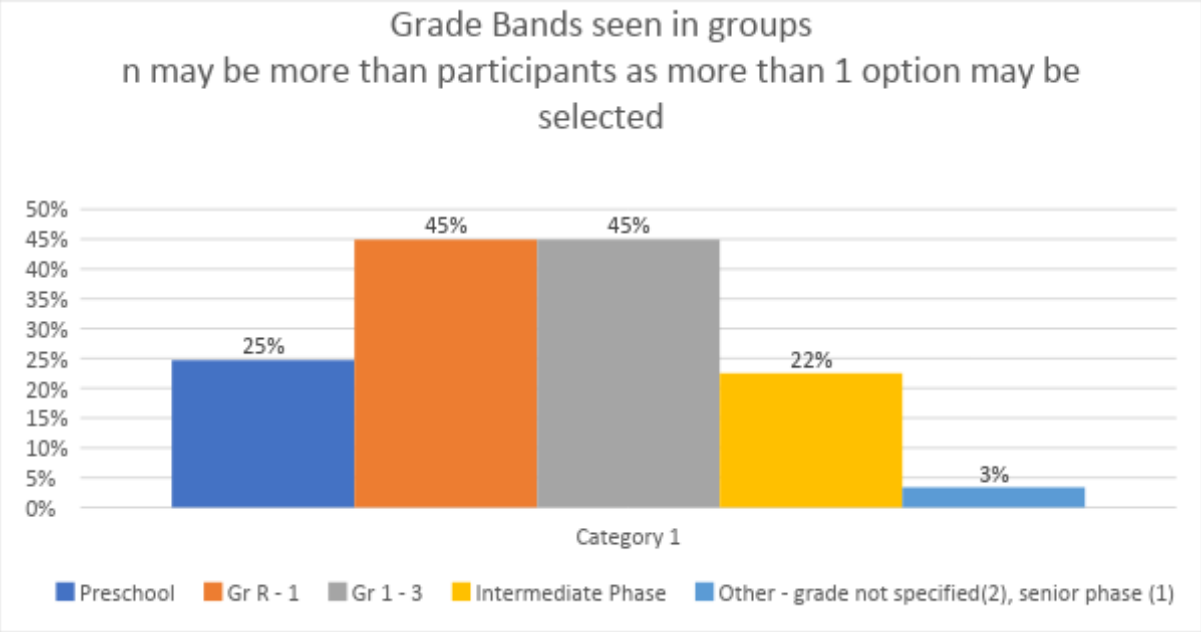


Fig 4.8 Grade Bands of learners participating in Occupational Therapy Groups (n=65)

The occupational therapy groups covered broad skill areas. The most prevalent skill being developed during groups were fine motor skills (61 participants / 94%), gross motor skills (56 participants / 86%) and visual perceptual skills (53 participants, 82%). Other areas included social skills (36 participants), sensory processing and modulation and occupational performance. Groups were also being run to address life skills, study skills, basic concepts and concentration. One respondent was running a signing group.

Other skills that were indirectly addressed were skills such as turn taking, working together and providing peer support, and this is explored in greater detail during the qualitative data analysis.

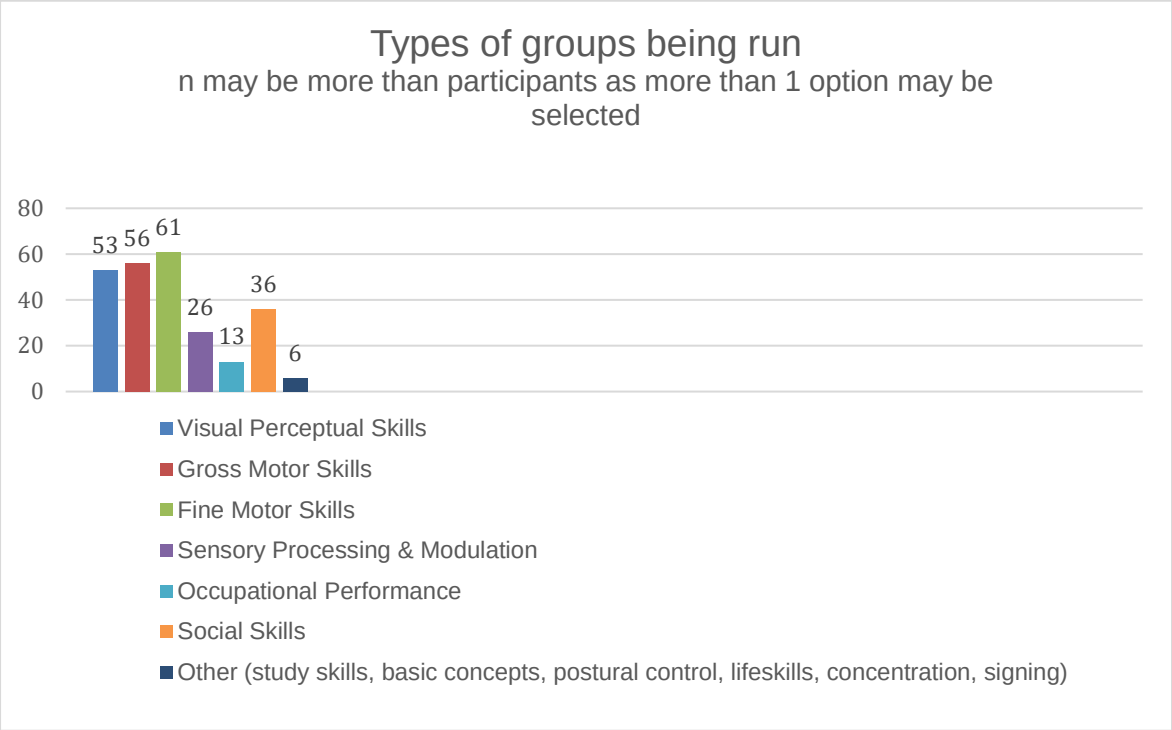


Fig 4.9 Types of groups being run (n=65)

Despite treatment being in a group format, 66 % of participants assessed each child individually. Of the participants surveyed, 43 % would also accept a recommendation directly from a teacher, and 40 % would transition a child from individual therapy into the group format. As further explored in the qualitative data, the importance of understanding the specific needs of each child, as well as what goals are addressed in the group format and how the effectiveness is measured were described as challenges within this treatment modality.

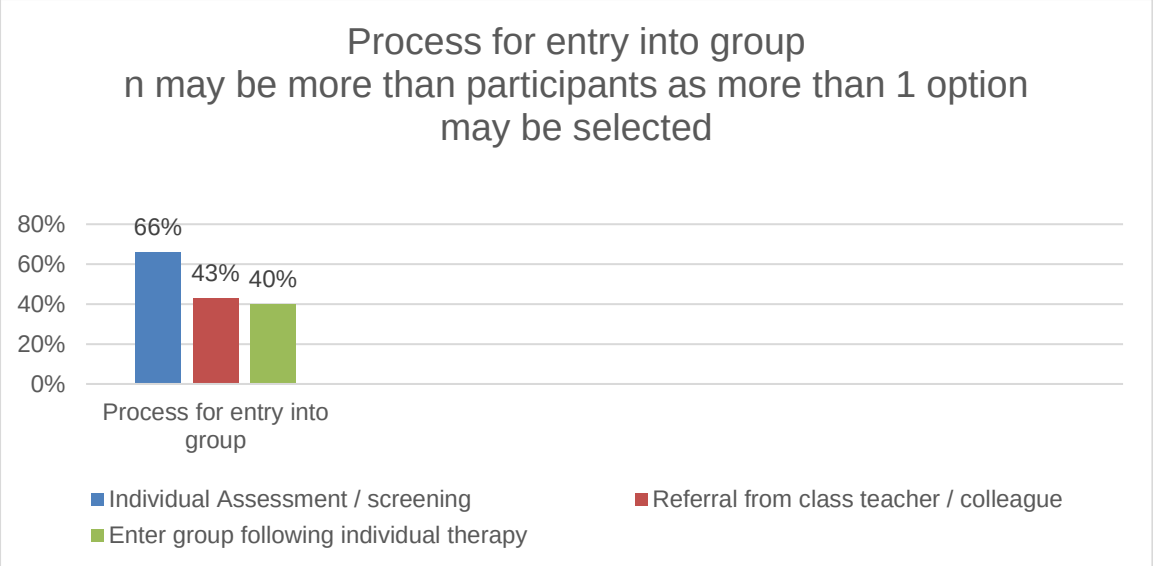


Fig 4.10 Process for entry of learners into group (n=65)

A Likert Scale was used to elicit further information from the participants about some of the benefits and challenges of running groups, and a five point scale ranging from strongly disagree to strongly agree was used.

The statements presented were

1. *I am / was able to provide treatment to a larger number of children requiring OT*
2. *Facilities at the school are / were adequate for providing group intervention*
3. *It is / was difficult to address individual therapy aims within the group setting*
4. *The groups facilitated carryover within the classroom due to factors such as concentration and collaboration being addressed*
5. *The school is / was supportive of the OT groups*
6. *The parents were satisfied with the level of intervention given to my child*
7. *Children made measurable progress following group intervention*

All the statements except for statement 3 were positive statements, thus the higher the agreement the more positive the therapist's perception was. Statement 3 reflected difficulty participants may be having in implementing individual goals.

