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INCLUSIVE EDUCATION IN GABORONE, BOTSWANA: TEACHERS' PERCEPTIONS, CHALLENGES AND THE ACCESS TO OCCUPATIONAL THERAPY IN MAINSTREAM SCHOOLS WITH LEARNERS WITH SPECIAL NEEDS

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UNIVERSITY

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

Johannesburg, 2020

DECLARATION

I, Jessica Makonyango, declare that this research report is my own unaided work. It is being submitted for the degree of Master of Science in Occupational Therapy at the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.



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Jessica Makonyango

20 November 2020

DEDICATION

To primary school teachers, who go out of their way to help learners with special educational needs. Your efforts do not go unnoticed.

ABSTRACT

This study aimed at exploring access to occupational therapy in mainstream schools with learners with special needs, the perceptions of teachers towards occupational therapy and the challenges faced by teachers in inclusive education. A descriptive qualitative method was used through an exploratory design, with the use of a focus group, including grade one, two and three teachers of public schools in Gaborone, Botswana, with a minimum of five year experience of teaching learners with special needs.

Findings of the results were discussed in three main themes, which were later discussed in sub themes: roles of occupational therapists in schools (Unknown resource and form of support, misconceptions regarding the role of occupational therapy, and teachers attempting to fulfil the roles of occupational therapists) challenges of inclusive education (Integration versus segregation, dysfunctional systems, physical inaccessibility, learning inaccessibility, and poor use of available resources) and feelings of teachers towards inclusive education (being unskilled, unsupported, under-resourced, uninformed and overwhelmed).

Inclusive education system in Gaborone still has a long way to go due to the poor functioning systems in place, high teacher student ratio, minimal support and resources availed to teachers, learners with special needs and parents, in order to ensure a successful system. There is a lack of implementation of the facilitators of inclusive education; with little knowledge on the roles of occupational therapists is a by teachers in government schools, and their roles on managing the challenges faced in inclusive education.

Occupational therapists in Botswana at large need to get more involved in creating awareness of their contributions in the education systems, and how effective these contributions are in trying to solve the challenges in the inclusive education system. Creation of awareness needs to especially begin with stakeholders.

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DEFINITIONS

Inclusive education

A system of education guided by the social model of disability which aims at changing the environment in which people with disability live in. It also looks at impairment as not being a barrier, rather considering and removing the negative attitudes and environmental and physical barriers. (Croussette, 2016)

A system that ensures the needs of all is met, regardless of life circumstances, gender health, disability stage of development, capacity to learn, level of achievement, financial and any other circumstances. (Ministry of Education and Skills Development, 2011)

Integration versus Inclusion

Inclusion focuses on the capabilities and the capacities of individual students to ensure participation rather than being integrated. Integration on the other hand looks at the learner fitting into the classroom, with focus being on the learner's deficits. Inclusion focuses on cooperation rather than competition, with learning being based on skills rather than content. In inclusion, learning is based on procedures rather than results. (Thomas, et al., 2006)

Types of education

A traditional education is a type of education that has set standards, promotes competition among learners in 'Preparation for the real world'. (Ciobanu, 2017) Special education is meant for learners who have delayed global developmental milestones in comparison to their peers in mainstream schools. Inclusive education means that all learners have access to quality education, and integrated education means that learners with special needs are included in ordinary mainstream schools/classes with their peers, but not much consideration is put towards their needs or capabilities. (Ciobanu, 2017)

Individualised education programme

The written plan of a learner's problem areas, the need for specific services such as occupational therapy, goals, objectives and a lay down on how the objectives will be achieved, together with frequency. (Case-Smith & O'Brien, 2010)

Multidisciplinary team

A group of professionals that from various disciplines providing learners with special educational needs related to the education and the school environment. These needs are determined by each learner's individualised educational plan, type and severity of their disabilities. (Case-Smith & O'Brien, 2010)

ABBREVIATIONS

CRC	: Central Resource Centre
GDP	: Gross Domestic Product
IEP	: Individualised Educational Programme
LSENs	: Learners with Special Educational Needs
LD	: Learning difficulty or disability
UNESCO	: United Nations educational, social and cultural organisation

CHAPTER 1: INTRODUCTION

1.1 Introduction to the study

Education of learners with special needs in Botswana dates back to 40 years ago, with educating learners with visual and hearing impairments by Dutch missionaries who came to Botswana and opened schools in 1969 and 1970. (Government of Botswana, 1977) Since the emergence of inclusive education policy in Botswana in 2011, (Ministry of Education and Skills Development, 2011) learners with different special needs: physical disabilities, intellectual disabilities and learning difficulties, have been able to attend mainstream schools. However, there is still a challenge of placing these learners successfully in schools that accommodate for their specific needs. While a high number of children living with disability are being placed in special units, special schools or prevocational training centres, with the capacity in terms of resources and being well equipped with knowledge to manage their specific needs, these centres are unable to accommodate all children with disabilities throughout the country. Inclusive education can be described as the education of learners with disabilities or special needs in a normal mainstream class set-up. (Bryant, et al., 2008) The inclusive education policy's goals are aimed at ensuring all citizens of Botswana, including people with special needs equal educational opportunities, early identification and intervention of learners with special need with a plan of early preparation for integration in to the society and ensuring that there is active support to the family and the caregivers and community at large through awareness campaigns. (Ministry of Education and Skills Development, 2011) However, this policy has not been formally legislated in Botswana, and therefore learners with

physical disabilities who have not been placed in appropriate centres, are accessing mainstream facilities. This, according to a previous study done, is because the government of Botswana and other stakeholders have not been able to come to a common understanding of inclusive education in the country's context. (Mukhopadhyay, 2009) Learners are therefore at a disadvantage because these mainstream facilities are not always suitable to optimise their learning experiences, due to the learning and accessibility challenges they face, and also due to limited awareness on matters of inclusive education. A previous research was carried out in Botswana to determine whether the vision 2016 of increasing access to education also included the learners with disabilities. The results revealed that many regular teachers in Botswana felt unprepared and fearful to work with learners with disabilities in mainstream classes. (Chhabra & SrivastavaIshaan, 2009) There has since been no further research done to identify whether other professionals, like occupational therapists, have raised awareness to ensure teachers in mainstream facilities know how to individually meet the needs of learners with learning difficulties and physical limitations in Botswana.

Occupational therapists play an important role in successful inclusive education, by supporting the teachers as well as the learners with special educational needs (LSENs).

School-based occupational therapists aim at facilitating the integration of learners with disabilities or special needs into mainstream classrooms by adapting and modifying the learner's physical environment, advising on adaptations to the delivery of the curriculum, addressing behavioural and sensory problems and assisting the learner and teacher in development of coping strategies to ensure that these learners manage successfully in the classroom, despite their disabilities. (Smith, 2013) Previous studies carried out in

various countries have shown different perceptions of teachers on the roles of occupational therapists in helping learners with special needs. While teachers regard occupational therapy to be important in schools, most teachers were not clear of the specific roles, and how they collaborated with teachers. (Anderson, et al., 2012) This meant that the types of learners referred were limited to needs like fine motor skills, handwriting, and occupational components. (Fairbairn & Davidson, 1993)

In Botswana, it is not clear whether teachers have these similar perceptions in Botswana or whether they are aware of the available services of occupational therapy no research for this specific context could be sourced.

1.2 Statement of the problem

School-based occupational therapists work with LSENs in developing competence in academic tasks. According to Engelbrecht and Green (2007) the occupational therapists should enable the teachers to be the primary role players in the classroom by assisting them to include and accommodate learners with disabilities so all learners' needs are best met in their classroom. (Engelbrecht & Green, 2007) From the researcher's professional experience, when assessing learners in mainstream schools who had been deemed as 'learners with learning difficulties/learning disabilities' by teachers, there seems to be limited understanding regarding the roles occupational therapists played in mainstream schools and inclusive education. The researcher experienced in the past few years that several LSENs have not been privileged to go through early identification and intervention, leading to them being referred to occupational therapy too late in their school careers, and this limited the opportunities for improvement, as earlier referral would have increased the time for adequate intervention and management of the learner's

dysfunctions, to enable them to optimise their academic performance. The lack of teachers' awareness of the role of occupational therapy, the referral process and their ability to access occupational therapy services, has therefore had a negative impact on the LSENs to reach their potential in mainstream schools. The researcher was therefore interested in understanding the perception teachers on occupational therapy, whether the LSENs were being referred for early intervention and assistance. (Benson, et al., 2016)

1.3 Purpose of the study

The purpose of this study was to facilitate a better understanding of teacher's perceptions regarding the role of occupational therapists in inclusive education. Once the perceptions have been explored, it will guide occupational therapists in developing services in Gaborone, Botswana, that are user-friendly and suitable to the population of LSENs in this city and elsewhere.

1.4 Research question

What are the teachers' perceptions of inclusive education and the challenges they face in mainstream schools with LSENs?

What do teachers understand regarding the role of the school-based occupational therapists in the context of inclusive education, and how accessible is the services in Gaborone, Botswana?

1.5 Aim of the study

The aim of the study was to explore the teachers' perceptions of inclusive education and the challenges they face in mainstream schools with LSENs.

The second aim was to explore the teachers' understanding regarding the role of the school-based occupational therapists and how are they accessing the services in the inclusive education context in Gaborone, Botswana.

1.6 Objectives for the study

1.6.1 To explore the teachers' perceptions of inclusive education in mainstream primary schools in Gaborone, Botswana.

1.6.2 To explore the challenges teachers face in the education of LSENs in mainstream primary schools in Gaborone, Botswana.

1.6.3 To explore the teachers' perceptions on the role of the occupational therapists in the inclusive education context and the access and referral of LSENs to occupational therapy services in Gaborone, Botswana.

1.7 Justification for the study

Appropriate and adequate support of teachers would not only enable them to successfully manage and teach learners who had special needs, but it would also allow them to feel equipped and empowered. Children with disabilities also deserve a bright future, and therefore better equipping of teachers and use of occupational therapy services would ensure that they rise above their challenges. Information regarding the challenges faced by teachers who educate LSENs and their use of occupational therapy services is lacking in the context of Gaborone, Botswana. This study would add to the body of knowledge

not only in this country but would be of value to similar African countries and education systems where occupational therapy services are accessed.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction to literature review

This literature review gives a brief history and world view of inclusive education, barriers, and facilitators, ideal occupational therapy practice in schools, teachers' perceptions and solutions for barriers faced in inclusive education.

2.2 Introduction to inclusive education

The process of inclusive education allows both learners with disabilities or special needs and those without disabilities to learn and gain experience from each other and to be exposed to opportunities for social and language development. The need for including LSENs in the mainstream schools has increased over the years due to issues of equity, civil rights, increased knowledge and awareness of parents, availability of technology and change in attitudes for both parents and teachers. Most countries still do not have a proper system in place that allow collaboration between the education and inclusive education system. (CERI, 1999) Inclusive education is defined as allowing LSENs to be placed in the same class as their peers, with the provision of all the necessary support to ensure adequate learning takes place. (Rainforth & York-Barr, 1997) LSENs can be defined as children living with disabilities, those with severe learning difficulties or behaviour. (Prigg, 2002) For the LSENs, the aim is for the learner to benefit individually from their educational experience, and not try to keep up with peers without special needs. (Ajuwon, 2008) Interaction of LSENs in a class with their peers who do not have special needs is important because it moulds their social and academic behaviour. Due to different cultural circumstances and local backgrounds in different countries and regions, inclusive

education cannot have similar definitions or policies. It should however encompass similar realistic features, which are threefold. (Ainscow, 2005) Firstly, inclusive education should target groups of learners who are highly likely to be marginalised, excluded or under achievers, by ensuring that these high-risk learners receive at most opportunities in a conducive environment. (Ainscow, 2005) Secondly, it is an ongoing process that involves identifying and eliminating barriers through evaluation and planning which can be used to improve and design policies. (Ainscow, 2005) And lastly, inclusion should encompass a learner's existence; optimise participation and success in the environment which should not only be measured through examinations, but holistically. (Ainscow, 2005)

A school system's ability to embrace a culture that accommodates each student's capabilities and limitations, and the willingness to review the type of service delivery offered in order to explore each child's capability, is one of the pillars of inclusive education in a school. (Lupton & Jones, 2002) The United Nations educational, social and cultural organisation (UNESCO) describes inclusive education as all learning centres being open to all learners by identifying and removing barriers, changing school systems and training teachers in order to accommodate all learners with the potential to achieve academically. It also describes integration as LSENs attending mainstream schools that have very few changes made to accommodate their needs, hence them having to adapt to the environment. (United Nations Educational Scientific and Cultural Organization, 2001) Inclusive education does not only entail how LSENs can be accommodated in a mainstream school. It also includes governing authorities coming together and forming statutes that have a common ground that supports inclusion. Laws, policies and acts should be put in place to support this technical process. (OECD, 1999) An inclusive

environment should also be a safe environment for all learners, free from bullying, and segregation with regards to race, culture, religious beliefs, ethnicity and disability status. Policies that protect children and disability should also be adhered to in order to protect all learners' interests. (Agbenyega, 2006) In developed countries, policies protecting LSENs in society and integration into schools have been in place for over 25 years. (Pivik, et al., 2016) For example, in Canada, school managers are mandated by the education act to acquire special education programmes for learners with "exceptionalities". (Pivik, et al., 2016)

When distinguishing between inclusion and integration/mainstreaming, the education white paper six of South Africa describes inclusion as being able to acknowledge and respect the differences amongst all learners and focusing on their similarities, supporting both learners and, educators and the system in order to ensure that the whole process guides towards the academic success of learners. It also describes inclusion as being able to identify barriers and challenges the LSENs face and working towards elimination of these challenges through adaptation and support. (Department of Education, 2001) In Botswana however, the inclusive education policy does not go in detail into such descriptions.