The results indicated 77 % of participants agreed or strongly agreed that by running group / simultaneous treatment, they were able to reach a greater number of children who required the services of an occupational therapist.

It also emerged that 60 % of participants agreed / strongly agreed that there was facilitation of carryover into classrooms by addressing aspects such as concentration

or collaboration, however 60% of participants also either agreed or strongly agreed that it was difficult to address individual aims.

It is interesting to note that 70 % of participants felt facilities were adequate for the running of groups and 91% of participants agreed or strongly agreed that the school was supportive, which may have contributed to the generally positive trend seen in their experience of running groups. Another positive factor was that 65% of participants agreed or strongly agreed that children made measurable progress when participating in occupational therapy groups.

. In the qualitative data analysis, the relationship with the teacher and parent was explored in more detail, and of the 65 participants running groups, 69% agreed or strongly agreed that parents were satisfied with the progress their child was making. In order to further understand the participants reasons for the positive and negative ratings, these statements were further investigated in Phase 2 of the study and contributed to the questionnaire development

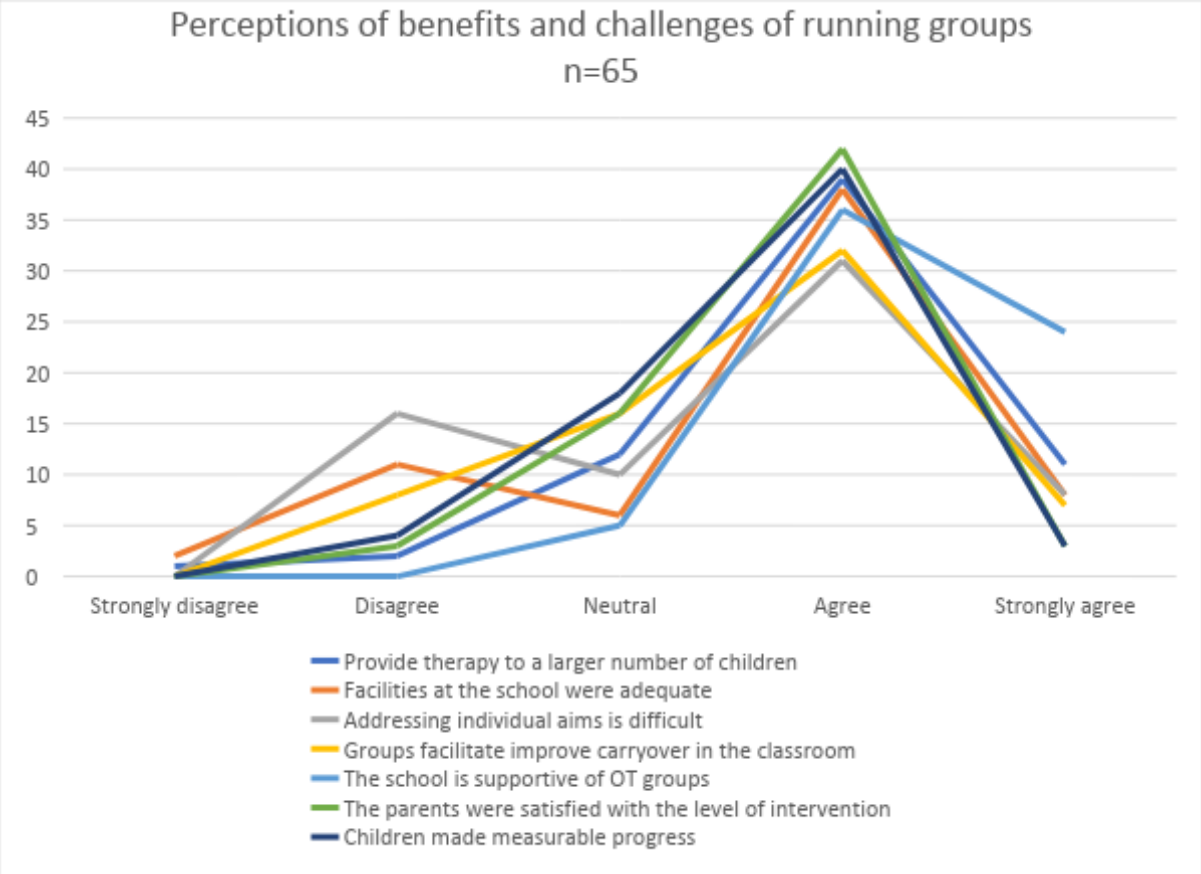


Fig 4.1.11 Participants' Perceptions of Benefits and Challenges when Running Groups (n=65)

4.2 Phase 2

4.2.1 Demographic Information of interviewees

Following the survey, six interviews were conducted in order to enrich data collected at the survey stage.
Initials (not their real ones) have been given to the interviewees and their school based settings (at the time of the interview) are described rather than named.

CD works at a full service primary school on the West Rand of Johannesburg. She is employed full time by the school governing body, and children from Grade 1 upwards receive Occupational Therapy free of charge (service is predominantly in the foundation phase). The majority of her treatment is either simultaneous or group based by mandate from the school. She has five years of experience

LP is a private practitioner based at one mainstream private boy's preparatory school in Johannesburg. The majority of her treatment is individual, though some group work has been done in the past. She has more than ten years of experience.

AD is based in KwaZulu Natal and works part time funded by a non-profit organisation (NPO) that runs groups based early intervention for children with autistic spectrum disorders, and part time in her own private practice based in a private mainstream primary school where she does not run groups. She has more than ten years of experience.

GR is a private practitioner based at two private 'learner assist' schools in Northern Johannesburg. She is planning to establish groups and has previously worked at an LSEN school where the majority of her treatment intervention was group based. She has more than 10 years of experience.

JS is a private practitioner based at a private mainstream pre- and preparatory school in Northern Johannesburg. The majority of her work in individual treatment, though is exploring the possibility of running groups. She has previously run groups when employed by an LSEN school and is the chair of the school based

occupational therapy interest group of the OTASA She has more than ten years of experience.

SF is employed by a school that caters for children with physical and learning disabilities in Johannesburg. The majority of her treatment is group or simultaneous treatment. She has five years of experience.
All the therapists had used groups as a treatment modality during their work history. Three interviewees use groups as a regular modality for treatment. Two interviewees may use group intervention depending on the requirements and possibilities within their work settings, and one interviewee felt groups were not a preferable method for intervention.
Two of the participants are employed full time by the school, and primarily work using groups as a treatment modality. Three therapists run a private practice, where funding for therapy comes from parents or private medical insurance, and one interviewee is employed part time by an NPO and is in private practice part time. The frequency of group work by private practitioners is significantly lower than for those in employment.

4.2.2 Themes emerging from the interviews

Three major themes emerged from the data analysis which were;

1. *The benefits of using groups as a treatment modality in both well and less well-resourced schools.*
2. *Challenges in ensuring that groups are effective, sustainable and beneficial.*
3. *Occupational Therapy services in school based settings need to be appropriate and innovative going forward*

These themes have been broken down into a number of categories summarised in the table 4.3.

Table 4.3 Summary of themes and categories generated by qualitative data (n=6)

Themes	**Categories**
The benefits of using groups as a treatment modality in both well and less well-resourced schools	● *Groups are well placed to address certain types of skills addressed by Occupational Therapy* ● *Groups are a way to manage a high caseload, as well as increase frequency and intensity of Occupational Therapy Intervention* ● *Groups facilitate Curative Group Factors, both positive and negative*
Challenges in ensuring that groups are effective, sustainable and beneficial.	● *An effective tool for assessing suitability for treatment, measuring progress and providing ongoing evaluation is necessary.* ● *The 'buy in' of parents, teachers and management structures is important.* ● *Sufficient Infrastructure and suitable funding models are required* ● *The therapist 's skills are crucial to successfully implement groups as a treatment modality*
Occupational Therapy services in school based settings need to be appropriate and innovative going forward	● *Services should focus on 'push in' intervention as well as more traditional 'pull out' therapy and should aim to support the classroom environment as well as the school curriculum.* ● *Services should be developed within a 'Viable South African Context' considering current policies and realities.* ● *Services should be innovative and use existing and new tools to maximise service effectiveness*

	● *Groups as a treatment modality need to be measurable and have a specific goal as well as an understand of who can benefit from this intervention method.*

4.2.3 Description of themes and categories

1. **There are numerous benefits to using groups as a treatment modality in both well and less well-resourced schools.**

i. ***Groups are well placed to address certain types of skills addressed by Occupational Therapy***

Groups facilitated skills that were not possible to establish in the individual treatment setting. Skills such as turn taking, work speed, communication and social skills were facilitated and developed. Therapists noted that sometimes peers could provide better feedback for a child and were also less likely to compensate for a child's difficulty.

Whether simultaneous or pure group treatment, the child in a group learned to be a little more independent in the skill.

"I think as a therapist, not meaning to, but I think we overcompensate with some of the difficulties. Whereas a peer will not and will challenge them in a different way. That within a group setting that a lot of social aspects have to be taken into consideration, because I'm finding the school environment that I'm working in at the moment that so many of the children struggle with basic social skills." (GR)

"(you might only see) benefits further down the line, you know, and sometimes what we did in the group, we wouldn't get in the one-on-one, and sometimes what you get in the one-on-one you don't get in the groups" (AD)

ii. Groups are a way to manage a high caseload, as well as increase frequency and intensity of Occupational Therapy Intervention

In Phase 1 of the research, 77% of participants felt that the groups were an effective way of both managing a high case load, as well as increasing the frequency with which children are able to receive occupational therapy services. Examples of interviewed therapists' caseloads in public schools ranged from 45 to 70, and they

indicated that if not for groups, they would be unable to see all children on a weekly basis.

Group Treatment also allowed for greater frequency of treatment, with therapists indicating that children who may not have received weekly or twice weekly treatment were able to.

“We could do two treatment sessions a week, so when we did the parent interviews, they saw the progress (their child had made)” (JS)

“I feel like I'm able to reach more children. If I refuse to do groups and said I'm only going to do it if I have enough time to do individual therapy or whatever, I would be able to reach much fewer children.” (CD)

It also allowed a therapist to use different options for intervention, even when individual intervention was an option for treatment.

“If children are coming to the end of their therapy time, and we just want to, you know, bring in a bit more dynamic aspects or so, social aspects, concentration, work speed, and then we often try and combine them with other children just before discharge.” (GR)

iii. Groups facilitate Curative Group Factors

Apart from managing caseloads, therapists interviewed were most positive about the curative group factors that are not possible to achieve in the individual setting.

Therapists were positive about the support and modelling that children provided for each other. Groups allowed for greater playfulness in children which is a natural occupation of a child. They mentioned how children tended to motivate each other and bring out an altruistic side as children support peers who are new to the group or struggling with a particular issue.

“I find it very motivating. I think for the kids, one on one, it can be quite anxiety provoking for a child, whereas when I see my private kids on their own it’s a very different dynamic than when you have three or four in a group, or even two in a group, and then they…they tend to work together and they’re less nervous and they’re more kind of open, and more playful even. So especially when you’re treating like a play kind of theme they feel that they play better with their buddy than with a

therapist. So that’s really nice.” (SF)

“And, they've felt a sense of community, so they don't feel like they've been singled out. They feel like "this is fun, this is normal". So, I really do think it's a positive, it feels positive to me.” (CD)

2. There are challenges in ensuring that groups are effective, sustainable and beneficial

While therapists were positive about the effectiveness and benefits are running groups, they did note challenges that were experienced. These are explored in the categories below

i. *An effective tool for assessing suitability for treatment, measuring progress and providing ongoing evaluation is necessary.*

Therapists seeing children in groups needed a method of assessing the child and measuring their progress in therapy. For a therapist carrying a high case load, this could be challenging. The busy environment of the group could result in insufficient or ineffective note taking.

“So, let’s say it takes me ten minutes to write progress notes per child. I think with four kids in a group, now that’s forty minutes. So, I wrote very brief progress notes for the groups. So, you don’t have that same kind of history, like of the session” (LP)

“I think often groups are started without very specific goals in mind, and then it is difficult to have something evaluate at the end of the period.” (GR)

“There's limited money for tests and those kind of papers, and limited time as well, so most of it (evaluation) is done by observation and also from the teacher and the parent's feedback. I have regular meetings and we follow up with the teachers to find out how is the child now coping in class. We follow up with the parents as well, say, looking at the functional side and ja, it's basically judged by their functionality” (CD)

ii. The ‘buy in’ of parents, teachers and management structures is important.

Therapists who work in a school-based environment are part of the team involved in helping a child develop their potential. They play a supportive role to both parents

and teachers, and also need to be able to fit in with and contribute to the environment at the school.

The participants noted that parents were at times weary about their child not receiving individual intervention. This was particularly reported by therapists working in private practice, where the perception was held that parents feel their child is not getting ‘the best’ therapy if they are not being seen on their own.

“It took quite a few sessions to sort of settle them down and get into that. And then interestingly the parents generally were not on board. They didn’t like the groups.” (LP)

“Parents often feel that if their child isn’t getting the individualised attention that “are they going to benefit from the therapy as much?” (they think) therapists just put children into groups in a school-based setting because you can make more money at once. Because each child is getting charged for the hour or 45 minutes, and so it’s financially more beneficial for the therapist.” (GR)

The relationship between the therapist and teacher was highlighted throughout the interviews, and therapists expressed the conviction that a good relationship between themselves and teachers benefited the therapy process and facilitated better opportunities for OT intervention.

“It’s vital(for) the carryover of skills in therapy to be carried over in that classroom environment and at home. So, the relationship between teacher is vital.” (JS)

“And to (understand) the specifics of what the teachers are working at or need to achieve at the end of the term. I think…ja, I’ve always found the relationships with teachers just vital and the need for their buy-in into what we’re doing” (GR)

“Very important (the relationship with teachers and parents). If you don't understand where they're coming from...it has to be a triangle, the parent, teacher, therapist triangle” (CD)

The role of school and district management was also noted as important. During Phase 1 of the study 91% of participants felt that the school was supportive of them running groups, which may indicate a reason for the positive implementation of this treatment modality. The involvement of district and provincial structures also

impacted on how intervention takes place and will be discussed later in this chapter. Support from the management structures of the school added weight and integration to Occupational Therapy intervention.

“(school structures must be) Very much on board, so unless the school management… if it doesn’t come from the top, and we haven’t discussed the sort of philosophy of how you want to approach it I think that wouldn’t work. And we know some teachers who have been teaching for a long time are very rigid” AD

iii. Sufficient Infrastructure and suitable funding models are required

Amongst requirements for providing group intervention are sufficient working space, timetable allocation and tools and equipment. While therapists demonstrated innovation in working under challenging circumstances, treatment was perceived as less effective if infrastructure was insufficient.

“Challenges also, our department is…we’ve got one big gross motor area and most of us run groups, so can often be quite chaotic with you have a group session there with three or four kids, and then next to you there’s another group session of four kids” SF

“That was obviously also a factor to take into consideration. That was also a well-resourced school, so we had a lot of games and a lot of equipment that we could use” JS

“I think also you’ve got to take into consideration the cost, especially with task groups, because you want to make nice end products, but that is also always more expensive than general one-on-one therapy” JS

iii. The therapist ‘s skills are crucial to successfully implement groups as a treatment modality.

The fit between the skills and experience of an occupational therapist and the demands of a particular treatment modality are important. Also relevant is the frames of reference within which they choose to practise. For example, those who primarily practised according to Ayres sensory integration found group implementation challenging, while those using a cognitive approach were more easily able to tailor their intervention. The therapists employed by schools who worked primarily in a

group setting found the physical demands of running groups less challenging than those who used a combination of approaches.

“You know, I came here straight after my comm serve (community service completed by new graduate therapists) and it was like sink or swim, finding this treatment modality, and becoming confident in it, and seeing how much fun, like, the kids actually have and how much it can work. It really can. You can...that child has had a full therapy session. They've done all 3 activities and a fine motor activity. The fact that they've done it in a group hasn't actually affected it significantly” CD

“Challenges was definitely managing and controlling. I mean, I don’t know how teachers do it, but I think it’s just that the kids come into that space and it is a fun space, but it’s hard for them to kind of transition and have fun but also kind of be work orientated” LP

“Um, yes, it has challenges, there are downsides, like, you get tired. Sometimes you feel like you can't spread yourself amongst all the other children, but in general, I feel like it's a good strategy” CD

3. Occupational Therapy services in school based settings need to be appropriate and innovative going forward

During the interviews, participants were asked about their suggestions for bringing services to under resourced schools. Participants expressed limited interactions with district and provincial structures, but felt this would be important, as well as a dialogue around best practise as well as delivering a broader, more equitable service

i. *Services should focus on ‘push in’ intervention as well as more traditional ‘pull out’ therapy and should aim to support the classroom environment as well as the school curriculum.*

When a therapist’s time at a school is limited, participants emphasised the importance of providing supportive services to teachers by spending time in the classrooms suggesting modifications and assistance to learners experiencing barriers to learning. It was also felt that therapists should aim to support the curriculum, offering services aligned with the requirements of the school.

“(we should offer) either groups or class-based facilitation, which is not technically group but it’s still about being able to service whatever they're doing in the class. Then you're able to go to each child and facilitate some of the activity. I think in the

government schools we need to work that way; we need to push in" AD

"And it wouldn't be necessarily…if we are running groups, removing those kiddies from the classroom setting, but implementing…I heard a term, I think it was called 'push in'…OT but then providing very hands-on intervention within the setting. Ja, so very practical, very functional." GR

"it's also more about the integrated approach to learning. So it doesn't become isolated and it becomes part of the curriculum. That OT is in the curriculum which becomes 'therapised', if I can say that." AD

ii. Services should be developed within a 'Viable South African Context' considering current policies and realities.