Inclusion enables children to be more willing to attend school, participate in activities and to become more independent. Research shows that most LSENs develop some level of improvement in basic math when placed in mainstream settings. These successes have been measured by teachers through individual educational programmes, data collection and informal assessments such as observations. (Downing & Peckham-Hardin, 2007) Mainstream education students who are functioning at a lower level would also benefit

from special activities to improve their independence in all areas of functioning. Children without any limitations or learning difficulties also become culturally accepting, helpful and tolerant towards their peers with special needs in the inclusive setup or everyday life. Learners without disabilities or special needs also benefited being education with their peers with special needs by acquiring new skills such as sign language, gaining empathy and nurturing tolerance. (Hammon & Allen, 1996) They also gain motivators, supporters and "conversational partners". Learners specifically with moderate to severe disabilities learn mainly through exposure to the curriculum, even though comprehensive knowledge and mastery of subjects might not be a priority. Even though the benefits of inclusive education are clear when considering the learners with and without special needs, some studies have shown that teachers, parents and other stakeholders seem to have a fear of inclusion at a higher education level or in other areas of life, such as the workplace, at home and in the community. (Downing & Peckham-Hardin, 2007)

The ideal mainstream programme focuses mainly on academics, where the learner with special needs attends a normal class for only a few hours during the day, depending on the learner's ability to perform in a general educational environment. For the other hours of the learner's day in school, he/she is placed in a special educational setting. Inclusive education on the other hand, focuses on both academic and social goals, with the learner being placed in a general classroom setting. South Africa's white paper 6, in defining inclusive education and the support required for learners, has stipulated three categories. One is the mainstream schools, in which learners who need the minimum support are placed. Second are the full-service schools in which learners that require moderate help are placed. The special schools are schools specifically for learners who require full

support. With this type of categorisation, all learners with diverse needs should ultimately end up in the right place where appropriate assistance is given. (Anderson, et al., 2012)

2.3 Inclusive education in Botswana

Botswana is one of the countries in the southern part of Africa with a size of 582,00sq km, with an approximate population of two point three million people. The country's official languages are Setswana and English. In the recent years, Botswana has been considered a middle-income country whose economic growth is steady. This is due to its high Gross Domestic Product (GDP), which is also considered one of the highest in Africa. (Common Wealth, 2013).

The first formal commitment by the Botswana government towards special education was seen when the government moved special education unit into its own department in 1984. (Ministry of Education, 2000) Special education in Botswana includes catering for learners with intellectual impairment, physical impairment, visual, hearing and mental impairment, for the purposes of early identification and social inclusion, apart from education. (Ministry of Education, 2000) It however does not include talented and gifted learners.

The government's initial focus was on learners with hearing and visual impairments. This was seen by addition of classes for these specific learners. Similar to early childhood development, in which the government initially did not play a direct role in establishing centers, non-governmental organizations catered for a wide variety of learners with different and severe needs. These included but were not limited to centers for the visually impaired. One way that the government played a role in inclusive education was to

collaborate with Ministry of health to arrange for learners with severe disabilities to be taken to countries like South Africa to access education. (Ministry of Education, 2000) In later years, the government of Botswana set up special units in selected primary schools and junior schools with a later aim of moving the learners in to the mainstream context. In this case, the local government would be responsible for equipping the schools appropriately while the ministry of education would be responsible for teachers' remuneration. (Ministry of Education, 2000)

The national policy on care for people living with disability in Botswana, though drafted decades ago, ensures the well-being, protection of human rights and dignity of people living with disabilities. It also states the responsibilities of different ministries in ensuring the well-being of people living with disabilities. The policy states that the ministry of education, in preventing all forms of injustices, should provide professionals in all areas of education. (Ministry of Health, 1996) The policy is also not clear on which professionals need to be helping in the education system, therefore, allied professionals who would be directly linked to assisting LSENs as well as supporting educators have not been provided in the schools.

The Botswana inclusive education policy was drafted in 2011 after the millennium developmental goals of 2004, in collaboration with the United Nations Development programme. It defines inclusive education as a system that caters for the needs for LSENs despite their prevailing circumstances. (Ministry of Education and Skills Development, 2011) This policy was developed to support the revised national policy on education of 1994 and contains five specific goals and ten commitment statements which all focus on achieving the overall goal of ensuring education for all children. However, the policy does

not clearly describe how provision of education for all will be ensured or the professional that needed to ensure a successful implementation. An implementation policy that further breaks down how this inclusive education should be implemented Botswana is not the only country with a challenge in the implementation of inclusive education. In the Middle East, the inclusive education system is still a notion, with no clear guidelines on implementation, or which professionals should be involved in the development and implementation. (Amr, 2011)

Another important policy that is indirectly linked to inclusive education is the policy on early childhood care and education is the Early Childhood Care and Education 2001. This policy has been development to ensure that children with developmental delays are identified early and referred appropriately. However, the government of Botswana provides an enabling environment for early childhood education to be offered by other stakeholders and is still not in a position to offer services to the entire country. One of the reasons why Botswana does not play a direct role in early childhood care and education is because of two treaties that were signed, which does not specifically prioritise or state the need for early childhood development. Secondly, there is a lack of funds allocated specifically for these services. Therefore, most private early childhood centres are set-up in urban areas where parents can afford to pay the required fees. In rural settings, the pre-school centres are rarely found. It would therefore be difficult for children in rural settings to benefit from the early identification and referral, as stated in the 2001 ECCE policy. The absence of early childhood care in rural areas also means that children with special needs entering primary education will miss the opportunity for a smooth transitional process through collaboration of relevant stakeholders like occupational

therapists. Collaboration of team members, according to previous researchers, is important for improving the performance of students and increasing the job satisfaction of teachers and the entire educational team. (Nochajski, 2002) (King-Sears, et al., 2015) (Maundeni, 2013)

The lack of government involvement in ECCE has its own negative implications such as poor standards of services offered by existing pre-schools which include lack of facilities of children with special needs. Denying children the opportunity to progress through early childhood care and education, leads to a high number of cases of children entering primary schools with undetected disabilities. (Maundeni, 2013)

Compared to other countries like South Africa and the western world, inclusive education in Botswana is still in its early stages where the appropriate network of multi-disciplinary team tasked to aid in the inclusion has not yet been strengthened. The government of Botswana, to ensure inclusion of LSENs, introduced training programmes in special education within the country, in 1994. Challenges that were faced back in the late 1990's and early 2000's with regards to accessibility of LSENs are still being faced at present. These include transportation shortages and inaccessibility and most children in wheelchairs are unable to get to school due to transportation limitations. (Ministry of Education, 2001) However, the number of LSENs who need enrollment has increased significantly. (Hopkin, 2004)

In a study done to identify why the educational performance was poor in Botswana, findings revealed that schools in Botswana were not as inclusive as required. Learners with special needs were incorporated in mainstream classes but did not receive at most help due to lack of skills in special education by teachers. (Makwinja, 2017) Teachers

therefore spent their time focusing on their peers without special needs for purposes of achieving of good results. Teachers also found themselves helping these learners through trial and error. For schools with special education units, learners were given a specialised exam, and were also given transcribers where need be. (Makwinja, 2017) Even though positive recommendations were made in overhauling the education system of Botswana, not much was discussed in the inclusive policy and collaborative effort of other stakeholders. According to the policy on education in Botswana, even though there has been an expansion of primary schools in the country, resource units are only being provided in select schools for LSENs, rather than providing to all schools. (Makhale, 2007)

2.4 Challenges to successful inclusive education

One of the barriers faced in inclusive education is “political unwillingness” and the inability of relevant ministries to accept change. (CERI, 1999) Greater awareness of special education and its effectiveness has improved, hence being put as one of the top priorities for funding in many countries. However, not all countries, especially developing countries, have it as the top priority due to pre-empted higher expenses like employing more professionals and adapting the school environment. Adapting already existing school environments would cost much less than building new schools specifically for learners who can be included in the mainstream environment. Availability of funding would lead to a more successful inclusion, which is not currently the case in most countries. (CERI, 1999)

Previous research indicated that the lack of resources being availed to primary schools was a common trend in the country, with some schools either receiving old equipment or no equipment at all. (Makwinja, 2017) There has been an increase in number of schools

established, but there is still a non-conducive environment in the 21st century where the class population ranges from 40-45 learners, failing buildings with broken windows and doors, learners having to maintain the traditional schooling system of four walled classrooms. (Makwinja, 2017)

Student teacher ratios and availability of teacher aids has proven to be a barrier for inclusive education due to the fact that some LSENs would require strategised instructional class sessions that are one a one-on-one basis. (Department of Education, 2001) The number of learners per teacher is a concern that is shared among teachers and parents currently. (Pivik, et al., 2016; Engelbrecht & Green, 2007) Teachers who work with LSENs have been found to experience higher levels of stress when compared to their colleagues who work with children without any barriers to learning. (Grandisson, et al., 2020) Therefore, teachers working with LSENs are at risk of burnout and low job satisfaction if they experience these high levels of stress and they do not receive the necessary support or resources to perform their work functions.

In South Africa the the formulation of white paper 6 on Special Needs Education aimed to address some of these concerns. Building an Inclusive Education and Training system in South Africa was aimed at developing strategies of inclusion of LSENs in all schools and to find ways of supporting teachers, allowing for swift transition in their interaction with learners of special needs. (Department of Education, 2001) .

Most teachers in South Africa in the past seemed to have embraced and accepted the idea of inclusive education, but the implementation proved to be difficult. Teachers expressed their concerns about being unable to fully modify the curriculum to ensure

learners with mild to severe disabilities/special needs were completely engaged. (Engelbrecht & Green, 2007)

The methods of teaching, language used, time allowed to complete tasks and the educational strategies are complex factors of the educational system that require adjustments to suit LSENs. One of the ways to do away with these barriers is to allow for flexibility in teaching to enable inclusion. (Department of Education, 2001)

Lack of training of mainstream schoolteachers on issues of inclusion, and proper preparation of the environment in readiness for integration of LSENs is still a problem in Botswana and was a challenge in the past and during the initial inclusive education plan. For instance, in Colorado in the United States of America this was a significant factor that contributed to failure of integration (OECD, 1999), and a lack of educational training was also found to contribute to the teachers' inability to improve the participation of LSENs in the mainstream classrooms in Canada. (Grandisson, et al., 2020)

If teachers are not getting the training and support they need, in order to embrace inclusive education and be able to use the relevant strategies in helping LSENs, then chances of those with moderate and severe disabilities might risk being denied a chance to be in schools. (Engelbrecht & Green, 2007) For instance, in children with behavioural problems, some were noted to have significant change in their aggressive behaviours. But for those who had no change, teachers expressed their concerns regarding learners with severe behavioural problems, who are often taken out of class to avoid disrupting the whole class, which limited exposure to curriculum. Teachers also felt that they were unable to find specific strategies to handle these types of learners. (Downing & Peckham-Hardin, 2007)

In Countries such as Jordan, special education teachers are based in the special class, but LSENs spend most of their day in the mainstream class where the special education teacher is not based. However, the mainstream teachers have very little knowledge on how to work with LSENs. (Amr, 2011) Even though there is a challenge as to well defining what the curriculum for LSENs should look like, it should be able to accommodate those with the most complex disabilities, to ensure success, both in academics and social life. (Downing & Peckham-Hardin, 2007) Schools environments should also allow teachers to teach the core contents of the curriculum and to give the teachers the means and freedom to make adjustments, in collaboration with other stakeholders, to learn the technology and be able to teach. (Downing & Peckham-Hardin, 2007) Curriculums lack a balanced educational programme that entails communication, social and life skills. Most LSENs have poor communication and social skills when interacting with peers and others. Learners also must be taught how to cope with adolescent stage and the changes that it comes with.

Adequate physical space is a challenge most teachers working in an inclusion environment face. Small classroom spaces are a barrier for learners who need adapted environments and physical equipment and aids for easy movement. (Engelbrecht & Green, 2007) A lack of legislation that requires all structural buildings to accommodate for people with special needs could also prevent physical inaccessibility to schools. (Ajuwon, 2008) In 2012, the attorney general of Botswana revised the building control regulations of 1981 to cater for the needs of people living with disabilities. The requirements stated were limited to parking spaces, ramps, lifts and toilets in public spaces. (Mmegi Newspaper, 2012)

One other barrier to a high-quality inclusion is the use of generic and general modifications which were implemented in mainstream environments without being individualised. Most observations and data collection that reviews work samples of learners show completed work without an explanation to how tasks were modified for each learner with special needs. (Downing & Peckham-Hardin, 2007) This has also been an observable trend in Botswana where teachers referring students for occupational therapy intervention show up with remedial books, with no side notes on how strategies were implemented or which accommodations were made before and during the remediation programmes.

Poor communication channels and carry-over of implemented programmes from teachers to parents has also been one challenge and barrier of successful inclusive education that teachers face in Botswana. Most teachers have a challenge with attempting to get parents to give them proper feedback on the learners' progress and encouraging continuation of individualised programmes at home. (Downing & Peckham-Hardin, 2007)

Some teachers however might consider inclusive education as a "a threat to their livelihoods", with a belief of less job opportunities for people working in special education systems and "quality of working life" for those in mainstreams affected. (OECD, 1999) This might be one perception of teachers on inclusive education and how it might affect their lives. Contrary to this belief, teachers in Botswana believe their quality of life would improve if other professionals were included in the education system to assist in teaching learners with special needs, thus reducing work overload and burnout. According to the white paper six of South Africa on inclusive education there are different categories of inclusion, which still requires a significant number of

professionals being employed. (Department of Education, 2001) Therefore, the quality of working life of teachers in the general educational environment may change due to the inclusion of LSENs, but the livelihood of those in exclusive education may not really be under threat.

In Kenya, a recent study revealed that some of the challenges faced by the country's education system in providing inclusive education for LSENs include: a high number of learners in the classroom, limited awareness of disability, culture and beliefs, limited support in terms of funding, teacher training. (Kiru, 2019)

2.5 Facilitators in overcoming challenges of inclusive education

Most barriers of inclusive education are brought about by people's way of thinking. When bringing about change in an organisation, it should involve people's perceptions and the way they work, rather than an impression. A very important aspect of ensuring that inclusive education is well received and implemented is involving all stakeholders in a discussion about the main elements of inclusive education. This has been found to be a slow, never ending but effective process that points schoolteachers towards a more encouraging direction of working out this process. (Ainscow, 2005)

Seventy percent of teachers from different schools in a research carried out in California, USA felt that there was need for more meaningful assistive devices for LSENs within the schools. Availability of adequate assistive devices therefor should also warrant for expansion of the classrooms to allow for more space and easy accessibility. (OECD, 1999)

Collaboration and teamwork include involving parents in communication with teachers to ensure proper update of the learner's progress. Homework may be seen as a good way of parents keeping tabs on what their children do in schools. (Downing & Peckham-Hardin, 2007) Teachers also talk of having a close working relationship with other professionals like occupational therapists as an advantage in being able to carry out individualised educational programmes (IEP) with the assistance of the allied professionals. The presence of school-based allied professionals means that all learners who require assistance would get a relevant and specific help at all times, rather than giving hourly sessions out of class. (Downing & Peckham-Hardin, 2007) Ensuring proper support from home and school, with proper communication between the teachers and parents would be an element of successful inclusion. (Hammon & Allen, 1996) Teamwork and collaboration between special education teachers and regular teachers is also an important way of reducing the teacher student ratio by assisting in lesson planning classroom issues. (CERI, 1999)

Preparing the stakeholders who are involved in inclusive education is an important factor that would enhance the success of inclusive education, from teachers' point of view. This is important for guiding parents, teachers and peers of LSENs in embracing the inclusion process. Parents should be encouraged and made aware of the extra support from the multidisciplinary team. They should also be prepared for the need for their added participation and follow up on the progress of the learners. All learners should be prepared through being made aware of the various differences of all learners in the classroom. School-based psychologists would be best positioned to prepare teachers and parents and guiding the teachers during the preparation of other learners in the class. (Hammon

& Allen, 1996) Psychologists should not only focus on learners but also on empowering, and motivating teachers to always have a systematic and thorough ways of problem solving.