Participants acknowledged the Department of Education's policy of inclusive education, and policies and structures that exist to assist children with barriers to learning. Those working in special needs schools mentioned limited intervention from the Gauteng Department of Education, their provincial education authority. One participant spoke about how 'traditional one on one interventions' no longer seem a viable model in South Africa.

"And when I did my master's as well, I think I realised how much really one-on-one pull out, is not a viable model for South Africa." AD

"In a school that's not well-resourced and there's maybe one OT and a large caseload, if you are going to be able to cover more kids and more needs then groups definitely are beneficial" SF

"none of the therapy posts are funded by the Department of Education" CD (employed in a full service school)

"We do see them. Last, a couple of years ago they were trying to look at full service schools and whether or not they were working, and they would come to our meetings regularly, but this year we have hardly seen them at all" CD referring to the district based support team

iii. Services should be innovative and use existing and new tools to maximise service effectiveness

The interviewees expressed the need to think creatively about the best ways to both deliver and measure services. In particular, innovative ways of funding occupational

therapy services are needed, given that the posts currently do not exist with the Department of Education to provide services in all public schools.

"(I) definitely see the benefits of funding the groups. I think if we could have an established way of evaluating it so that as OTs we can (assess) that would carry some weight that at the end of running a period of groups that we had something substantial to be able to evaluate" GR

"I think it's intimidating to start with, and I think it takes practise to be able to do it well, and I think you have your on and off days, you're not going to be perfect therapist. But I mean it can be a really good treatment modality, and it's useful. And I think in our South African context, we have to start considering it, because we have high caseloads. One way or another, OTs out there are dealing with high caseloads." CD

"Innovative ways of using recyclable materials, using maybe, not necessarily adapted assessment stuff, ways of that they could use the assessment in a more effective way" JS

"(we are) considering more a block therapy approach. So, if you have a caseload of 45 kids, maybe seeing twenty of them for the first term and then the next twenty the second term, and then…so alternating every three months" SF

iv. Groups as a treatment modality need to be measurable and have a specific goal as well as an understand of who can benefit from this intervention method.

All of the participants emphasised the importance of having a specific goal in mind for the group. All those interviewed felt that it was important to understand the therapy needs of the child in that setting and design the groups accordingly. Group intervention was not always suitable, for example a child with severe behavioural issues may disrupt the whole group, and a child with significant dyspraxia simply copied the other children and their own praxis skills didn't improve.

"one learner was maybe needing more assistance than the other learners; there's sometimes I found that the learners would feel a bit out, or that the other learners couldn't move on" JS

“I do feel though that often your more very specific groups are the ones that then land up being more successful in those environments. So, your children are identified for very specific goals, such as handwriting, or social skills” GR

“So, I also like it if the groups can be very functional, very specific, because then they can have a very specific outcome, and then it does land up being a very therapeutic process.” GR

“parents also needed to know that there was a time limit for the groups, that it wasn’t going to be endless group therapy but that there was a very specific focus in mind for the group” GR

The results chapter has summarised the findings of both Phase 1 and Phase 2 of the research process and made links between the two phases of the study. There was a high level of positive sentiment around the use of groups as a treatment modality alongside some challenges and caution suggested. Results are placed within various South African School contexts. This will be interpreted in greater detail in the following chapter.

Chapter 5

Discussion

5.1 Introduction

This chapter draws together experiences of school based occupational therapists, literature and global practice around the use of groups in schools and treatment centres by health and education practitioners, merging this information with South African policy, and suggests that occupational therapy groups may be an effective tool in the practise of inclusive education in under-resourced South African primary schools where Occupational Therapy services do not currently exist, providing some substantiation to the research question.

The chapter is broadly arranged according to the themes that emerged as a result of the qualitative research as well as the objectives laid out in the introductory chapter of this research project.

5.2 A description of the current status of occupational therapy services in primary schools

All the occupational therapists who participated in the study had a minimum of an undergraduate degree, but 57% had some form of post graduate training (for example in sensory integration therapy) and 13% of therapists had a master's degree. Of the participants, 51% had more than 10 years of experience as an occupational therapist, and 35% of participants had more than 10 years of experience as a school based therapist. The information gathered indicates that participants in this sample have depth of experience in running school based services. The level of experience of the participants allowed for the collection of valuable data from participants who have a thorough understanding of school based occupational therapy.

Of the survey participants just 33% were employed by a school, and of these only 16% (5 participants) were employed in mainstream / ordinary government schools. This was less than 6% of all the school based occupational therapists who responded. In contrast, 78% of participants delivering services in mainstream primary schools were occupational therapists in private practice. These practices were in both private and government schools, but the cost burden fell on caregivers /

health insurance for services. Government schools that are defined as ‘fee paying’ schools are better resourced than schools defined as ‘non fee paying’ that are completely reliant on government subsidies. The fee paying schools are generally based in wealthier areas and would be where private practitioners would render school based services. As a result, occupational therapy services tended to be offered in better resourced environments to allow a private practitioner to generate an income. In the long run this means that occupational therapy was most accessible to those who could afford it financially, and not necessarily to those who needed it most.

Information obtained from Gauteng Province Department of Education (GDE) indicated that the vast majority of Occupational therapists employed by the department were based at schools for children with special educational needs (LSEN) rather than deployed to mainstream public schools. According to 2018 statistics supplied, 194 of 195 therapists employed within the GDE are based at schools (email communication N Dube February 2019). National statistics were not available, and thus how occupational therapists are employed in education may differ from province to province. Consequently, while therapeutic intervention is described as one of the strategies for implementation of inclusive education in Department of Education policy (Department of Basic Education,2014), there appeared to be poor distribution of therapists in mainstream government primary schools.

Participants were making use of groups to deliver occupational therapy when offering school based services. Of the survey participants, 73% either had previously or were currently delivering group intervention in varying proportions of their total therapy caseload. For the purposes of this research, groups included therapy sessions for 2 or more children simultaneously. The children were participating in a group consisting of group aims and processes, or in simultaneous treatments with individual aims.

Groups were being used to address a number of areas typically addressed by school based Occupational therapists including visual perceptual skills, fine motor skills, social skills and gross motor skills. Participants emphasised that they preferred groups where they were able to have a common aim, though there may be variations

in the abilities of the children performing the groups. Barriers facing school children governed the type of services that were delivered and included a broad range of learning difficulties related to neurological factors, inadequate access to early childhood development and the need for language enrichment. An example of how participants responded to barriers to learning by developing innovative services, was the stimulation groups at one full service and one LSEN school. This facilitated the school readiness skills of children who had not previously accessed early childhood development services. The importance of early childhood development is well researched (Burger, 2010) and this early intervention was reported by participants to reduce the children's barriers to learning as they moved through the school. Thus, groups were responsive to the particular school environment based on needs of the learners addressing a number of functional areas.

Occupational Therapy services were not always accessed by those who need them, and the following section outlines some of the key challenges and barriers to accessing occupational therapy services.

5.3 Challenges to accessing Occupational Therapy

Participants in the study described a number of challenges to children accessing occupational therapy. The three main challenges to delivering services were high caseload, unequal distribution of occupational therapists in the education sector and the costs involved in delivering services.

Participants working in both the private and government sector experienced difficulties with managing a high case load. The study showed that 46% of participants were practising in two or more schools. A number of participants in Phase 1 and Phase 2 of the study indicated that the amount of time available did not allow them to see children individually, or even to see all the children who required their intervention. This was a prevalent factor for the implementation of group based occupational therapy services within the literature. For example, Vertes et al implemented sensory motor groups to replace some traditional sensory integration therapy in order to accommodate more children, and in Camden's study the entire paediatric practice became group based (Camden, Tétreault, & Swaine, 2012; Vertes et al., 2014). Therefore, high caseloads (which are not unique to South Africa) have resulted in therapists looking for alternative methods (such as group therapy) to

allow them to reach a greater number of children or increasing the frequency of a child's contact with occupational therapy services.

The second factor was the unequal distribution of services. Policy developed by the Department of Basic Education notes the importance of including outside (not necessarily based within the school) specialist support. This includes occupational therapists and should be implemented in a co-ordinated way to best support a learner's needs. It should reduce disruption to their learning and social needs and, where possible, be provided at a child's local school (Department of Basic Education, 2009). Data collected indicated that this was happening in some schools but was mostly limited to schools where a private practice could be run. As a result, non-fee paying schools would not be able to benefit from these services. This finding reflects the literature which describes the historically unequal distribution of services throughout South Africa, as services are concentrated in schools where parents have the financial resources to sustain occupational therapy services(Department of Education, 2001). Non fee paying schools would require the assistance of the Department of Education to access state based occupational therapy services. Therefore, the lack of district occupational therapists (supplied by the Department of Education) serving mainstream schools and thus the dependence on private practitioners to deliver services perpetuates this historical imbalance and keeps occupational therapy in fee-paying and private schools.