Teachers working in the inclusive programme are entitled to continuous skills training to which focuses on individual educational programmes, teamwork and inter-collaboration among teachers in various inclusive schools and how to monitor progress, among other skills. The inclusive education policy mainly focuses on the rights of LSENs being able to attend a mainstream school. But issues such as providing support to teachers and providing the in-service training are not discussed. This may explain why research done in Botswana showed that teachers were reluctant in embracing inclusive education. (Chhabra & SrivastavaIshaan, 2009) Bench marking process in countries that have well established IEP, especially on how training of the teachers is done, would be an ideal way of ensuring inclusive education becomes successful. Training programmes and seminars on issues inclusive education is not only important for teachers' own professional development, but also to ensure proper implementation and success of inclusive education programme. (Downing & Peckham-Hardin, 2007) (Engelbrecht & Green, 2007)

Teacher student ratio burden can only reduce if more allied professionals, and teacher assistants are employed to work in schools. Teacher assistants will mainly be focusing on LSENs to offer the relevant support. (OECD, 1999)

Following individualised assessments by a multidisciplinary team, methods of teaching and the curriculum should be reviewed to allow each individual to benefit appropriately from an IEP that is feasible and can be implemented. (CERI, 1999)

Most teachers often have a negative attitude towards LSENs in the mainstream. This however might be due to the lack of knowledge various conditions and disabilities and how to work with such learners. (Amr, 2011)

Statistics can also be used to give evidence, learning trends, differentiate practices, and identify changes that take place within inclusive education practice. Such data collection and analysis can however influence inclusive education negatively in a way that is not helpful. There should be a process in which schools are evaluated on the progress made. Instruments that look at a learner's presence, participation and achievements should instead be used. (Ainscow, 2005)

As the white paper six in South Africa states that one of the steps to ensuring appropriate implementation of inclusive education, at the district level and institutional level, support should be provided towards curriculum implementation, learners' materials and equipment, together with professional assessment and support to the educators. In schools that lack an in-house occupational therapist, the therapists can form part of the district support team, where they will provide knowledge on assessments, including providing direct support to the teachers on issues regarding LSENs. (Department of Education, 2001)

Proper training, counselling and motivation for teachers, parents and learners, more so for those in challenging environments, trainings and workshops for parents on how they could assist their school going children, is a recommendation that would apply to any country. (Makwinja, 2017)

Fifteen to twenty percent of students usually end up requiring special input at some point in their school life. Factors which ensure a well-functioning inclusive education system need to be considered, especially for countries still young in the process. (OECD, 1999) Countries all over the world have different approaches of how to facilitate inclusive education.

Ensuring that funding projects work in a manner that caters for learners with disability in a sustainable way to avoid exclusion is important. In countries like Canada, some areas set aside resources based on the number of LSENs present in that area and the extra hours the teachers would have to work with these learners. It is therefore not easy to allow for equitable allocation of funds to due variations in the number of LSENs in different areas. For a school to receive extra funding in areas like Australia, there should be a criterion followed: The learner should be enrolled in a mainstream class, it should be proven that the extra support given cannot be funded by the school's resources and that the extra support should be age appropriate and should involve individualised education plan which supports at most independence. In some regions of Australia, the criterion is different in that the school managers are required to apply for funding as long as they submit forms showing details of number of hours required to assist the learner with special needs, all assessment forms done together with aims and objectives set. Lastly, the pedagogy should also be included. (OECD, 1999) This criterion would be beneficial in Botswana if support from other professionals like occupational therapists was given to the teachers in carrying out individual assessment and developing strategies.

Studies have also shown that the best facilitator for inclusive education in schools is a good support system from the government and other relevant local authorities. However, there are other factors that might be overlooked by many schools when embracing the inclusive education policy especially in developing countries like Botswana. These factors are, according to Lupton and Jones (2002):

- The schools' mission, vision and values should clearly express its mandate in promoting inclusive education.
- The school community should be well conversant with the inclusive education policy and should be ready to support.
- Relevant helpful resources should be sourced in order to carry out inclusive education.
- Learners' assessments should be individual based, by a multidisciplinary team.
- Ensuring that all relevant staff members use strategies that are in line with inclusive education when helping learners.
- Ensure the learning process is routinely monitored to ensure that all is in line with the mission statement and that of inclusive education policy. This routine monitoring can be external professionals who advice the internal administrators on what resources will be required to achieve successful inclusion. (OECD, 1999)

Greater awareness of special education and its effectiveness has improved, hence being put as one of the top priorities for funding in many countries. However, not all countries, especially developing countries, have it as the top priority due to pre-empted higher expenses like employing more professionals and adapting the school environment.

Availability of funding would lead to a more successful inclusion, which is not currently the case in most countries. (OECD, 1999)

Teacher education programmes should be designed in a manner that equips teachers with knowledge and skills of working with LSENs. The teaching pedagogies should also be able to cater for LSENs. (Amr, 2011)

2.6 Occupational therapy in education

According to the occupational therapy practice framework and domain, education is one aspect of occupational performance areas. (American Occupational Therapy Association, 2014) Education as an occupation includes academic, non-academic, vocational and prevocational activities. (Willard, et al., 1978) Occupational therapists working in schools facilitate learners' abilities to be able to benefit from a holistic educational programme. Occupational therapists are well equipped to provide input and intervention to assist teachers and LSENs due to their understanding of personal, environmental, and activity related requirements to ensure full participation in the school environment. (Grandisson, et al., 2020)

Occupational therapists have been working in educational programmes since the 1970's in the United States of America. In 1975 a legislature was signed in the federal government advocating for "Education for the handicapped Act, PL94-142 which allowed free and "appropriate" education for all learners with disabilities. This act led to the inclusion of occupational therapy services as a related service. (American Occupational Therapy Association, 2014)

Occupational therapy forms part of the general educational environment to allow for training in a natural environment (Hammon & Allen, 1996), and is dependent on referrals form teachers, family members of the LSENs or from other medical practitioners. (Caidor, 2016) Ecological models of occupational therapy practice place the match between student and environment as a crucial aspect of remediation. When intervention is given in a natural environment, there seems to be maintenance of skills and increased generalisation. (Stokes & Baer, 1977) This follows to say that occupational therapists should avoid taking learners out of the class session for therapeutic intervention unless direct therapy is warranted. (Hopkins & Smith, 1988)

Occupational therapy roles can be categorised in five main areas.

These include (1) assessment: screening, evaluation, and reevaluation, (2) intervention: direct service, monitoring, and consultation such as promoting self-care skills, positioning in class, sensorimotor processing, fine motor performance, psychosocial functions and life skills training, (Willard, et al., 1978) (3) programme planning: IEP and other intervention development, including meetings, management and (4) administration: planning, developing, implementing, and (5) evaluating the programme, supervision and taking part in the multi-disciplinary team. (Powell, 1994) The formulation of the white paper 6 in South Africa has enabled many occupational therapists to be part of the support system in schools for inclusive education. However, the implementation of this policy on the ground seems to be far from what the paper suggests. (Hargreaves, et al., 2012)

Occupational therapists also play a vital role in the transitional process of learners in early identification during early childhood when learners join public school and their transition in adulthood life. (Kardos & Phrudhomme , 2005) School-based occupational therapists,

in a survey carried out, suggested that some of the reasons why they were not able to carry out a proper transitional process for learners with disabilities were; less value given to occupational therapists in the process, parents not requesting for occupational therapy for older students, school administrators not financing the occupational therapists to increase their roles, and occupational therapists making an assumption that the special education department was handling the transitional programme. (Inge, 1995) Not only do occupational therapists offer their services in the schools to ensure that LSENs have a smooth transition from early childhood, but they also use a family-centred approach to support the family during the process. (Humphrey, 1989) Research carried out in Australia showed that occupational therapists play a vital role in assisting parents make choices like which school their child will attend, and what type of classroom their child will attend. Counselling services are also an important role that occupational therapists play in the process. (Prigg, 2002) The study also revealed that even though the family centred approach was meant to allow parents to make vital decisions regarding their children, occupational therapists often found themselves helping to make such decisions due to parents' inability or a reluctant nature when it came to making those decisions. (Prigg, 2002)

School readiness is also an important aspect that an occupational therapist focuses on, when working with learners who are transitioning. The therapist would look at the prerequisite skills necessary for school readiness like fine motor skills and development of gross motor skills which is an important aspect for play as an occupational performance. (Prigg, 2002) Other aspects of school readiness that occupational therapists look into are coping mechanisms, behaviour, independence in activities of daily

living and social skills. All these skills are necessary and important for education as an occupational performance component. This is mostly important in reducing anxiety on both family and the child. (Beamish, et al., 2014) Occupational therapists are involved in providing support regarding motor skills and handwriting difficulties, behavioural and self-regulation, independence in daily activities and classroom routines. They can also manage difficulties with school transportation, nutrition, transition, play, academic activities and specialised classes. (Grandisson, et al., 2020) However, in countries like Botswana where the early childhood care programme is not a service that is readily available to children all over the country, more so in rural areas, children with special needs in the early ages may miss out on the opportunity for early identification, intervention and the swift transition process into primary school. If occupational therapists have contact with the child during transition process, they make relevant recommendations necessary with regard to any modification and adaptation that should be made in the school in readiness for the child. The occupational therapist collaborates with the special education teacher, the school head or any relevant department regarding this information. (Prigg, 2002) (Pollock & Stewart, 1998)

For teachers to ensure they meet the needs of the LSENs, occupational therapists should be able to provide strategies, support and guidance on how to modify and adapt the curriculum and the environment, and advice on appropriate assistive devices that would ensure a safe and comfortable environment for the learners. (Anderson, et al., 2012) Individual educational plan should be done collaboratively. Parents, teachers, the allied professional like occupational therapists need to be part of the implementation process to ensure a holistic approach in the learner's education. However, sometimes

occupational therapists are left out of the implementation meetings due to minimal understanding by the teachers on importance of having an occupational therapist in the meetings. (Prigg, 2002)

With new policies emerging to promote inclusive education, school-based occupational therapists, and even private occupational therapists who visit schools, have had to adjust and redefine their roles in order to meet the demands of these policies. (Anderson, et al., 2012) Most school-based occupational therapists are unable to clearly define their roles to the multidisciplinary team, which may lead to stepping over boundaries and being disregarded by other professionals.

One of the perceptions as to why the roles of occupational therapists in schools are not clearly defined was the fact that implementers of new policies were not occupational therapists. Implementers using a top down approach lack to consult with occupational therapists to seek their counsel on policy implementation with regards to occupational therapists. It is therefore impossible to come up with a unified role of occupational therapists because they tend to work according to the needs of the learners. (Anderson, et al., 2012)

Occupational therapists in the private practice who work with LSENs tend to focus more on a specific learner rather than on all the learners in the class. This is due to parents sourcing out the therapists themselves and paying for the services themselves or through medical aid. This is a more traditional way of intervention where the multidisciplinary approach is not really observed, with a less holistic approach. (Anderson, et al., 2012) However,most occupational therapists have moved from a more individualised approach to a holistic approach, aiming at advocating for policy development, collaboration within

the multi disciplinary team, supporting the parents and the community, and lastly adequate communication within the team to avoid confusion and improper referals in the future. (Hargreaves, et al., 2012)

If occupational therapy services focus on improving awareness of the collaborative team, mainly teachers, and also consulting with them, the attitudes and perception of teachers towards LSENs may improve positively. (Case-Smith & Cable, 1996) (Clark & Miller, 1996) Performance of LSENs, in a research, was found to have improved positively when teachers and occupational therapists collaborated weekly. (Kemmis & Dunn, 1996) Teachers also expressed their approval of occupational therapy services, and preferred compensatory strategies to remedial on learners.

In their consultative role, occupational therapists, in a study (Prigg, 2002) revealed that they felt really uncomfortable being in the classrooms or consulting with teachers due to the negative attitudes towards LSENs.

2.7 Perceptions of teachers on the roles of occupational therapists

The roles of occupational therapists seem vague and mostly unknown to the public and to other health professionals. Most health professionals and the public assume that the roles of occupational therapists are limited to helping to carry out activities of daily living, or self-care. (Alheresh & Nikopoulos, 2011)

A study to identify teachers' perceptions of the role and effectiveness of occupational therapist in schools revealed that occupational therapists were deemed important by teachers. However, there was a need for them to define their roles and to collaborate with

teachers, helping them with regards to children who had learning disabilities or special needs. (Anderson, et al., 2012)

Some teachers felt that occupational therapists should concentrate more on the classroom activities and not all other areas of occupational performance. (Fairbairn & Davidson, 1993) In Canada, a research on the role of occupational therapists in schools revealed that 49% of teachers viewed the role of occupational therapist to address “issues of performance component”, 15% to be disability and 20% thought occupational therapist worked on “occupational issues”. The highest number of cases that were referred for occupational therapy was handwriting, which has also been the experience of the researcher in the current study.

Many teachers felt like occupational therapy had relevance and there was need for more collaborative work. (Benson, et al., 2016) A certain percentage of the teachers felt that occupational therapy did not adequately address the needs of the learner, and that they were not seen as being part of the team. Previous researchers recommended that school-based occupational therapist needed to work more with teachers to meet the needs of the learners. (Benson, et al., 2016)

One of the roles of school-based occupational therapists has been described as the modification of how the curriculum is being delivered. Teachers are mostly guided by their own values and beliefs, and change might be difficult to achieve if these are being challenged. In order to work collaboratively it is suggested that other methods like involving teachers in the plan for change and having both the school management and government support them rather than using a top down or autocratic approach be used. (Burstein, et al., 2004) Literature has recommended that it is important for teachers to be

able to teach all types of learners, in collaboration with special needs teachers and occupational therapists. (Ajuwon, 2008) Research regarding the understanding of the occupational therapist's role in inclusive education is therefore needed to ensure better collaboration among all team member for the benefit of the LSENs.

The roles of a school-based occupational therapist in the 'full serviced schools' however needs to be clearly defined in a way that it will be applicable in all schools countrywide. (Hargreaves, et al., 2012) (Anderson, et al., 2012) Although Smith (2002) found that most teachers in special needs primary schools are aware of the type of cases to be referred to an occupational therapist for intervention (Case Smith, 2002) Sonday et al (2012) found members of the education team in a mainstream 'full service' school may have misconceptions about the school-based occupational therapists role. Where incorrect or no referral is made, it is evident that the current role of occupational therapists may be vaguely explained. This makes the roles difficult to clarify, as often the occupational therapists work according to the specific needs of the schools and their roles may thus differ widely. (Hargreaves et al, 2012) (Anderson, et al., 2012)

Another perception as to why the roles of occupational therapists in schools are not clearly defined was the fact that implementers of new policies were not occupational therapists. Implementers using a top down approach lack to consult with occupational therapists to seek their counsel on policy implementation with regards to occupational therapists. It is therefore impossible to come up with a unified role of occupational therapists because they tend to work according to the needs of the learners. (Anderson, et al., 2012)

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sourcing out the therapists themselves and paying for the services themselves or through medical aid. This is a more traditional way of intervention where the multidisciplinary approach is not really observed, with a less holistic approach. (Anderson, et al., 2012)

Misconceptions of the roles of occupational therapists by the multi-disciplinary team may lead to incorrect referral, undervaluing of the profession and resistance to the profession in general. A future role of the occupational therapist would be to educate and raise awareness about the functions that fall within the field of the school-based occupational therapist and the contributions that an occupational therapist can make to inclusive education. This promotion of occupational therapy should be present at school level but also reflected in the policy documents such as Education White Paper 6. (Department of Education, 2001)

A study carried out in Jordan revealed that the knowledge about occupational therapists, to the public was as limited. The study also revealed that some of the occupational therapists' roles were being carried out by other professionals like special education teachers or physiotherapists. (Darawesh, 2018) Occupational therapists were also sometimes forced to take up the roles of other professionals like special education, which ended up skewing the practice with regards to the philosophy of occupational therapy.

Occupational therapists should advocate for inclusion of policy development in order to achieve at most relevant collaboration to avoid a non-holistic approach being used when carrying out interventions for learners. (Hargreaves, et al., 2012)

2.8 Conclusion to literature review

Most developed and developing countries have made strides with regards to inclusive education, by ensuring that relevant professionals like occupational therapists responsible for ensuring a successful inclusive education system, are well placed within the schools or the support structures. Occupational therapists in other countries have also made efforts through studies, to understand the perceptions of teachers on the roles of occupational therapists in mainstream schools. However, the knowledge and perceptions on the roles of occupational therapists is still wanting, even in developed countries.

CHAPTER 3: METHODOLOGY

3.1 Introduction to methodology

This chapter details the methodology used in this study. The specific study design adopted and the rationale behind its use, a description of the study participants, the inclusion criteria, a step by step description of the research procedure, the data collection tools used, data collection, data analysis and lastly the ethical considerations taken into account when the study was taking place.

3.2 Study design

This study used a descriptive qualitative method through an exploratory design executed through the use of focus groups. The focus groups explored the perceptions of teachers in mainstream schools, regarding the education of LSENs and the role of occupational therapists in the schools where they worked in. Focus group allowed for in depth discussions and debates about different opinions and experiences of participants in such a way that allowed the researcher to gain information that would be difficult to gain while carrying out one on one interviews. (Welman, et al., 2005) The researcher also wanted participants to interact in group setup to allow for interactions that would tap into different forms of both verbal and non-verbal communication, which be necessary for data collection. People's true feelings and perceptions are sometimes best obtained through various ways of communications. By allowing the participants to reacts and respond to each other's opinions, the researcher was able to understand the depth of knowledge of the participants on the occupational therapy, which would be difficult to achieve in a one-on one interview. (Kitzinger, 2006) Focus groups also help with expressing common

feelings about topics that would be difficult to talk about in a one-on- one interview. (Farquhar, 1999)

3.3 Study population

The study population was grade one, two and three teachers in public primary schools that had taught LSENs in Gaborone.

3.4 Study sample

3.4.1 Sample selection

Purposive sampling was used to choose grade one, two and three teachers in public primary schools that had taught LSENs in Gaborone. The researcher chose purposive sampling because it allowed for participants who fit the profile and criteria of the study sample to be selected. (Gaganpreet , 2017) These teachers may or may not have had experience referring or interacting with an occupational therapist. The researcher contacted the seven public primary school principals in Gaborone, which is a city in the South East District of Botswana. Once all permissions were granted, twenty-one teachers were invited to participate in the study. (Creswell, 2003) Primary education is governed by Ministry of basic education, with the primary languages being English and Setswana, also known as Setswana medium. Primary education ranges from grade 1-7, with children enrolling at the age of 6. The following inclusion criteria were used:

3.4.1.1 Inclusion criteria

- Grade one, two and three teachers in public primary schools around Gaborone.
- The teachers should have had a teaching experience of not less than five years and should have engaged with LSENs for at least six months.

3.4.1.2 Exclusion criteria

- Teachers in private schools around Gaborone.
- Teachers from government schools outside of Gaborone.
- Teachers with less than 5 years-experience.
- Teachers who have never taught learners with special needs.
- Teachers of grade four to eight.

3.4.2 Study sample size and participants

Participants were teachers from government primary schools, teaching different classes ranging from grade one to three in Gaborone. The final sample size was thirteen teachers who met criteria of more than five years of teaching experience and had taught LSENs currently and in the past. Three of the teachers out of the thirteen were not available to participate in the focus group and were also not available for another focus group in the future. It was therefore ideal to have one group of ten participants for the focus group, as this size group is manageable and ensures rich data collection. (Creswell, 2003) The researcher intended to facilitate at least one focus group, in which data saturation was reached in the first focus group session.

3.5 Research technique

3.5.1 Research procedure

The protocol was approved by the Faculty of Graduate Studies Committee at the University of the Witwatersrand. Ethical clearance (Certificate number M170931) for the study was obtained for the Human Ethics Research committee (Appendix A) at the University of the Witwatersrand (HREC).

Permission was sought out from the Ministry of Education and Skills development of Botswana. (Appendix B) After these clearances were obtained, a total of 7 schools were approached and the principals of the schools were given information letters (Appendix C) and permission to do research which was then be obtained from the principals of the schools through a consent form signed by both the school head and the researcher, in the presence of a witness. (Appendix D) The researcher purposefully selected suitable participants at each school, by identifying teachers who had interacted with LSENs. The researcher then explained the purpose of the study and asked for willingness to participate by providing the teachers with information letters (Appendix E) and they were then provided with an informed consent form which was signed by all participants. (Appendix F) An explanation of how the focus group would be carried out was given to all participants, before invites to participate in a focus group were extended to all chosen participants. Participants were also made aware that not all who participated in filling the demographic information form would be able to participate in the focus group.

A date agreed upon by all parties was set by telephonically contacting the teachers.

The essential elements for success of the focus group were put into consideration. These included recruitment of the right participants with varied experiences, a conducive setting that created a comfortable atmosphere, well developed probing questions with group dynamics in mind. The questions were short, clear, and open-ended, aimed at a single dimension, which increased the facilitator's ability to make the process easy, spontaneous and unplanned. (Openshaw, et al., 2002)

The focus group session was approximately four hours long, with a break in between.

Before the focus group session begun, the facilitator thanked all participants for attending. The purpose of the focus group and objectives were reviewed, by reminding the participants on the demographic questionnaire that were previously answered. (Kitzinger, 2006) The facilitator guided the participants on the flow of the session, set ground rules and encouraged all participants to express themselves freely and to also comment and respond to other members. The facilitator the proceeded in to asking the questions. (Krueger & Casey, 2015)

3.6 Data collection

The method of data collection for this study was the use of focus groups. This was to enable the researcher to explore the perceptions of teachers in mainstream schools, regarding the barriers and facilitators in teaching of LSENs and the role of the occupational therapists as well as referral to occupational therapists in the schools where they worked in. Because the researcher wanted to understand the participants' perceptions, it was also important to take into account the non-verbal communication and to allow participants to respond to comments of other participants in the group. (Miller, 2020) Focus groups are also a cost effective and time saving way of understanding participants' perceptions and opinions with the ability to allow for each participant to build on the other participant's comments. The anonymity of using codes in focus groups allows for participants to give honest answers to questions asked. (Miller, 2020)

Even though focus groups allow for rich data collection, some participants were more dominant, which led to other participants not fully participating.

The demographic information forms (Appendix G) were given to the teachers on a school visit, prior to the focus group. This form described the demographic data of the participants. These included the age ranges of the participants, years of participants, grades that each participants taught, numbers of learners with special needs encountered, types of special needs they encountered, type of therapists the learners were referred to, and whether or not there was a school-based occupational therapist.

Upon arrival at the focus group, the participants signed consent forms to allow for audio recording. (Appendix H) Confidentiality was observed by ensuring all the participants had codes instead of using their real names.

During the focus group, open-ended questions were asked to allow for in-depth data collection, until saturation was achieved. The researcher followed the focus group schedule which she was used to guide the discussion during the focus group (Appendix I). A co-facilitator was present to observe and take notes on the reactions of participants, during the session and after, and prevented researcher's bias.

During the focus group, the researcher took audio recordings with the use of a digital recorder and later the audio files were transcribed, in order to enhance the rigour of the data collected. (Depoy & Gitlin, 2016) This information was used for coding and the creation of themes by using an inductive coding technique. In case the decoder failed, the researcher had a phone that would be used for audio recording as an additional measure put in place. A notebook and flip chart were also availed as back up. (Kitzinger, 2006)

Data saturation was noted when the participants became redundant, repeating issues and points that had been previously mentioned. The researcher therefore concluded that rich data had been collected and that no new data was apparent, which led to conclusion of the session. (Hennink, et al., 2019) The researcher also noted down her reflections immediately after the session about the group on the session's success and limitations. One major observation was that there was limited general knowledge on occupational therapy, which meant that the participants were unable to delve deeper into the roles in mainstream schools. This might have been another reason why data saturation was quickly reached.

3.7 Data collection tools

A demographic information form (Appendix G) was used to describe the demographics of the sample.

Focus group schedule (Appendix I) had been developed by the researcher and it contained open ended questions which were used in the focus group to allow for in-depth collection of data, rather than simple "yes" and "no" answers.

The researcher was guided by the set objectives of the study, and existing literature to set the open ended questions for the focus group. (Nyumba, et al., 2019)

3.8 Trustworthiness

To ensure trustworthiness of the findings, after transcribing, the researcher allowed the participants to validate the information for credibility through member checking. This was done by emailing two participants, a summary of the focus groups, to ensure that ensure

that what had been written was a true reflection of what was said in the focus group meeting. (Seale & Corti, 2000).

To avoid bias and to ensure that the findings were true, the researchers clarified her bias before data analysis and used reflexivity to indicate how her interpretations might have been shaped by background history. The researcher used the bracketing technique. (Seale & Corti, 2000)

Peer debriefing was ensured, to enhance accuracy. The researcher used a fellow occupational therapist as a peer debriefer, who reviewed the transcribed data, counterchecking alongside the themes and subthemes hat were created. This was to ensure that no points were left out or repeated. (Heilman, et al., 2010)

3.9 Data analysis

The following steps were undertaken to analyse the data:

- In the focus group, the researcher organised and prepared the data for analysis. This involved transcribing the focus group audio which was done by the researcher. (Pope, et al., 2006)
- Confidentiality of the participants was ensured by allocating a code to each participant for e.g. Participant 1, 2, 3
- Inductive coding of the raw transcribed data was used to develop theories which were later made into themes and subthemes.(Chandro & Shang, 2019)
- The researcher used electronic and manual methods to analyse the data.
- Initially the researcher read through the transcript as a whole to gain a general impression of the data. This was followed by in depth reading of the raw data.

- The researcher then divided the data according to the objectives they fulfilled. This was done electronically and made it easier to manage the large amounts of data. (Pope, et al., 2006)
- The researcher then identified units of information representing certain ideas or meaning.
- Each unit was electronically highlighted in the text and was then assigned a label. Each label was indicated next to the unit selected on the word document.
- These units of information were then copied and pasted onto an Excel spreadsheet with its corresponding code.
- Subthemes were identified from the data and recorded in a codebook.
- Similar subthemes were grouped together.
- Each group of subthemes was given a theme.
- The codes from each objective were represented in a separate Excel spreadsheet.
- Information from each objective was then analysed as a whole.
- To ensure reliability, the following steps were undertaken:
- The researcher recruited the assistance of an expert researcher to code check.
- Transcripts were checked to ensure no mistakes were made during transcription. This included checking that interviews were transcribed accurately and appropriately.
- No drift in the definition of codes. This was done by ensuring data were described well and transparently.

The researcher organised and prepared for analysis of the data and data was transcribed verbatim. The researcher listened to the audio recordings of the focus

groups, while making reference to the recorder's notes to allow for originality of the information. (Graneheim & Lundman, 2004) Coding of the information was used to later summarise the focus group interviews. Quotations were used to directly reflect the participants' ideas and thoughts. During the coding, ideas were organised in inventory of points to allow easy thematic formation. Finally, the interpretation of inductive themes was the last step of the analysis. The final step of analysis was interpretation of the findings. Interpretation was derived from comparing the findings of the research to available literature or the researcher's personal deductions. (Cresswell, 2014)

3.10 Ethical considerations

The following ethical considerations were included in order to protect the rights of the participants:

Ethical clearance(Appendix A) for the study was obtained for the Human Ethics Research committee at the University of the Witwatersrand (HREC) and permission from the Ministry of Education in Botswana (Appendix B) and the principals of the schools where teachers were employed (Appendix D)

Prior to the focus group, teachers were provided with information letters (Appendix E) and consent forms (Appendix F) before participating in the research. Upon arrival at the venue for the focus group they were provided with consent forms for audio recording (Appendix H). (Akaranga & Mukau, 2016)

It was made clear that participants could withdraw from the study at that point, without implications.