An additional challenge, also linked to unequal distribution of occupational therapy services, is the number of sectors and agencies providing services for children of school going age. In South Africa there are a number of agencies involved in the delivery of Occupational Therapy services for children with learning disabilities. These services are spread across the health, education and private sector. However, these services are not well integrated to provide seamless care. South African Occupational therapists working in the department of health are limited in terms of what services can be offered to the education sector. Private practitioners are limited by the need to work in communities where an income can be independently generated, and therapists employed by the Department of Education are not sufficiently supported to render district based services. This appears to have resulted in various levels and types of service delivery from area to area. This was supported by research from Canada and the United States. The literature described

a scenario where multi-agency involvement and a lack of specific and implemented policy resulted in services available in various schools and school districts differing significantly depending on the commitment and collaboration shown by those in a specific area. (Villeneuve & Shulha, 2012). Ultimately, poorly integrated or coordinated services results in access to occupational therapy in education being granted only to those who can afford it.

The third significant challenge to accessing Occupational Therapy services in both public and private schools was the cost of delivering services. As described earlier, costs were mostly borne by the parents or caregivers of the individual child receiving services regardless of whether or not they were attending a government or private school. In Daniels' assessment of psychology services within the education sector in the Western Cape, she reported that when extra support was able to be paid for by parents or school governing bodies in mainstream schools, a greater number of children were able to access the support they needed to reduce their learning barriers (Daniels, 2010). The challenge exists to develop a model where this sort of financial support is able to be built into school funding, for example spread between fees levied to parents or subsidies from governing bodies or the Department of Education. This success was described by a Phase 2 participant working at a full service school in Johannesburg. She described that while parents paid school fees, their level of disposable income was low. Her post was funded by the School Governing Body, allowing her to treat children from Grade 1 upwards free of charge. While, indirectly, parents are still paying for the service via their school fees, the load was spread throughout the parent body. Another participant interviewed spoke about a fine motor group in a mainstream public school where the occupational therapist was able to see a portion of the children in the group for no charge, with costs covered by the other attendees.

Participants interviewed suggested that occupational therapy groups could be effectively used as a treatment modality. It would allow those currently rendering most of the school based services in mainstream schools, private practitioners, to offer a quality outreach service in the form of an occupational therapy group to an under-resourced school. Parents would be charged less due to the number of participants in the group, making the service more affordable. In this way, the cost of

occupational therapy services, which present as a significant barrier to accessing services, could be shared and lowered.

In summary, there are a number of factors that affect access to occupational therapy, but there is also evidence to suggest that occupational therapy groups may be one way of mitigating some of the challenges that prevent access.

5.4 Benefits of Occupational Therapy Groups

Of the survey participants, 73 % of participants either had previously, or were currently using groups as a treatment modality and only 27% had never run groups at all. Broadly speaking, the 73% of participants who had group experience felt positive about the impact of using groups as a treatment modality and the infrastructure and support given to them by the school. A number of parents were also positive about the modality and 69% of participants who had run groups agreed that parents were satisfied with the progress their child was making. It must be noted, however, that positive bias may have been introduced into the data, as the participants in this part of the survey were those who had experience running groups. Unfortunately, the instrument did not sufficiently measure the feelings of the 27% of participants who did not run groups, and thus may be less positive about group therapy. Nevertheless, the positive attitude displayed in this study was supported by the findings in the literature, for example by Camden et al who was able to reflect positive experiences by all those involved in occupational therapy groups run in their paediatric practice(Camden et al., 2012). In summary, participants were positive about the use of occupational therapy groups as they were seen to be providing an environment in which a child could make progress.

Participants indicated the importance of progress being measurable in the groups. Entry to occupational therapy groups was still by individual assessment for 66% of participants, and 65% of those running groups were able to demonstrate measurable progress. Participants used either formal reassessment or detailed progress noted to measure this improvement. The ability to demonstrate measurable progress is a strong justifier for the use of occupational therapy groups as a treatment modality.

Therapists are facing high caseloads, and participants expressed turning to groups to manage this case load to good effect. Participants in both phases of the research, indicated that a high caseload was often a primary reason for starting to run groups

or simultaneous treatment sessions. Participants expressed that groups allowed them to see a greater number of children, or even see children with higher frequency. From the survey, participants who were running groups, 77% strongly agreed that groups or simultaneous treatment allowed them to reach a greater number of children. This suggests that group therapy may be an effective way to implement services across a greater number of government schools without over-burdening the service providers. For example, a therapist employed by the Department of Education with a number of schools to service, would be able to manage a higher caseload by using a group format. Alternatively, a private practitioner may be able to include visits to a school that currently does not have an occupational therapist at their disposal. By running a group, they could deliver effective occupational therapy services to sufficient children within a limited time period.

Participants interviewed indicated that even when they as practitioners were not comfortable in the group environment, many of the children felt more comfortable with a group or simultaneous approach and enjoyed the experience of working together. Participants reflected that children liked the feeling of working towards something together, and at times preferred to ask their peer rather than a therapist for guidance. Vertes et al recorded how groups with clients in their occupational therapy practice were in fact initiated after therapists had observed how children were seeking each other out in therapy sessions and encouraging and learning from each other (Vertes et al., 2014). Children have a natural affinity to group work, there is a predictable and almost immediate 'group development process' which would allow them to quickly feel settled in the occupational therapy environment.(Shechtman, 2002).The result of this is that therapy would seem to commence immediately, with less time required to build the therapeutic relationship. In summary, the benefit for the children is that they are happy and thus engaged in the group environment, and the therapist is able to make use of this to facilitate interpersonal learning.

Therapeutic factors, also described as curative factors including interpersonal learning, cohesiveness, universality and the imparting of information were described by participants in both phases of the study as factors that were not achievable when not using a group format. As a result, group therapy was in fact preferable in certain

treatment settings. Comments such as ‘it seems more fun for the children’, or there’s the feeling of ‘being in this together’ were commonly mentioned. The term interpersonal learning was coined by Yalom in his description of group therapeutic factors, initially used to describe psychotherapy groups(Shechtman, 2002). However this has since been seen to take place in occupational therapy groups as well (Falk-Kessler & Momich, 1991). Thus, the positive experience of being part of a group served to motivate the children to work towards their therapy goals.

In addition to groups facilitating interpersonal learning and the positive benefits of peer support and modelling, participants expressed that collective treatment sessions allowed for the facilitation of skills necessary in the classroom, such as concentration in a noisier setting or turn taking. One respondent expressed that it allowed for ‘therapy to be curriculumised’ by providing an occupational therapy session to the whole class within scheduled classroom time, and 60% of survey participants felt that groups allowed them to develop skills necessary in the school and classroom environment. Therapists are able to adapt treatment modalities traditionally used by occupational therapists in an individual treatment setting, such as sensory integration therapy, for a group setting, for example in sensory motor groups. (Vertes et al., 2014). Ultimately this allows for treatment to provide for improvement in both an intrinsic skill, as well as the ability to apply the skill more effectively into the classroom environment.

In summary, while therapists may have started groups for a variety of reasons, their experiences were positive and measurably effective. The school based occupational therapists experience reflect what was discovered in the literature, and in general, they felt this was a treatment modality that could be more broadly utilised in the school based context in South Africa. However, despite the positive response to group therapy, some reservations and challenges were also expressed which need to be understood and are explored below.

5.5 Challenges of Occupational Therapy Groups

Groups are certainly not a panacea for all conditions treated by a school based occupational therapist, and participants in both phases of the research did raise

challenges and negative factors associated with running occupational therapy groups.

While it is a positive factor that children enjoy the group environment, participants expressed that groups can be chaotic and difficult to manage. When running groups, it was not always able to take adequate notes, make sufficient adjustments to the session or evaluate response or progress fully. Shechtman's research indicated the importance of counselling groups having a heterogenous make up to allow for appropriate modelling of behaviour (Shechtman, 2002). However, the opinion of the occupational therapists interviewed was that variations needed to be within measurable parameters in order to reduce management difficulties described above. Participants felt that the greater the variation of treatment needs of the children in the treatment session, the more difficult the session was to manage. If the use of groups is to be considered an effective therapeutic tool when extending occupational therapy services, the management of the heterogenous factors is important.

The most significant limitation of the group modality noted by participants was the difficulty in designing a tailor made assessment and treatment programme for each child. It was even more challenging to implement this, and implementing individual aims was found to be a challenge by 60% of participants. There were certain therapies a child may require, for example Ayres sensory integration therapy, which they felt were not possible to implement in a group setting. Daniel's did express that psychologists had found practitioners found this a challenge in the Western Cape, particularly when their training had been in more reductionistic methods of treatment (Daniels, 2010). It is important to understand that there are limitations when using group intervention, and assessment and treatment protocols may need to be adapted to suit the treatment modality.