To ensure confidentiality and anonymity, the researcher did not use any names or identities in the study by allocating a number to each participant. (Saunders, et al., 2014)

The recordings and all other data collection forms will be stored in a locked archive at the researcher's practice for six years, and thereafter it will be destroyed. They will be stored in form of hard copies and for easy access and retrieval, plus an electronic copy. (Lin, 2009)

3.11 Researcher's assumptions

The researcher assumed that the participants were delighted to have a platform where their needs and proposals were heard. This was because of the good participation during the focus group, by participants, and also the fact that data saturation was achieved after the first focus group meeting, therefore not needing to schedule another focus group meeting.

CHAPTER 4: RESULTS

4.1 Introduction

This chapter delves into the findings of the focus group in three major themes, which will further be broken down to subthemes. It also describes the demographic information of the participants in general, with

4.2 Description of focus group participants

Below are two tables that summarise demographic information about the participants.

Table 4.1: Demographic information of participants

Participant	Age Range in Years	Years of Experience	Grade teaching	Number of learners encountered
1	30-35	9	3	6
2	45-50	28	1	25
3	45-50	21	1	12
4	45-50	25	1	5
5	50-55	27	2	10+
6	56-60	31	2	15+
7	40-45	10	2	16
8	50-55	34	2	6
9	30-35	11	2	7
10	50-55	32	2	8

Table 4.2: Information regarding participants' contact with learners with special educational needs and therapists

Types of special needs	Referred to a therapist	Type of therapist?	School-based/ visiting occupational therapist?
Epilepsy, LD	No	-	No
Dyslexia, Dysgraphia	Yes	Educational psychologist	No
Physical disability	No		No
LD, Intellectual disability	Yes	Speech therapist, educational psychologist	No
LD	No	Central Resource Centre (CRC)	No
LD, Physical disability, psychological, deaf	Only one	Physiotherapist	No
Slow learners, unable to read/write.	Yes	CRC	No
Low performer	No		No
Reading, writing, slow to understand	No		No
Visual, dyslexia, dysgraphia, epilepsy, speech therapist.	Yes	Speech therapist, educational psychologist	No

The study population was identified through purposeful selection from government schools around Gaborone. Twenty-four demographic questionnaires were filled by

teachers. For the focus group, participants who fit the criteria were purposefully selected out of the ones who filled the forms. Ten participants with an age range of 30-55, with years of experience varying from nine to 32. Number of learners they had encountered ranged from five upwards. Most participants were grade two teachers, then grade one, with one participant being a grade three teacher.

4.3 Description of themes arising from focus group

The table below summarises the themes and subthemes that emerged from the data analysis of the study findings.

Table 4.3: Themes and subthemes arising from focus group

THEMES	SUBTHEMES
Theme 1: Role of occupational therapy in inclusive education	Subtheme 1.1: Unknown resource and form of support
	Subtheme 1.2: Misconceptions regarding the role of occupational therapy
	Subtheme 1.3: Teachers are attempting to fulfil the roles of occupational therapists
Theme 2: Challenges in inclusive education	Subtheme 2.1: Integration versus segregation
	Subtheme 2.2: Dysfunctional system
	Subtheme 2.3: Physical inaccessibility
	Subtheme 2.4: Learning inaccessibility
	Subtheme 2.5: Poor use of available resources
Theme 3: Feelings of teachers towards inclusive education	Subtheme 3.1: Unskilled
	Subtheme 3.2: Unsupported and under-resourced
	Subtheme 3.3: Uninformed
	Subtheme 3.4: Overwhelmed

4.4 Theme 1: Role of occupational therapy in inclusive education

4.4.1 Subtheme 1.1: Unknown resource and form of support

The participants in the focus group seemed to lack knowledge on the roles of occupational therapists, which have an essential role to play in the education of LSENs. Most teachers have had to refer LSENs to CRC but do not know who exactly would assess and make recommendations. Teachers feel that they are not receiving all the support they require to ensure they are able to cope with the LSENs that they encounter. Occupational therapy services are available in the referral hospital located in Gaborone, non-governmental organization and private clinics. Yet these services are not accessed, therefore leading to the teachers' feelings of being inadequately supported and resourced. Teachers are oblivious to the roles of occupational therapists, but some felt that occupational therapists would help with the challenges they have expressed. This would assist in including and accommodating LSENs, to avoid being seen as an extra burden in classes. These feelings and perceptions will be further explored in subtheme 3.2.

"I will fail to answer this one because I do not know the duties of an occupational therapist." P5

"I do not know." P2

"I am not clear about the duties of an occupational therapist." P8

4.4.2 Subtheme 1.2: Misconceptions regarding the role of occupational therapy

While some teachers try to guess the roles of occupational therapists, most teachers have a poor concept of what the profession is or what it entails, even though they mention that they might have heard the term occupational therapy. Due to this lack of knowledge of occupational therapy, teachers feel that occupational therapists cannot attend to assist in the management of children with learning difficulties, but they feel occupational therapists rather intervene with people with mental challenges, physical limitations, neurological disorders and autistic spectrum disorders. This is a sad irony, as even with the little knowledge teachers have on occupational therapy, some feel that it is unnecessary to have occupational therapists in schools. A few of the teachers in the focus group felt that if occupational therapists could find a way to assist and support LSENs, then it would be best to have them in the schools.

"Maybe an occupational therapist is someone who deals with something that can help the child with things like activities of daily living for children with special needs, because they are not academically gifted. If they cannot cope with academics, there has to be something they do to earn a living." P1

"I think occupational therapists are people who come up with meaningful activities to help children with special needs so that they may not have limitations in life." P2

"No, they would not work with those with learning difficulties like dyslexia." P6

4.4.3 Subtheme 1.3: Teachers are attempting to fulfil the roles of occupational therapists

As seen in sub-theme 1.1 and 1.2, with a lack of knowledge and teachers' misconceptions about what occupational therapy is, they are not accessing this valuable support system, and therefore are left to fulfil this role themselves. Thus, apart from fulfilling a demanding teaching role, they have the added strain of attempting to do what occupational therapists do, without the necessary skills or training. The teachers are not realising that their feelings of being overwhelmed, as seen later in subtheme 3.4, is increased by not being aware of how well occupational therapists could support them in successful inclusion of LSENs, due to their lack of awareness of what occupational therapists' roles are.

"We can survive without one, as long as we are equipped with the knowledge of what they do. They can visit the school." P5

"They should always be there. We cannot be teachers and occupational therapists at the same time. There is a lot of work to be done." P2

4.5 Theme 2: Challenges in inclusive education

4.5.1 Subtheme 2.1: Integration versus segregation

The attitude of the teachers during the focus group regarding LSENs seemed somewhat antagonistic. The teachers clearly distinguish between the children in the mainstream school who do not have learning difficulties, and the LSENs. Although this might not be their true feelings, the use of certain terms would be considered as segregating and opposing inclusion. Teachers were even suggesting that the LSENs needed to have their own schools, as if the LSENs are intruders in the mainstream schools inhibiting the

learners without challenges from succeeding academically. The teachers all agreed unanimously that they do not have the adequate skills to teach the LSENs, especially those who are severely challenged.

The teachers feel they lack the knowledge and information regarding what is required of them, and they also seem to lack understanding regarding the principles of inclusive education, and the role they need to fulfil to ensure its success.

"We do not know what is required of us really. It is just one of the requirements. There is no consistency by the ministry of education on what needs to be done. Information is not relayed to 'spade workers' even though they are the modalities of implementation. Those who drive these policies are not aware of what exactly is needed. They do not come specifically to sit with us and discuss what problems we are facing. Rather they come to find faults from us." P2

"We don't know how to help them. We don't have the skills. We don't know what to do with them… The other reason why the children in a wheelchair need their own class is because they are destructive to other children. And it is also restrictive for their movement." P6

"I think these ones in the wheelchair need their own schools. I don't know why they ended up in our schools… We feel like it is a dumping site in mainstream." P2

4.5.2 Subtheme 2.2: Dysfunctional system

The teachers felt that the system regarding assessment and placement of LSENs is dysfunctional, slow and delayed. The LSENs may not be absent from school while

assessments are conducted and decisions are made, therefore they have to be accommodated somewhere until placed appropriately.

Children who do not have the ability to cope in mainstream schools are placed in mainstream schools temporarily, but they are set up for failure with the added challenges of being in classes where teachers are unable to manage their specific needs. Teachers also feel that they do not have the skills to teach (as seen in subtheme 3.1) and integrate LSENs successfully into the educational environment, even if they have the academic potential, as they do not have the resources (subtheme 3.2).

The ministry of education is felt to push for good results, and LSENs do not perform well due to their challenges and lack of adequate support. Teachers therefore work in fear and feel they are judged because their classes do not perform well, but this is due to LSENs being set up for failure in trying to manage and keep up with the curriculum which they are not equipped to deal with or they are placed within an inappropriately supported academic environment.

The participants there felt that the assistance they require should come from the highest level of the educational system, which is the ministry of education.

"We also need collaborative effort from the ministry, special unit and the mainstream. The people from the ministry should come and discuss with us what problems we are facing." P4

***"**For instance, we have a special unit in our school, but sometimes when they are registered for grade one, if you tell the special education teacher that you have a child who seems to require special attention, or seems to have disability, the teacher at the*

special class will tell you to let the child continue in the mainstream and they also tell you to wait for assessment by CRC, which we already said takes long. If the CRC recommendation states that the child needs to go to a special unit, they will take the child. But without the recommendation, the child is taken to a mainstream." P3

4.5.3 Subtheme 2.3: Physical inaccessibility

The participants shared their frustrations with physical barriers affecting the LSENs' ability to learn and participate in educational activities. These included factors such as minimal spaces in classes to allow for proper movement, adapted toilets being significant distances from the classrooms, which forced LSENs using wheelchairs to miss out on aspects of ongoing lessons due to extended time required to access ablutions.

While some teachers were pleased with how well adapted their schools were for learners using wheelchairs, the priority was for teachers who were wheelchair uses rather than learners who were wheelchair users. In schools that had poor accessibility, teachers felt that learners using wheelchairs caused disruptions in class or school activities, and their safety was at risk. Some teachers were also unsatisfied by the fact that learners had to share facilities with teachers due the poor accessibility of the learners' facilities.

"They are destructive. So, in the morning when kids are going to the toilet, you will see all the children scrambling for his wheelchair to try and help him. But it is not safe. That is why I meant it is destructive." *P6*

"Our school is well adapted because we have one teacher who is a wheelchair user. If it was not for him, we would not have had the school adapted. We had learners in wheelchairs before him, and the learning disability teacher tried to propose for the school to be adapted, it never worked." P7

"We have a toilet for disability in the staffroom, but teachers are not okay with the fact that we share a toilet." P5

"We are not sure who advocates for adaptations. But as for the new buildings in our schools do have ramps. But the old ones do not." P5

4.5.4 Subtheme 2.4: Learning inaccessibility

Due to various circumstances, such as the delay in assessments, inappropriate placement in mainstream facilities, and inadequate support and assistance, LSENs become disadvantaged as they are unable to gain optimally from the learning process. This is due to the education system not being able to accommodate for their specific needs as reported by the teachers, even though they might have the potential to learn. Teachers expressed their frustrations of having LSENs in class who needed more attention or more patience than their peers. Learners with severe intellectual impairment, autism or delayed processing skills, all require alternate teaching interventions and adaptations, but they are inappropriately placed in mainstream schools and inclusive education will not be successful in this case. With the combination of learners with and without learning difficulties, without the appropriate resources to successfully include them in the mainstream education system, seems unfair towards both teachers and learners, and seems to fail to achieve the principles of successful inclusive education. The LSENs who have the potential to benefit from inclusive education should be given the appropriate accommodations and support, which should enable them to manage as well as their peers without special needs. But it seems however, that children with severe learning difficulties are also placed within mainstream schools, and they are unable to manage in this learning environment.

"I have another one. She can't speak or write. She cannot do anything. Sometimes when she gets to class and just sleeps. Even if you look at her, she looks disabled. Even if you give her materials for colouring like crayons, aah, she does nothing" P3

"But the problem comes during examinations, they are not catered for. They write the same examinations like other children. So, we become confused as teachers. What should we do for them?" P2

"You have to account for results. So, what my colleague is saying is that when you give attention to the ones with special needs and leave the rest, your class is going to fail because of them. So, we end up isolating them because we are looking for results." P4

"I remember commenting that Setswana and English have too much information for them. The comprehension passages are too long to be read and written. If they are slow to comprehend, you have to repeat severally for them to understand. Although some are given thirty minutes extra time, the content is still too much for them." P3

4.5.5 Subtheme 2.5: Poor use of available resources

Desperation of teachers to have teacher aids and support in schools has led to unemployed parents being asked to step in and assist in the learning process of LSENs. There also seems to be inconsistency in all the schools since some of the parents and guardians who work as teacher aids are paid by the government, while some are not. Some schools use volunteers to act as teacher aids, who are then paid by parents. The lack of support is also compounded as teachers and school managers are not accessing available resources such as occupational therapists and other professionals to assist both learners and teachers manage and succeed in schools, as seen in subthemes 1.1 and 1.2.

"But we have one, the grandmother is the teacher aid comes to work just like other employees, and she is paid because she understands the child more. She acts as a teacher aid." P8

"Ours is different, the volunteers are working as teacher aids. And the school has allowed the parents to pay them. And others are being paid by the government. Motor vehicle accident aid pays for compensation." P7

4.6 Theme 3: Feelings of teachers towards inclusive education

4.6.1 Subtheme 3.1: Unskilled

Teachers felt as though the training in their teaching qualifications was insufficient because they feel that they lack skills with regards to teaching LSENs. And even though teachers claimed they lacked the skills to teach LSENs, it was startling that some of the teachers continue to apply for the vacant posts of learning disability teachers, and therefore are not suitably equipped to manage the job description. As stated in subtheme 1.3, teachers have a desire to be upskilled and trained to better manage the education of LSENs, but caution should be taken that they do not view these skills as being adequate to replace occupational therapists. The focus of teachers' skills and knowledge should be based on the principles of successful inclusive education, thus they should be equipped to manage learners of different abilities in the same classroom.

"We don't know how to handle them. Let me say I am not trained in teaching learners with special needs, I don't know the activities to give them… No special workshops are organised for these teachers. It is upon every teacher who has been promoted to

learning disabilities position to understand the job description and do what is required of them." P5

"Like my colleagues were saying, we don't have the skills, we don't know what to do with these children. We don't know what to do." P3

"Mmmmh, these learners usually are behind in class as compared to others. As she has already said (reference to P5) we don't have skills of how to deal with them. So, in the classes we will try and give them exercises in groups which they can do. The ones that are not difficult." P2

4.6.2 Subtheme 3.2: Unsupported and under-resourced

There is continuous pressure to reach set targets from the ministry of education to ensure good performance of learners. However, there is insufficient support from both the ministry and parents to ensure LSENs and teachers manage their academic demands successfully. Little or no resources, poor accessibility, minimal training, poor collaboration with other health professionals or with the special education department to ensure early identification and management, are all factors contributing to the teachers feeling unsupported and under-resourced. Teachers feel the need to either use their own resources or to reach out to parents to financially assist, but they are also feeling frustrated by the lack of involvement from the parents of the LSENs, thus they are putting in significant efforts using their own personal resources, without any support from government or the parents. This leaves them feeling that their hard-earned attempts are futile.

"Let me just be frank. We are not paid or given any allowances like special units have scarce skills. For us we have nothing. We are dying for nothing." P5

"Parents refuse to come to school to discuss with the teacher. So, if they are not available, then a strategy will not be developed." P4

"Sometimes we ask parents to raise funds to buy what we need. There is a development fee that is supposed to be paid by the parents or guardians, which is used to purchase the items we need. But not all parents are able to afford to pay." P7

"Sometimes you end up using your own money to purchase." P2

4.6.3 Subtheme 3.3: Uninformed

With regards to various conditions and diagnoses of LSENs, teachers felt that some conditions were too complicated for them to understand, and they felt it would be best to have a professional assist. For those LSENs who have the potential to manage successfully in the inclusive education system, teachers felt they lacked the information regarding these learners' challenges to be able to assist and refer them appropriately. For successful implementation of inclusive education, the challenges and limitations of the learners should be identified in order for the teachers to implement adaptations and refer to the appropriate health and education specialists. But often the teachers do not even have access to the basic information regarding the reason for the learner's challenges, whereas this information will assist greatly in understanding their challenges and managing their learning potential effectively.

"And again, you find that we teach these kids without knowing what the problem is. You know in some cases when you know the problem, you may cater for them appropriately. Like if they have delayed developmentally, then you will know what material to give them." P4

"These are the ones that we can identify easily and that are common. These ones like autism and hydrocephalus, we feel like they need trained personnel who can handle them and cope, because they have the skills, as compared to us." P5

"And we do not know what the real diagnosis is, so we just say this is learning disability, this one we don't know which area they fall in." P2

4.6.4 Subtheme 3.4: Overwhelmed

Mainstream schools throughout Botswana are overly populated with the ratio of 1:40. Teachers feeling overwhelmed is understandable. Having LSENs in these overly populated classes make it very difficult for teachers to ensure learners receive the optimum input from the teachers in the learning process. Teachers are feeling that they have immense pressure from the ministry of education to produce satisfactory results, regardless of the situation in the classrooms, and without the adequate support. Teachers feel they have to focus more on learners who were better performing, and neglect their peers with special needs, and therefore feel guilty for not providing the adequate input to LSENs, and possibly neglecting the learners without challenges, as the LSENs may be very demanding and require more effort and time during academic activities. This leaves them feeling overwhelmed and failing in their purpose of teaching all children in their classrooms. The teachers may also be feeling overwhelmed due to the lack of skills to manage LSENs successfully in an inclusive education environment, as seen in subtheme 3.1.

"I already have 41 children in my class. So, imagine if you have these children also with special needs. It's a problem. I cannot cope." P5

"And again, we once asked the education officer about the ratio. The normal children have a different ratio. Mainstream with special needs children is not considered when looking at the ratio of teacher to student." P6

"I feel overwhelmed too. And I am stressed because I don't know how to help." P1

4.7 Summary of Results

The themes and subthemes from the focus group tie together into similar issues teachers, learners and occupational therapists are currently experiencing in the inclusive education system in Gaborone in Botswana. The first theme indicated how teachers either did not know at all what occupational therapists do, or they are unaware of the support occupational therapists can provide in the successful inclusion of LSENs in mainstream education. Teachers who have heard of occupational therapists, also often had a misconception of the roles they could fulfil in education, as they had a perception that occupational therapists only manage severely challenged children and healthcare. There is a clear need for occupational therapists in inclusive education, but due to the lack of use of occupational therapy services, teachers are attempting to fulfil the roles of occupational therapists themselves, adding to their feelings of being unskilled and overwhelmed.

The inclusive education system in Gaborone is facing several challenges. Due to the incorrect placement of some children with severe challenges who would not benefit from inclusive education, as well as the poor support given to make appropriate accommodations and adaptations for those learners with the potential to benefit from mainstream education, teachers have become negative and seem to be antagonistic

towards the LSENs. This is understandable, as the mainstream school environments have limitations in both physical and learning accessibility, increasing the demands and strain on teachers. Although teachers are feeling unsupported, there is some refuge as occupational therapists are currently under-utilised in Gaborone and could be a great support and assistance to teachers within inclusive education. School managers should therefore be informed of the available resources to assist their staff and students more effectively.

The focus group was successful in providing a space for the participants to share their honest feelings about inclusive education, their challenges and frustrations in educating LSENs. Firstly, they feel unskilled, and their basic qualifications do not seem adequate to face the challenges in inclusive education. But upskilling teachers in this environment should focus specifically on their roles as teachers, and the skills should not replace the need for occupational therapy services that should be rendered at schools. Teachers feel unsupported, from the higher level of governance, to the parents of the learners and the occupational therapists who could support them significantly. The teachers also felt frustrated that they would want to assist LSENs to the best of their abilities, but often they are challenged without even receiving the basic information regarding the reason for the learners' referrals or their diagnoses and challenges. This hampers effective assessment and appropriate adaptations and accommodations that need to be made for successful inclusion. And lastly, the teachers feel overwhelmed with the demands of large classes with the added strain of LSENs who require extra attention and different teaching approaches. This is compounded by the fact that severely challenged LSENs who are

inappropriately placed in mainstream schools are difficult to teach in the classroom, and the LSENs with potential to learn are not receiving the appropriate support.

CHAPTER 5: DISCUSSION

5.1 Introduction to Discussion

The findings of the study revealed three major issues that are important to address as Botswana is finding its way with inclusive education and how occupational therapists fit into the picture. These issues were categorised into three major themes which include the role of occupational therapists in inclusive education, challenges in inclusive education and feelings of teachers towards inclusive education, which will further be divided into sub themes. The researcher used the sub themes to describe the themes. The discussion also touches on proposals of how to improve the success of inclusive education and how to support teachers and LSENs in this environment.

5.2 Focus group participants

The researcher experienced a general excitement portrayed by the teachers who participated in this study. There was a varied age range of the participants, from 30 to 60 years, with a teaching experience that ranged from 9 years to 34 years. These were teachers who taught grade one, two and three learners, and had all taught more than five LSENs in their years of experience. Having a varied group of participants was a desirable sample as it encouraged rich, saturated and accurate data collection that represented an overview of teachers' feeling towards inclusive education in Gaborone. (Farquhar, 1999) Teachers felt they were given a listening ear, an opportunity to air out their grievances and to come up with solutions they felt were relevant.

Data saturations was achieved though the running of the one focus group, as it is clear from the themes and subthemes that issues were closely related, and the lack of

knowledge regarding the roles of occupational therapists and the challenges of inclusive education all lead to the negative feelings of the teachers in this context.

The information obtained from the focus group also agreed strongly with existing literature, which will be discussed in more detail in this chapter. The challenges and feelings of the participants were similar to those of other teachers from different countries as found in literature. With all the years of experience had by the participants, it was alarming and concerning that the participants had so little experience with occupational therapists in their careers. The role occupational therapists can fulfil would greatly support the teachers as well as ensure a more successful inclusive education system.

5.3 Themes arising from focus group

Due to the findings of the knowledge of occupational therapy, this theme will be discussed first, even though they were discussed last in the focus group.

5.4 Theme 1: Role of occupational therapy in inclusive education

5.4.1 Subtheme 1.1: Unknown resource and form of support

Teachers complained of a lack of sufficient support, but they were also unaware of the available support systems or the appropriate resources they needed to ensure successful inclusive education implementation.

Due to the teachers being unaware of the available and existing support services, they are not appropriately accessing services; or rather end up using their own resources and parents' resources to assist LSENs, as seen in subtheme 3.2. It is however ironic that in the 21st century, occupational therapy in developing countries like Botswana is an

unknown resource in the education system, whereas in developed countries like the United States, the practice has existed, with an array of paradigm shifts dating back to the 1970's, with legislations put in place to keep the trend running. (American Occupational Therapy Association, 2014)

Literature has shown that services rendered by occupational therapists to LSENs are dependent on referral from teachers and other members involved in the multidisciplinary team. (Caidor, 2016) A lack of awareness of teachers on the roles of occupational therapist in schools for LSENs in Gaborone would mean that a significant number of learners either progress through the education system without any help until it is too late, their needs remaining unnoticed, which also result to poor academic performance and teachers feeling overwhelmed and eventually suffering from burnout and poor job satisfaction.

Occupational therapists are well equipped to offer support to teachers working with LSENs as they understand personal, environmental and activity related requirements for the full participation in the school environment. (Grandisson, et al., 2020) The teachers are attempting to put more effort and time in trying to ensure they give the best support to the learners, and then in this case they are compensating for the lack of occupational therapy services, by attempting to fulfil an added role in their work, which adds to their feelings of being overwhelmed (subtheme 3.4) and unskilled (3.1). With increased knowledge and awareness regarding the role occupational therapists can fulfil in inclusive education, extra burden on teachers would be reduced and it would also ensure the LSENs receive the most appropriate intervention from the correct professionals.

Education related issues as discussed in the literature, if disregarded, has repercussions such as poor social interactions and self-esteem issues which can later negatively affect the behaviour and mental health of LSENs.

One question that needs to be asked is how much effort occupational therapists in Botswana have put in trying to promote the profession to the ministry of education in relation to inclusive education. Due to minimal or non-existent studies conducted and published in Botswana, it is difficult to determine the effectiveness of efforts in creating awareness of existing support structures such as occupational therapy and other allied professions.

There is also a lack of ongoing research to determine and indicate how much support and resources have been put in place for inclusive education in Gaborone, and whether this is deemed as sufficient. Based on the findings of this study, the little knowledge on occupational therapy in general may mean that occupational therapists in Gaborone may have not made a successful effort in promoting their services in this sector.

5.4.2 Subtheme 1.2: Misconceptions regarding the role of occupational therapists

Some participants felt that occupational therapists would be necessary in the schools, even though they did not clearly understand what their roles were. Teachers were also unable to determine which learners they would refer to occupational therapists. These findings were similar to previous studies which revealed that occupational therapists were deemed important and had relevance, with the need for more collaborative work. (Anderson, et al., 2012)

In the demographic questionnaire provided to the participants, majority of the participants mentioned fine motor skills and handwriting problems as some of the problems LSENs presented with. However, during the discussions in the focus group, participants did not feel as though learning difficulties or challenges with academic activities were issues that occupational therapists would address. Participants perceived the role of occupational therapists as helping learners with disabilities to carry out activities of daily living, such as gardening and sewing, when they are unable to manage a mainstream curriculum due to their various challenges. Not only were they unaware of what the roles of occupational therapists were, it also emerged that they were unaware of the roles of other members of the multi-disciplinary team including allied health professionals like educational psychologists, speech and language pathologists, audiologists, physiotherapists, orthopaedic specialists, social workers, among others.

Previous studies have also shown that teachers identified fine motor difficulties as a problem among learners but were unaware that occupational therapists addressed this problem. (Jackman & Stagnitti, 2006)

The participants in the focus group differed to those reported on in other countries. In the United States of America, teachers were able to identify which learners to refer to, or which problems occupational therapists would manage through intervention. (Case Smith, 2002) Just as most teachers felt that the roles of occupational therapists were mainly focused on activities of daily living, findings in other studies have shown that other health professionals or the public viewed the roles of occupational therapists to be the promotion of independence in activities of daily living. (Alheresh & Nikopoulos, 2011)

If this is the case, health professionals who have little knowledge on what occupational therapists do, will not be referring LSENs for therapeutic services. It is important for all multi-disciplinary members to be made aware of the roles of occupational therapists, and the type of clients they work with, for appropriate referrals and to also ensure that people in need of services are not deprived of them due to ignorance. (Fossey, 2011) This would improve the functioning of existing systems and help all team members in being the driving force of implementation of new policies and ensuring a well-functioning system.

Occupational therapists in Botswana have a great task set out for them when it comes to creating awareness on their roles in schools. Occupational therapists should be active in carrying out in-house seminars and workshops for their colleagues in other professions regarding their roles and type of intervention they can provide in schools. These roles include identification and assessment of learners, intervention in form of fine motor skills, class positioning, psychosocial well-being, sensorimotor issues, life skills training, developing, implementing, and evaluating programmes in a multidisciplinary team. (Powell, 1994)

The Ministry of Education and policy makers also need to collaborate with occupational therapists in drafting an implementation policy to ensure that all the roles of occupational therapists are well defined. An increase in awareness should be built from undergraduate courses of pre-service teachers, special education and inclusive education should be reviewed, with more information added on to equip future teachers on the roles of stakeholders in inclusive education. This will ensure that teachers are better equipped to manage the needs of LSENs, with an ability to motivate for allied professionals such as occupational therapists to be employed in schools by the government.

5.4.3 Subtheme 1.3: Teachers are attempting to fulfil the roles of occupational therapists

Despite teachers having a poor understanding of the roles of occupational therapists in the school environment, some feel there is no need to have them on board to assist and support in the education and development of LSENs. There are, however, teachers who feel that occupational therapists would be able to assist in some way or another in helping both teachers and LSENs manage better in the academic environment.

The essence of inclusive education is identifying and eliminating barriers of LSENs in a mainstream environment through evaluation and planning (Ainscow, 2005), and providing adaptations and support for these learners to gain optimally from what is being taught and their interactions with their peers without specific learning difficulties. When considering the roles occupational therapists can fulfil, adapting the environment and providing support for learning falls well within their scope of work.

A lack of knowledge on how occupational therapists can assist and support LSENs who are struggling to achieve academic goals, is contributing to teachers feeling overwhelmed (subtheme 3.4) and poorly supported and under-resourced (subtheme 3.2). The teachers felt that as long as they were equipped with the knowledge and skills to manage the LSENs by themselves, they would be able to manage. Yet, as will be discussed in subtheme 3.4, teachers are already feeling overwhelmed, and therefore attempting to take on this role and equipping themselves with extra skills and further increasing their workload, could possibly compound their feelings of being overwhelmed and overloaded.