Participants interviewed in this study mentioned the importance of being able to measure progress, which required some form of initial assessment, as well as effective recording of progress made during the group sessions. Participants in phase 1 of the study preferred individual assessments, with 66% of participants completing an individual assessment before the child began in a group. Inadequate assessment, or needs that were too broad based, resulted in a child receiving treatment for certain areas of need while other needs are neglected. In analysing the

use of this modality by a district based occupational therapist, the challenge would exist for them to structure a treatment group for children in one school with various educational needs.

Participants also expressed their own limitations in terms of insufficient skill or practise in running treatment groups. This resulted in resistance to implementing group based treatment. Perceived insufficient skill is an important factor for both undergraduate training, as well as continuing education as therapists need to be equipped to offer this kind of treatment. As noted earlier, Daniel's description of the transformation of school psychology services in the metro south region of Cape Town emphasized the importance of embracing innovative ways of delivering services. However, Daniels reported that therapists may experience resistance or themselves resist change in the face of more established practices (Daniels, 2010). The goal of this research was to contribute towards the body of knowledge of research around school based occupational therapy groups. This could assist in the training and development of practitioners who lack skill in running groups.

An interesting point was raised by some participants. They felt a challenge to delivering group based services was that parents who were paying for therapy wanted 'one on one' intervention. Participants, particularly private practitioners, experienced some difficulty initiating and running groups as some parents tended to have a traditional belief that one on one therapy is the only or best therapy. This was reflected by two therapists during the course of the interviews. There was agreement in principle by those interviewed that if parents were adequately educated about how group intervention could benefit their child, they would be more open to the use of groups. This was confirmed by Camden et al's Canadian study where all OT intervention in a particular paediatric practice was moved to a group format. The change was done simultaneously alongside an education programme for parents about the nature of the service. When parents fully understood the process, and observed their child's progress, they were supportive of the group format (Camden et al., 2012). This was also shown in Vertes et al's study involving sensory motor groups, where parents were able to observe the therapy process through one way mirrors and saw the effectiveness of the group based or collective intervention. The inclusion of parents in the therapy process allowed them to understand the benefits of the modality and in this way to change their attitudes towards groups.(Vertes et

al., 2014) Therefore, if group therapy is to be successfully implemented, it is important to convince parents of the effectiveness of the intervention. Working with children at schools is a collaborative effort, and it is important to ensure all stakeholders understand the process being undertaken when commencing occupational therapy.

This chapter has thus far described challenges to accessing occupational therapy services, as well as the positive and negative factors in implementing groups. The following section places in context how implementing services should align with existing policy.

5.6 Implementing Occupational Therapy within existing legislation and policy guidelines.

An important finding from this research is that there has been insufficient systemic implementation of inclusive education policy, and that it appears reliant on individual therapists and school districts.

Participants surveyed who were employed by schools were mostly based at private and public LSEN schools, reflecting the statistics obtained by Gauteng Department of Basic Education. Only 42 % of survey participants were working at mainstream public schools, and these participants were typically running private practices within the school and were therefore only accessible to those learners who could afford services. The information obtained in this study demonstrated the reality of therapists on the ground, versus the goals of the Department of Basic Education as stipulated in policy. It suggested that there has not been a broad shift into accessible district education support services for occupational therapy at schools. In contrast, the implementation of community service years for new graduate occupational therapists in the Department of Health has allowed for health based services to reach previously underserved areas.

Private practitioners might be wary of rendering services at under-resourced (no-fee) schools where there may be no assurance of a secure income. The successful service being run at the full service school by a school governing body (SGB) funded occupational therapist was not reported to be replicated sufficiently throughout school districts. While implementation remains a challenge, the white paper as well as the SIAS policy promotes district and school based support services by a variety

of professionals (Department of Education, 2001, Department of Basic Education, 2014). The policy does not specify groups as the vehicle for service delivery, however it allows for services to be determined according to the needs and resources available in a particular district. Encouraging schools to use this policy as a starting point would allow for private practitioners to branch into the under-resourced public schools while the department of basic education built capacity in support of existing policy.

The importance of gaining the support of all role-players in the school environment was a significant factor in the success of occupational therapy groups. In the survey, 91% of participants felt that the school was supportive of the group services. This opinion was echoed in at least 2 interviews, with therapists indicating that the higher the buy in of management and teachers into the benefits of occupational therapy services, the greater the scope and both the perceived and measurable effectiveness of the service. The importance of collaboration between stakeholders is articulated by the Department of Basic Education. (Department of Basic Education, 2009), as described in the literature review. Greater knowledge by the therapist, teacher and parent populations of the types of occupational therapy services that are both possible and available would allow for greater advocacy in schools when seeking inclusive education for their children.

It was the opinion of all participants interviewed that a system of in-classroom support, combined with group input for those children with a higher level of need, would be a positive start. Engelbrecht, when discussing the changing roles of educational psychologists in an inclusive education system such as is promulgated in South Africa, spoke about how they must now not only be prepared to intervene on an individual level, but also on a systems level in order to implement and evaluate preventative programmes (Engelbrecht, 2004).Daniels noted that a continuing paradigm shift into incorporating inclusive education into the fibre of the school rather than simply an ‘add on’ service is still required(Daniels, 2010). Hence, the role of paraprofessionals in general education services is key to the successful implementation of inclusive education.

Sufficient policy exists to support the use of occupational therapy groups as a method to implement services within primary schools. Therapists should be

encouraged to widen their reach into a greater number of primary schools, in particular those that are ‘non fee paying’ and thus less well resourced. In order to achieve this, therapists should use innovative and appropriate methods to broaden the reach of occupational therapy in the education sector.

5.7 Using Innovation and Best Practice for Implementation of Occupational Therapy

“Our charge, as school-based therapists, is to move towards a vision of client-centred, occupation- based practice. Change is complex and, in some schools, and some organizations there is resistance that constrains our actions and slows our progress. How sad it will be if the constraints come from within us rather than from others” (Beck Ericksen, 2010).

The implementation of occupational therapy groups as a model for intervention in South Africa should incorporate both best and innovative practise

This study finds that occupational therapy groups are a useful treatment modality in school based settings. Their effective implementation as part of the model of inclusive education needs to focus on achievable and innovative practise.

Three key concepts emerged around the development of achievable practises in under-resourced schools in the current South African framework. These included alignment with existing policy (introduced in the previous section), buy in and collaboration with stakeholders in education and a combination of push in (classroom / teacher focused) intervention as well as contact therapy in the form of occupational therapy groups or where necessary individual intervention.

Participants interviewed outlined the importance of providing both supportive services to school as well as providing some direct occupational therapy input with children. They felt supportive services alone were not sufficient, particularly if the model of inclusive education was fully implemented and children with more specialised needs were learning in local schools. Occupational Therapy contact for children was an important part of a support programme as described in the SIAS policy (Department of Basic Education, 2014) and Phase 2 of the survey. All participants interviewed suggested the use of group treatment to provide input into under-resourced schools. Policy exists to justify the implementation of occupational

therapy services throughout primary schools. The guidelines for inclusive learning included information on support programmes, referring to structured interventions delivered at schools. The support programmes would mainly consist of curriculum support but could also be support for educators and managers. This could include consultation, training, mentoring and therapeutic intervention as well as physical and material resources.(Draft Guidelines for Inclusive Learning Programmes, 2005, (Department of Basic Education, 2014))). By using a combination of contact in the form of occupational therapy groups, as well as support within the classroom setting, therapists would contribute towards the policy objectives of providing quality inclusive education.

Participants interviewed all expressed the importance of buy in from school management, class teachers and parents when implementing Occupational Therapy services. This echoes the position of the Department of Basic Education who state "The principal and his/her School Management Team should have an unwavering belief in the value of inclusive schooling and considerable knowledge and skills for translating the concept into practice"(Department of Basic Education, 2009).Logistically, it can be difficult to implement groups giving the many competing activities in a school day, as described by Jaycox in terms of the implementation of psychology groups (Jaycox, 2010). Jaycox reported on the challenge of placing additional demands on the school day and mentioned the challenge of implementing counselling groups when children were absent or busy with other activities. Therefore, if the therapist has a strong relationship with stakeholders, it would be easier to collaboratively plan services. Teachers also play a key role in the process as expanded below.

The importance of building relationships with teachers was emphasised by participants as an important facet of services offered. When teachers have a good understanding of the role of occupational therapy, they are able to appropriately refer, and 41% of survey participants reported that they would enrol a child in an occupational therapy group of the basis of a teacher or colleague's referral. Vertes et al suggested that teachers have an opportunity to observe occupational therapy services as a way of developing their understanding of the importance of the service(Vertes et al., 2014) The rendering of school based occupational therapy services needs to be done in a collaborative fashion with all stakeholders in

education, as this ensures that these role-players understand the goals and methods of the occupational therapy service (Villeneuve & Shulha, 2012). It would both result in greater support for the occupational therapy programme as well as allow occupational therapy services to be more responsive to the needs of a particular environment.