The teachers therefore are attempting to fulfil a role they are not equipped or skilled to deal with, rather than using a skills partner, the occupational therapist, to assist in the education in LSENs.

5.4 Theme 2: Challenges in inclusive education

5.5.1 Subtheme 2.1: Integration versus segregation

The process of inclusive education allows both learners with disabilities or special needs and those without disabilities to learn and gain experience from each other and to be exposed to opportunities for social and language development. (CERI, 1999) Teachers' sentiments towards LSENs came across as though the learners were being segregated with some teachers even suggested that they needed to have their own schools.

The attitude of teachers goes against the principles of inclusive education, as placing LSENs in their own classrooms will not enable them to fully interact and benefit from the experience of being with learners without learning difficulties. Inclusion enables LSENs to be more willing to attend school, participate in activities and to become more independent. Research shows that most LSENs develop some level of improvement in basic math when placed in mainstream settings. (Downing & Peckham-Hardin, 2007) Even mainstream learners with specific difficulties in learning also benefit from the activities the LSENs participate in. The learners' peers without any limitations also become culturally accepting, helpful and tolerant towards LSENs in the educational environment as well as life outside of school, and could acquire new skills such as sign language, gaining empathy and nurturing tolerance. (Hammon & Allen, 1996) Therefore, both LSENs and learners without learning difficulties may be able to benefit from inclusive education.

As literature states, inclusive education is the ability and willingness to accommodate each student despite their strengths and weaknesses and to ensure that service delivery allows for exploration of each learner's capabilities. (Lupton & Seymour, 2000) This includes the attitudes of teachers towards LSENs and towards inclusive education. The vast distinction made during the focus group on LSENs and their peers, with some teachers feeling as though LSENs did not belong in their schools, is a worrisome finding, yet understandable.

An inclusive education system as described above seems to be in an ideal world. But what the teachers from the study described, is a system which is rampant with challenges, and without the adequate support for LSENs in the mainstream environment, the negative feelings of the teachers are to be expected. As they have described, they feel unskilled to manage the LSENs appropriately (subtheme 3.1), they do not have the necessary support or resources to provide the adaptations and individualised educational plans as expected (subtheme 3.2), and they feel overwhelmed by the pressures to perform and being set up for failure (subtheme 3.4).

One major reason for negative attitudes towards LSENs is lack of knowledge. Teachers cannot be put solely to blame as stakeholders and pioneers of inclusive education have not done enough to ensure a greater awareness and implementation of inclusive education.

When occupational therapists collaborate with teachers, either school-based or visiting therapists, they would be in a position to provide advice, support and make recommendations for adaptation and modification of the environment and the curriculum, to ensure the LSENs are able to manage successfully in the mainstream environment.

With this approach, teachers would be more positive regarding LSENs attending mainstream schools, as they have a greater chance of success when the process is more aligned with the ideal inclusive education policies. As highlighted in research, an important aspect of ensuring that inclusive education is well received and implemented, is involving all stakeholders in a discussion about the main elements of inclusive education. (Ainscow, 2005) Thus, the employment of occupational therapists in mainstream schools with LSENs would greatly benefit the learners as well as provide much needed support to the teachers.

Teachers are feeling unsupported and overwhelmed, as seen in subthemes 3.2 and 3.4, and this may also be due to the inclusive education policies mainly focusing on the needs of the LSENs, and the support they require, and neglects providing support to the teachers who are facing a challenging situation. Issues such as providing support to teachers and providing the in-service training they require are not featured in policies. This could be contributing to the findings of studies done in Botswana that showed that teachers were reluctant in embracing inclusive education. (Chhabra & SrivastavaIshaan, 2009)

Overall, the policies regarding inclusive education do not seem to be user friendly or available and enforced properly, and therefore has become misunderstood. If teachers are feeling that it is best to segregate LSENs from their peers without challenges, then the government is failing to convince their employees that inclusive education would be ideal to all learners, with or without challenges. There is a gap between the policies and implementation of a successful inclusive education system, as the schools are not

equipped to manage such a system, leaving all users feeling negative towards the system.

Better understanding and knowledge regarding inclusive education, with the adequate support and resources for successful implementation, would therefore lead to a more positive experience for both learners and teachers, and will also assist in teachers feeling less uninformed, as discussed in subtheme 3.3.

5.5.2 Subtheme 2.2: Dysfunctional system

Teachers complained of government officials from the ministry of education providing confusing information, and they are frustrated by the slow and ineffective system of placement of LSENs in appropriate schools.

Development of a fair system for allocation of funds in all schools to cater for LSENs should be considered, as lack of funds was also discussed as a great barrier and challenge to successful inclusive education, as seen in subtheme 3.2. Schools are not automatically suited for inclusive education, as several extra resources and funds are required to be prepared and adequately equipped to receive LSENs. The UNESCO describes inclusive education as all learning centres being open to all learners by identifying and removing barriers, changing school systems and training teachers in order to accommodate all learners with the potential to achieve academically. Thus, the necessary human and non-human resources are required, but learners should also be evaluated appropriately to ensure that they are placed in the most beneficial learning environment.

Currently, the system is failing the LSENs, as learners with severe learning difficulties are placed in mainstream school classes, and they are not able to manage the academic demands, even with support. Inclusive education should target groups of learners who are highly likely to be marginalised, excluded or under achievers, by ensuring that these high-risk learners receive at most opportunities in a conducive environment. (Ainscow, 2005) One can argue that to correctly identify these learners, a comprehensive evaluation process should be followed with a possible trial period in a mainstream school, thus in fact the process is almost guaranteed to be slow and effortful to be successful.

Therefore, the government needs to employ more professionals in the central resource centre to avoid a backlog of learners not being assessed and placed in appropriate schools and classes within a reasonable time.

Teachers feel that for inclusive education to be successful in schools, LSENs with the potential to manage a mainstream curriculum should be adequately supported, as per the principles and policies of inclusive education. The ministry of education needs to provide more effective support systems for teachers, parents and LSENs and their peers. Suggestions were made such as providing resources for teaching such as teacher aids, teaching materials, providing continuous professional development through workshops and seminars, employment of the most suitable staff to fill the vacancies for LSENs teachers, and counselling and emotional support services to parents, teachers and learners. Having this kind of support will also help combat problems such as the high teacher student ratio. This challenge was also discussed in the focus group session, which is in line with existing literature that explains how professionals would assist in

lesson planning and classroom issues, which in turn reduce the burden on teachers. (CERI, 1999)

These recommendations have been made in previous studies in other countries that have a successful inclusive education system, or in countries like South Africa that are still in the brink or ensuring a successful implementation while implementing steps like teacher aids, allied health professionals, well-adapted schools and an adapted curriculum. (Department of Education, 2001)

The ideal system for inclusive education seems to be at a very early stage of development, although policies and ideas are written and accepted all over the world. In South Africa, studies have shown that even though the implementation policy for inclusive education is detailed, activities running on the ground are very different and the policy is not followed through to the latter. The policies are seen as the perfect plan, but the policies are also shortcoming. The inclusive education policy in Botswana does not clearly describe how provision of education for all will be ensured, or which professionals are required to ensure a successful implementation. Botswana is not the only country with a challenge in the implementation of inclusive education. In the Middle East, the inclusive education system is still a notion, with no clear guidelines on implementation, or which professionals should be involved in the development and implementation. (Amr, 2011)

For a functioning system to be put in place, legislation, laws and implementation policies that include all members of multidisciplinary team should be in the forefront of ensuring the country has well organised system with all relevant resources and support structures employed. Important guiding factors when considering a successful inclusion, as discussed in the literature, should be considered. (Lupton & Jones, 2002) Statistical

evaluation is also important in guiding implementers on the successes and challenges of inclusive education nationwide.

The lack of policy regarding which professionals are required in an inclusive education environment, means that there will be several roles in the process that are vacant, and in the end the burden to manage all the roles would be placed on the teachers, which leads to them feeling unskilled (subtheme 3.1), unsupported and under-resourced (subtheme 3.2) and overwhelmed (subtheme 3.4). Where special education teachers are present, they should be able to assist teachers in the mainstream classes in identifying and making appropriate referrals to allied health professionals. Placing LSENs in the same class as their peers, providing the appropriate support by eliminating barriers, to ensure at most participation, means learning being made accessible to all learners. Mainstream schools, full service schools, and special schools, as is in South Africa (Anderson, et al., 2012) would be an ideal way to ensure that all LSENs in the country are catered for.

Mainstream schools cannot be left as they were originally built and resourced if they are to be fully inclusive, as to ensure inclusive education's success, the necessary adaptations and support structures should be put into place. Even though positive recommendations were made in overhauling the education system of Botswana, inclusive education seemed to have been neglected and all stakeholders have not been involved in the compilation of the policies. There has been some expansion of primary schools in the country, but resource units are only being provided in select schools for LSENs, rather than providing to all schools. (Makhale, 2007)

A non-equitable funding plan that considers the number of LSENs in each district or school should be considered, with room for reviews each financial year. This will allow for all learners to be well catered for.

Having allied professionals in the school or who visit the school will help with early identification. These statistics in return will help the ministry or larger governing bodies to identify how much funds will be allocated based on the given statistics. Just as literature proposes, governing bodies and policy makers have a responsibility of laying down and implementing specifications necessary for a successful inclusive education. (Department of Education, 2001) This process needs to include both a bottom up and top down approach to ensure that the needs and concerns of teachers and other multi-disciplinary team members are heard and put into consideration. Participants in this study felt as though the managerial team excluded them in decision making processes and disregarded their plea for a better support structure.

It is time for policy makers to consider an implementation policy, following the framework policy that exists in Botswana. The government of Botswana, including policy makers, should benchmark in other countries to identify pros and cons of different policies to guide in drafting and implementing the most suitable one for the country. This process does not have to be a top down approach. Teachers should also be included in the benchmarking process.

Therefore, to improve the functioning of the inclusive education system, the ministry of education should review the polies, procedures and requirements of inclusive education including all stakeholders in the process. The government should realise that mainstream

schools are not automatically suited for inclusive education, and therefore the necessary funds and resources should be budgeted for to make the schools accessible to LSENS.

And lastly, the correct placement of LSEN in the most conducive academic environment is the core to successful inclusive education, thus the assessment process requires comprehensive auditing and extra human resources to prevent unnecessary and harmful delays of placement of learners. Poor inclusion of LSENs does more harm than good, as in the long run, learners who are inappropriately placed will not achieve their full potential, with teachers will suffer from burnout and poor job satisfaction (as seen in subtheme 3.4), and being antagonistic towards inclusion (as seen in subtheme 2.1).

5.5.3 Subtheme 2.3: Physical inaccessibility

Most schools, as narrated by teachers during the focus group, have not been physically adapted to allow for accessibility, especially for learners using wheelchairs. Teachers are forced to share their staff toilets with learners who are wheelchair users. Small classroom spaces and lack of pavements around the schools are also matters of inaccessibility that most teachers see as a challenge and a barrier to inclusive education.

Teachers also mentioned that they were not aware whose responsibility it was to have the schools well adapted. Small classroom spaces in previous studies have been a major barrier for inclusion, especially for learners who require an environment that is well adapted due to the use of physical equipment (Engelbrecht & Green, 2007) Researchers blame the lack of proper adaptation of school environments to a lack of legislation that make it mandatory for full accessibility for LSENs (Ajuwon, 2008)

The use of assistive devices by LSENs in the school environment automatically warrants for expansion of classrooms spaces for accessibility and should therefore not be ignored. (OECD, 1999) Challenges that were faced 20 to 30 years ago with regards to accessibility of LSENs are still being faced at present, with children in wheelchairs being unable to attend school, due to transportation shortages and inaccessibility of transport vehicles. (Ministry of Education, 2001)

It is important for ministry of local government, lands and housing, through town and regional planning, to make full accessibility in schools mandatory by ensuring that the regulation on handicapped accessibility is followed through. (Ministry of Works and Transport, 2007)

Old school structures need to be better adapted in the anticipation of having learners, visitors or teachers who are wheelchair users in the future. Adapting already existing school environments would cost much less than building new schools specifically for learners who can be included in the mainstream environment. Availability of funding would lead to a more successful inclusion, which is not currently the case in most countries. (CERI, 1999) Teachers and school managers should also make it their responsibility to motivate for the school environments to be fully accessible, not only when there is a teacher that is a wheelchair user, but also when there are learners using wheelchairs or other physical equipment.

5.5.4 Subtheme 2.4: Learning inaccessibility

Learning inaccessibility is affecting both learners with severe challenges and those with the academic potential to manage in a mainstream environment with support.

Teachers expressed their frustrations regarding LSENs with severe challenges being placed in mainstream classes while awaiting assessments, or to attempt to promote inclusion. The apparent inability of the assessment centres to ensure that LSENs are placed in a suitable learning environment with all the appropriate support, is leading to occupational deprivation which is an injustice to children with learning difficulties. The LSENs are denied the right to appropriate education as compared to their peers.

In previous studies, teachers expressed their concerns regarding learners with severe behavioural problems who had to be taken out of class to avoid disrupting the whole class, which limited exposure to the curriculum. Teachers also felt that they were unable to find specific strategies to handle these types of learners. (Downing & Peckham-Hardin, 2007) This paints a picture of a poor functioning system of inclusive education in Gaborone. The inappropriate placement of learners with severe learning difficulties is caused by the dysfunctional system for assessment and placement of learners, as discussed in subtheme 2.2.

The government of Botswana should consider benchmarking the current placement process and facilities by evaluating other countries' successful inclusive education systems and considering a system where children with more severe learning difficulties can be placed appropriately.

Some of the existing literature defines inclusive education as allowing LSENs to be placed in the same class as their peers, with the provision of all the necessary support to ensure proper learning takes place (Rainforth & York-Barr, 1997), thus mainstream schools cannot function successfully in the inclusive education system without being provided with the necessary support for learners with the potential to manage.

Occupational therapists, in addition to ensuring learning accessibility, are best placed to assist teachers in curriculum modification for LSENs, as this is one of the major roles of occupational therapists. (Smith, 2013) Having therapist in schools working with teachers directly would also assist in diminishing the misconceptions of teachers about occupational therapists (seen in subtheme 1.2) and also improve awareness on the importance of having occupational therapists in schools (as seen in subtheme 1.1).