An example of how occupational therapy services which are responsive to the specific needs of a community were noted in 2 interviews, where participants had started groups for learners who were either young for the grade or had inadequate exposure to early childhood development services. 'Stimulation groups' were implemented with these groups of children which had enhanced their ability to cope once integrated into the more formal school curriculum (typically Grade 1). It is thus clear that effective collaboration will allow for an effective occupational therapy service that will be of greatest benefit to the children who need them.

Participants spoke about the importance of developing integrated occupational therapy services. Groups on their own were not felt to be sufficient for the school based Occupational therapist, but rather a part of a total school service. Push in services, where the therapist is able to assist the teacher in the classroom with assistive devices, handling skills or even in-classroom intervention was felt to be important in addition to the use of group based treatments. Previous research in South Africa, on the African continent and also in the US have noted how the success of inclusive education relies on support given to teachers, and that teachers rely on support from occupational therapists to assist children with barriers to learning to achieve task independence (Long, 2003, Arbeiter & Hartley, 2010). By offering a broad service consisting of both push in as well as pull out (contact) services, the influence and benefit of occupational therapy will be more wide ranging. This would also ensure that the challenges children face in overcoming learning difficulties would be more comprehensively, and thus more effectively addressed.

5.8 Conclusion

Occupational Therapy services, and more broadly inclusive education are vulnerable to the same challenges facing the education system in South Africa, including insufficient resources and inadequately trained teachers and administrators (Department of Basic Education, 2014). The opinion of all interviewees was that

occupational therapy groups were an important way to initiate a service at an under-resourced and underserviced school, and that this needed to be done in conjunction with providing appropriate support to teachers and schools to facilitate the provision of inclusive education

This chapter has explored how occupational therapy groups are and could be used in mainstream school environments, and in many ways can offer more benefit than the traditional ‘pull out, individual’ therapy. It also highlights the facts that groups would form part of a total package of occupational therapy services, which in turn would promote the implementation of effective inclusive education services throughout South Africa.

5.9 Limitations of the Study

As around 73% of the participants either are currently or have previously run groups, bias may have been introduced. While the research included data from therapists who had elected not to run groups it is thought that participants may have been persuaded to click on the survey link as this was a field that was interesting or relevant to them in reading the title. It would be important for further research to establish the type of occupational therapy services in under-resourced (no-fee or in poorer areas) schools in a representative sample of education districts.

It proved difficult to obtain sufficient data from therapists working in mainstream schools employed in the Department of Education. This may be because they are few and far between as described in detail in the discussion. However, it may also be that they do not belong to the professional body Occupational Therapy association of South Africa (OTASA) through whom the survey was disseminated.

All participants interviewed for this study were working in urban areas where services are historically more accessible, and this reflects the legacy of the apartheid era where resources are focused in urban / suburban schools. A limitation of the survey conducted, was that it did not collect sufficient information from participants as to whether they were living in an urban or rural environment where both services required and resources available may be quite different.

The study allowed a broad definition for group treatment. There is a difference between simultaneous treatment and group treatment, and further study into this

area which may include pilot groups would need to be specific about which treatment modality was being measured.

It would have been beneficial to be more thorough in the development of the survey for Phase 1, in terms of the development of the questions as well as piloting it with a broader group of people. On data analysis, it was felt more information in certain of the areas would have provided greater insight into the types of groups run, and the clinical and pragmatic reasons for running groups.

Chapter 6
Conclusion

6.1 Summary of Research

The results of this research indicated that groups were being used for numerous types of intervention by Occupational therapists in school based settings to varying degrees of success. Additional findings were that that school based services in mainstream schools were largely being rendered by occupational therapists in private practice. There is a need to develop services in alignment with legislation and advocate for the effective implementation of occupational therapy services within the inclusive education in South Africa. Findings drew attention to the fact that existing policies on inclusive education are not being broadly implemented, but that individual schools and therapists are using innovative service delivery methods, including groups as a way of meeting the therapeutic needs of a broader group of learners. Occupational Therapists formed a key part of educational support for children who may experience learning difficulties of a motor, perceptual, sensory or social nature.

While this research looked at Occupational Therapy groups within primary schools, it is important to acknowledge the broader context within which this research finds itself. Effective education, which involves first minimising barriers to learning by providing a broad range of effective and inclusive services has been seen as an important marker in the reduction of poverty, and the relationship between education and decreasing levels of poverty is well established. (Awan et al, 2011). The results acknowledged the existence and impact of barriers to learning, the development but poor implementation of inclusive education and the challenge of ensuring broader access to occupational therapy services. The research described the use of groups as an effective method for delivering school based services in various settings.

The study set out to describe the current use of occupational therapy groups within the South African primary school population and establish whether groups were a variable treatment modality to extend services to under-served schools particularly those in poorer areas.

The results obtained in this study have described the use of occupational therapy groups in a variety of school based settings. It has found that there are challenges to accessing occupational therapy within mainstream government primary schools due to high caseloads, unequal distribution of occupational therapists in the education sector and the cost of delivering services. There is also insufficient implementation of inclusive education despite extensive legislation and policy.

It has found that the use of occupational therapy groups in the school based setting allows for management of the some of the challenges highlighted. In addition, there are further key benefits to using groups. This includes children making measurable progress in skill acquisition, the use of curative group factors and the ability to better imitate the classroom setting.

The study also highlighted challenges involved in running a group based service, including the management of children with a variety of needs and ability levels, the skill required of the therapist and the ability to implement tailor made therapy programmes.

The study has highlighted existing legislation, policy and practise guidelines and indicated how this is being implemented at school based level. The benefits of occupational therapy groups to learners, teachers and therapists has been described in addition to some of the challenges involved.

6.2 Recommendations for future research

With the roll out of the National Health Insurance as well as ongoing policy development and implementation in the Department of Education, it is essential that occupational therapists are at the forefront of the implementation of services for children with learning difficulties.

Further research would definitely need to include greater collaboration with the Department of Basic Education. The implementation of both inclusive education and occupational therapy services may vary significantly from province to province and as was seen in this study, even between education districts and schools. Further research would potentially include pilot sites where group and push in services were offered and measured similar to research done by physiotherapists (Brenner, 2008) and psychology services (Daniels, 2010). The research has highlighted a need for

greater investigation into the reach of occupational therapy services into under resourced schools. The researcher needs to form links with therapists and administrators within the Department of Education to fully understand plans for the roll out of district based support teams and occupational therapy services within mainstream public school.

While perceptions of the benefits and challenges of groups as a treatment modality have been described, it would be necessary to run some pilot groups in target schools (under-resourced mainstream public schools) within the structure of the existing district based support teams, and measure the outcomes achieved by the learners as well as the experience of teaching and management staff of the occupational therapy intervention.

While this study explores the use of groups by current therapists on the ground, the focus of future research emanating from this study will obtain a deeper understanding of occupational therapy services throughout the education sector in South Africa

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Appendices

Appendix 1

Appendix 1 – Survey for Phase 1 of Research

Please note some formatting has changed due to transfer from the RedCap system to a Word document

The use of groups by school based OTs

Good day,

I, Sue Dacre, am doing research on the use of groups as a treatment modality in primary school settings. I am exploring and describing the current use of groups by School Based Occupational Therapists, with a view to developing and expanding effective use of group work as one method of expanding OT services to underserved primary school contexts.

I invite you to participate in Phase 1 of the research, by completing the survey below.

Please complete the survey if you are an Occupational Therapist working with the paediatric population, either part or full time in a school based setting.

The survey should not take more than 5 to 10 minutes to complete.

Phase 2 of my research involves expanding on information obtained through the survey via interviews. If you would be willing to be interviewed for the second part of this research project, please insert your email address in the space provided at the end of the survey. This will not affect the confidentiality of your survey information. Thank you!

Please state your highest completed qualification:	○ Undergraduate ○ Postgraduate qualification (SI, NDT, postgraduate diploma) ○ Masters ○ Doctorate
How many years of experience do you have as an Occupational Therapist?	○ 1 to 3 years ○ 3 to 5 years ○ 5 to 10 years ○ More than 10 years
How many years of experience do you have as a school based occupational therapist?	○ 1 to 3 years ○ 3 to 5 years ○ 5 to 10 years ○ More than 10 years (Does not need to be full time)
What is your current / previous involvement as a school based therapist?	☐ Run a private practise within ONE school based setting ☐ Run a private practise within TWO or MORE school based settings ☐ Employed by a school (involvement can be full or part time, more than one option can be selected)

Please select the category of school where you do the majority of your work	☐ Public(government) mainstream school ☐ Private mainstream school ☐ Public LSEN school ☐ Private LSEN school ☐ Other (more than one can be selected)
Please specify	_____
Do you currently run groups with 3 or more children as part of your therapy approach (this can include cluster / simultaneous treatment)	○ Yes ○ No
Have you previously run groups with 3 or more children as part of your therapy approach (this can include cluster/simultaneous treatment?	○ Yes ○ No
Have you considered running groups, and chosen not to, or been prevented from doing so?	○ Yes ○ No
Please give reasons for this choice	_____

Please indicate the grade level of the children you run / have run groups with	☐ Preschool ☐ Gr R - 1 ☐ Gr1 - 3 ☐ Intermediate Phase ☐ Other (more than one can be selected)
Please specify	_____
What areas of intervention did you address during your groups?	☐ Visual Perceptual Skills ☐ Gross Motor Skills ☐ Fine Motor Skills ☐ Sensory Processing and Modulation ☐ Occupational Performance ☐ Social Skills ☐ Other (more than one can be selected)
Please specify	_

Experiences Running Groups

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
I was able to provide treatment to a larger number of children requiring OT	X	X	X	X	X
Facilities at the school were adequate for providing group intervention	X	X	X	X	X
The groups facilitated carryover within the classroom due to factors such as concentration and collaboration being addressed	X	X	X	X	X
The school is / was supportive of the OT groups	X	X	X	X	X
The parents were satisfied with the level of intervention given to my child	X	X	X	X	X
Children made measurable progress	x	x	x	x	X

How are children selected for / referred to the groups?

Children are individually assessed or screened by an OT before entering groups	X
Children are referred by class teacher or other professional to a particular group	X
Children receive individual therapy prior to or while attending groups (more than one can be selected)	X

What was your reason for using occupational therapy groups and / or simultaneous treatment	☐ Relevant to occupational therapy aims ☐ Reduce therapy cost for parents ☐ Allow greater number of children to receive occupational therapy within a specified time period ☐ Reduce disruption to class teacher ☐ Other (more than one option can be selected)
Please specify	_____
Any further comments	_____

If you are willing to be contacted for a follow up interview (whether you have or haven't run groups), please provide an email address below

_____

Appendix 2 – Invitation to participate in survey via RedCap

Subject: Invitation to participate in a study on the use of Groups as a Treatment Modality in Schools

Dear School Based Occupational Therapist

I, Sue Dacre, am doing research on the use of groups as a treatment modality in primary school settings. I am exploring and describing the current use of groups by School Based Occupational Therapists, with a view to developing and expanding effective use of group work as one method of expanding OT services to underserviced primary school contexts. This forms part of my MSc (OT) at the University of Witwatersrand

I am inviting you to participate in Phase 1 of the research, by completing the survey attached in the link below.

https://redcap.core.wits.ac.za/redcap/surveys/?s=A7LMLC3L7D

Please complete the survey if you are an Occupational Therapist ***working with the paediatric population***, either **part or full time *in a school based setting***. You do NOT need to be running groups to participate.

The survey should not take more than 5 to 10 minutes to complete and is done via RedCap. The survey includes demographic information as well as some scale questions which measure your experiences as a school based therapist.

Phase 2 of my research involves expanding on information obtained through the survey via **interviews**. If you are a **school based occupational therapist** involved in a primary school, and you would be willing to be interviewed for the second part of

this research project, please insert your email address in the space provided at the end of the survey. This will not affect the confidentiality of your survey information.

All information will be treated confidentially, no identifying information will be used when analysing or presenting the data. All identifying links, such as email addresses will be removed, and codes will be used to represent potentially identifiable information.

There are no perceived risks, and there is no compensation involved for your participation.
You are, however, contributing towards the body of Occupational Therapy knowledge in South Africa, which in turns grows and strengthens the contribution the profession is able to make towards the development of school -based services. On request, results of the research will be shared with the participant.

Ethics clearance has been obtained, clearance number M170904

Researcher Contact Details

Susan Dacre
Currently registered for MSc (OT) degree at Wits, School Based Private Practice Owner
asdacre@mweb.co.za
0836514410

Supervisor Contact Details

Lyndsay Koch

Lyndsay.koch@wits.ac.za

Appendix 3 – Consent for Interview and Audio recording

The Use of Groups as an Occupational Therapy Treatment Modality with Primary School Learners

Thank You for agreeing to participate in the above-mentioned study by means of an interview

I am doing research on the use of groups as a treatment modality in primary school settings. I am exploring and describing the current use of groups by School Based Occupational Therapists, with a view to developing a practice framework for group practice, as one method of expanding OT services to underserviced primary school contexts.

I request your participation in this semi structured interview, as you fulfil the study's inclusion criteria of having experience in a school based setting, and are either running, have run, have chosen not to run, or have been prevented from running groups within the primary school context. This is phase 2, the qualitative portion of a 2 phase research project.

Your participation involves an interview, with follow up verification of the concepts gleaned from the survey. Questions will involve description of the services offered at your school based service, as well as your experience of the effectiveness of group practices within primary schools.

The interview should take approximately 1 to 1 ½ hours. The interview will be audio-recorded for transcription purposes.

I will supply you with the results of the interviews, as well as recommendations that emerge from the study.

There are no perceived risks, and there is no compensation involved for your participation.

You are, however, contributing towards the body of Occupational Therapy knowledge in South Africa, which in turns grows and strengthens the contribution the profession can make towards the development of school based services.

Please note that your participation is voluntary, and you may at any time stop the interview, or refuse to answer or elaborate on a particular question. You may, at any time following the interview, request that your input is withdrawn from the research data.

While absolute anonymity cannot be guaranteed, every effort will be made to maintain confidentiality. No names will be used, and the only identifying data would be the type of school you are involved with. You will be identified by use of a pseudonym. Audio recording will be stored in a password encrypted file.

For any ethical concerns please contact the chairperson of the Human Research Ethics Committee at the University of Witwatersrand, Prof P Cleaton-Jones at peter.cleaton-jones@wits.ac.zaContact details for the administrative offices: Ms. Z Ndlovu/ Mr RhulaniMkansi/ Mr Lebo Moeng, Tel: 011 717 2700/2656/1234/1252, or email: Zanele.ndlovu@wits.ac.za; Rhulani.mkansi@wits.ac.za; Lebo.moeng@wits.ac.za

Researcher Contact Details

Susan Dacre

Currently registered for MSc (OT) degree, School Based Private Practice Owner

asdacre@mweb.co.za

0836514410

Supervisor Contact Details

Lyndsay Koch

Lyndsay.koch@wits.ac.za

I confirm that I have read, and understand the above information, and consent to be interviewed by Susan Dacre for the purpose of the above study. I understand that I will not be identified in the study, and that I may at any time withdraw from the process

……..	……..
Signature of participant	Signature of Researcher
……..	……..
Name of Participant	Name of Researcher
……..	……..
Date	Date

I understand that by participating in this semi-structured interview, that an audio-recording will be made of the interview for purposes of accurate recording and transcription.

This recording will only be listened to by the interviewer and transcription service and will be stored in an encrypted file following the interview. I may elect to withdraw from participation at any time during the interview, and may also request that the audio recording is not used following the interview

…….	…….
Participant Name	Researcher Name
…….	…….
Participant Signature	Researcher Signature
Date	Date

Appendix 4 – Questions prepared for semi structured interview

Interview Questions (as this is a semi structured interview, questions will be expanded on as necessary. Some questions may not be necessary / appropriate to ask

1. *Please describe the school/s that you work at*
2. *Please explain what services you offer that the schools you work at (including in classroom work, talks, individual and group therapy, school readiness assessments)*
3. *If you have stopped running groups, or have chosen not to run groups, please explain why you came to that decision*
4. *Tell me about the groups that you currently running or have previously run*
5. *Describe the relationship you have with the teaching / support staff, particularly with regards to the OT services.*
6. *What is your opinion about the effectiveness of the groups you have run?*
7. *How have you measured the progress of the children who attend your groups*
8. *Can you describe what you believe to be benefits of running groups with children requiring OT*
9. *Can you describe what you believe to be some of the challenges of running groups, and what challenges have you experienced*

Appendix 5 – Ethics Approval

R14/49 Ms S Dacre

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M170904

NAME: (Principal Investigator)	Ms S Dacre
DEPARTMENT:	School of Therapeutic Sciences Department of Occupational Therapy Medical School
PROJECT TITLE:	The use of groups as a treatment modality within primary school learners
DATE CONSIDERED:	29/09/2017
DECISION:	Approved conditionally
CONDITIONS:	Please add to the Information Sheets for both phases of the study that a participant may withdraw at any time, without consequence & without giving a reason
SUPERVISOR:	Ms L Koch
APPROVED BY:	Professor PE Cleaton-Jones, Chairperson, HREC (Medical)
DATE OF APPROVAL:	22/11/2017

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary on 3rd floor, Phillip V Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.
I/We fully understand the conditions under which I am/we are authorised to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to resubmit to the Committee. **I agree to submit a yearly progress report**. The date for annual re-certification will be one year after the date of convened meeting where the study was initially reviewed. In this case, the study was initially reviewed in **September** and will therefore be due in the month of **September** each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature _____ Date _____

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix 6 – Plagiarism Form



UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

FACULTY OF HEALTH SCIENCES

PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

SENATE PLAGIARISM POLICY: APPENDIX ONE

I Susan Dacre (Student number: K0514227) am a student registered for the degree of MSc (OT) in the academic year 2019

I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.
- I have included as an appendix a report from "Turnitin" (or other approved plagiarism detection) software indicating the level of plagiarism in my research document.

Signature: Susan Dacre Date: 7/6/2019

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