The methods of teaching, language used, time allowed to complete tasks and the educational strategies are complex factors of the educational system that require adjustments to suit LSENs. One of the ways to do away with these barriers is to allow for flexibility in teaching to enable inclusion. (Department of Education, 2001) If teachers are spending extended time and putting in substantial effort above their usual duties to attempt to assist the LSENs in managing the curriculum, they will neglect the other learners in the class, which is occupational deprivation of the peers without learning difficulties. For successful inclusive education, the learners with the potential to manage the mainstream curriculum should manage as well as their peers, provided they receive the best and most appropriate support. This will in the long run to ensure that all the LSENs achieve their fullest potential and success in mainstream inclusive education, without being to the detriment of teachers' well-being and ability to manage, as well as their peers right to education.

The teachers also stated their frustrations with regards to the LSENs not being catered for during examinations. Literature states that inclusion should encompass a learner's existence; optimise participation and success in the environment which should not only be measured through examinations, but holistically. (Ainscow, 2005) There is therefore

a need for a review of reasonable accommodations for LSENs during exams, to ensure that their true capabilities and knowledge is tested, and they are not disadvantaged through setting examinations and expecting performance that is disadvantaging them.

Occupational therapists are able to evaluate LSENs and they can recommend individualised strategies to assist LSENs cope during examinations, (Anderson, et al., 2012) and therefore their services should be accessible in this case. Following individualised assessments by a an appropriate professional, methods of teaching and the curriculum should be reviewed in order to allow each individual to benefit appropriately from an IEP that is feasible and can be implemented. (CERI, 1999)

5.5.5 Subtheme 2.5: Poor use of available resources

The focus group highlighted that teachers were not using available resources in government settings or private sectors, but instead they relied on unemployed parents and volunteers in theirs schools to help with the challenges they faced in classes. The situation in Gaborone seems to be worse that in some other countries, as it was indicated that teachers in other countries use available resources appropriately, they are making appropriate referrals, even though they also lack the services of school-based allied professionals such as occupational therapists (Alheresh & Nikopoulos, 2011)

For teachers to be able to use available resources appropriately, they need to gain knowledge on a collaborative approach of inclusive education (Benson, et al., 2016). This includes research focusing on the existing available resources, attending workshops and seminars on matters regarding inclusive education, as also discussed in subtheme 2.1. The government also needs to put a proper support team in place that includes all allied professionals. The central resource centre, which is responsible for assessing and

placement of LSENs in schools all over the country, should not only focus on assessments and placements, but also on presenting awareness workshops for the teachers.

Appropriate support from the government and all relevant professionals in the multidisciplinary team will ensure available resources are used appropriately by teachers to avoid poor job satisfaction, burn out and promoting the ability of LSENs to achieve to their maximal potential, which is also discussed in subthemes 1.1 and 1.2.

5.6 Theme 3: Feelings of teachers towards inclusive education

5.6.1 Subtheme 3.1: Unskilled

Teachers acknowledged and felt limited by their insufficient skills to teach LSENs, with the government providing minimal effort to ensure adequate training and equipping, workshops or allowing for modifications of the curriculum to ensure upcoming teachers are in a healthy position to advance inclusive education. Another worrisome issue that emerged was the fact that posts that required skilled teachers such as a learning disability teacher were filled by teachers who had no added qualifications and could therefore not assist much in identification and referrals for the support of LSENs. Previous research on the barriers and challenges in inclusive education also highlighted these frustrations of teachers worldwide. (Grandisson, et al., 2020)

Successful inclusion cannot be achieved by merely placing LSENs in mainstream schools. Successful inclusive education depends on sufficient training and equipment of teachers, with the appropriate professional support and the physical accessibility of the

environment. Due to the lack of knowledge regarding the roles of occupational therapists in inclusive education, as seen in subtheme 1.1, as well as the misconceptions regarding what occupational therapists do in schools (subtheme 1.2), this valuable resource is not accessed by teachers.

Occupational therapists' role in education would fit very well in modification of the curriculum and ensuring that the LSENs are holistically evaluated and they will provide individualised interventions to ensure each learners can access the curriculum to the best of their ability. For the teachers to conduct these evaluations as well and implement and monitor the modifications, would mean that they will be further overloaded, and in all honesty, they would be delving into a professional scope that they are to equipped to perform. Previous studies also showed that teachers were facing a challenge with modification of the curriculum to suit LSENs. (Engelbrecht & Green, 2007)

Teachers working in the inclusive programme are entitled to continuous skills training to which focuses on individual educational programmes, teamwork and inter-collaboration among teachers in various inclusive schools and how to monitor progress, among other skills. Training programmes and seminars on issues inclusive education is not only important for teachers' own professional development and sense of competence (Grandisson, et al., 2020), but also to ensure proper implementation and success of inclusive education programme.

Previous studies have indicated that for instance in Colorado, United States of America, this was a significant factor that contributed to failure of integration. (OECD, 1999) Lack of training of mainstream schoolteachers on issues of inclusion, and proper preparation

of the environment in readiness for integration of LSENs is still a problem in Botswana, as seen in this current study.

Not only should the government focus on changing the training curriculum and carrying out more seminars, but it should also make an effort to have occupational therapists and other allied health professionals directly working with schools. Occupational therapists' roles will be based on assessment of each LSEN, with intervention ranging from advice on how the curriculum can be modified, to other performance components that have been compromised in collaboration with teachers and other members of the multidisciplinary team. This will mean that teachers will be focusing on what they are supposed to do; teach, while the other allied health professionals guide on specific needs of each learner.

Support in terms of motivation and encouragement is also important for teachers and parents for development of better coping strategies. It would also be important to have all stakeholders meeting to discuss on issues of successful inclusion, to ensure that all are equipped with basic knowledge of the needs of each stakeholder in ensuring a successful inclusive system.

5.6.2 Subtheme 3.2: Unsupported and under-resourced

During the focus group, teachers felt that there was an insurmountable amount of expectation placed on them by the ministry of education to produce good results, without consideration of the number and demands of LSENs in each class. During school visits and evaluation by the ministry of education representatives, participants felt that they were unable to raise their concerns or get the proper help and support their needed.

The findings of this research were similar to existing literature that has shown how teachers felt too much pressure to perform but were not given appropriate support. It also indicated how schools are under-resourced, and not receiving adequate equipment from government. (Makwinja, 2017)

Receiving support from the government and related stakeholders would assist and empower teachers, parents and the learners to succeed in the inclusive education system. Having a platform for teachers to discuss their concerns or make proposals on matters of inclusive education would richly improve attitudes of teachers, with an aim of successful inclusion. Expecting teachers in mainstream schools to accept LSENs and to ensure successful inclusion is unreasonable, as the principle of inclusive education is the provision of support to ensure LSENs can manage. This was also discussed in subthemes 2.1 and 2.2.

As discussed in subthemes 1.1 and 1.2, and increased awareness of the roles of occupational therapists could assist in developing more sustainable support systems. Multi-disciplinary (occupational therapists, physiotherapists, speech and language therapists, audiologists, social workers, educational psychologists) teams in action would also ensure that early identification and intervention is put in place, with the opportunity for teachers to learn more about different conditions affecting LSENs. This would ensure successful management in classes as teachers would be able to identify the appropriate materials and techniques to use in the teaching and learning process. This would also only be possible if there was an ongoing continuing professional development to enrich their knowledge on the types of learning difficulties and disabilities and management in

the school environment, as discussed in subtheme 3.1, or have special education teachers in each school to assist.

Parents should also be encouraged to offer support to both the LSENs and their children, at home and at school, to ensure a successful follow up and collaboration. The therapists supporting teachers do not necessarily have to be school based, rather they can be part of the special support team formed by the ministry of education, in each district. Since some LSENs require one on one intervention, teachers and school managers should ensure that they motivate for the government to hire sufficient teacher aids in schools to help reduce the burden, by offering individualised added support in class.

The inclusive education policy states that the ministry of education, in preventing all forms of injustices, should provide professionals in all areas of education. (Ministry of Health, 1996) Unfortunately, allied professionals who would be directly linked to assisting LSENs as well as supporting educators have not been provided in the schools.

Occupational therapists would also assist in facilitation of LSENs to be integrated in schools by advising on adaptation and modification of the school environment to suit the learners' needs, addressing behavioural, sensory issues and advising on adaptation of the curriculum. (Smith, 2013) As therefore, as stated before in subtheme 1.1, it is essential that occupational therapy services are promoted and implemented in inclusive education.

5.6.3 Subtheme 3.3: Uninformed

Teachers are not trained as medical professionals; therefore, it is not appropriate to expect them to understand and interpret medical diagnoses and conditions. Many of the

LSENs are diagnosed or live with certain conditions, and if medical professionals, such as occupational therapists, assist teachers in understanding these symptoms and make recommendations and adaptations regarding the best approach to their education, teachers will feel better supported and the LSENs will be able to manage the mainstream curriculum.

However, before the LSENs background information and medical history can be understood, it is important that this information is relayed to the schools and the appropriate staff members who will be managing the education of the LSENs. The assessment and placement system, as discussed in subthemes 2.2 and 2.4, requires significant review as currently communication between all stakeholders is poor and information which will assist teachers in the planning and preparation of receiving the LSENs in their classes, is not handed over. Thus the audit of the procedures and processes for the assessment and placement of LSENs in mainstream schools should also include the documentation handling and communication channels to ensure relevant and important information regarding the learners will reach the teachers and occupational therapists successfully.

5.6.4 Subtheme 3.4: Overwhelmed

Teachers felt that there were a number of issues, as previously discussed, which overwhelmed them. These, similar to findings of previous studies included teacher student ratio, lack of resources, limited awareness on matters concerning disability, limited support from the ministry and family members of LSENs and pressure to produce good results without the necessary support and infrastructure.

Teachers are also overwhelmed with their workloads due to poor collaborative effort with the multi-disciplinary team both in-house and those from outside of school, the inability to modify the curriculum for learners with mild to severe learning difficulties, and lacking the skills and resources for adaptation and modification of the school environment.

As discussed in subtheme 1.3, the attempt of teachers to fulfil the roles of occupational therapists is overwhelming them even more and adding to an already full workload. Thus, with the improvement of teachers' knowledge and understanding regarding the roles of occupational therapists in inclusive education, as seen in subthemes 1.1 and 1.2, teachers will be more willing to refer LSENs for extra support, and they will access the available support more effectively, to the benefit of themselves and the learners. It is also important for the government of Botswana to review the inclusive education policies, in order for the policies to be more realistic and to place emphasis on the resources required to support teachers, as a mainstream school without the necessary support, cannot implement inclusive education successfully, as also discussed in subtheme 2.1. The support for the adaptation of the curriculum and making recommendation on reasonable accommodations to be made for learners fall into the role of occupational therapy, and therefore can support the teachers significantly in managing their workloads more effectively, as discussed in subtheme 2.4.

This process should then be followed by a review of assessment and placement procedures of LSENs, to ensure that learners with the potential to manage the mainstream education with support are included in the classes. The inappropriate placement of learners with severe learning disabilities into mainstream classes is overwhelming teachers, as they require extra time and effort to manage, with teachers

feeling that they are neglecting the learners without learning difficulties, as discussed in subtheme 2.2.

Collaboration with all stakeholders involved in LSENs is important to ensure teachers have a good workflow with manageable pressure. These include the learners themselves, teachers, parents/guardian, occupational therapists, speech and language therapists, physiotherapists, orthopaedic technicians, medical specialists, social workers, ministry of education and the government, as a whole. In addition to occupational therapists being employed in schools, teachers and school managers should motivate for teacher aids. As literature puts it, teacher student ratio is one of the major challenges of inclusive education because LSENs require one on one time with teachers. (Department of Education, 2001) If teacher aides were employed to assist in classes, teachers would be less overwhelmed by LSENs in their classes, but this requires better support and collaboration with the government to ensure the required funds are available, as discussed in subtheme 3.2.

5.7 Limitations of the study

The sample population in this study focused on government schools only, and private primary schools were not part of the study. Due to some of the recommendations and conclusions regarding the challenges of inclusive education being directly linked to lack of support and funding from the government, private schools may not identify lack of funding and resources as challenges. Therefore, the findings and recommendations may not be applicable to the private school system.

Although data saturation was achieved after only one focus group, the study results are limited due to the small number of participants. A wider group of participants and a wider set of inclusion criteria may have yielded more varied responses to have justified holding more focus groups. Therefore due to the non-probability nature of selection in purposive sampling, analytical generalisation cannot be made based on the study's findings. (Gaganpreet , 2017)

5.8 Conclusion to discussion

This study explored the challenges faced by teachers in government primary schools around Gaborone. It also shed a light on the knowledge of occupational therapy amongst teachers and sought out their perceptions on the roles of occupational therapists and the need to have them in schools. There was a value in exploring teachers' perceptions with regards to setting a milestone for the future of school-based occupational therapy in Botswana.

This study explored how the implementation of the inclusive education policy is still in its infancy stage. Unlike other developing and developed countries that have a well-defined implementation policies on inclusive education, the policy in Botswana states that educational institutions should be willing and ready to accommodate LSENs, however, it does not describe the multi-disciplinary team involved, or their roles in ensuring a successful inclusive education.

There is a huge gap in the knowledge and misconception of occupational therapy and the roles of occupational therapists in schools, with teachers assuming that occupational therapists only work on activities of daily living and disabilities like hydrocephalus but not

learning difficulties. This gap in the knowledge has led to teachers compensating for the roles of therapists rather than focusing on teaching, with some teachers feeling that they do not need occupational therapists.

Occupational therapists need to play a big role in creating awareness to teachers and school heads, so that there is a motivation for the need to have therapists in schools and also minimise the misconceptions. Once there is awareness, occupational therapists will be able to support school managers and teachers on issues such as recommendations on environmental adaptation and modification, curriculum adaptation and development of strategies in class and school in general, for better coping.

Other healthcare providers and community members should also take the responsibility of actively creating awareness and participating in any activities that promote a successful inclusive education system.

From the discussion above, it is not surprising that the teachers have mostly negative feelings towards inclusive education, and their jobs at the moment. They feel unskilled because they are trying to fill the roles of occupational therapists because they are not accessing occupational therapy services in their areas, and their school managers are not making sure that the services are provided. The government of Botswana has also not employed enough occupational therapists. It is therefore recommended that pre-service teachers are trained well on matter of inclusive education in their under graduate degrees and the access the occupational therapy services to assist them in areas such as curriculum adaptation which they are not skilled in.

Teachers showed a general feeling of being overwhelmed by the dysfunctional system of inclusive education which has led to limited resources to support inclusive education. Limited resources as a result, has seen less schools fully accessible and less professionals being employed to assist in assessment and proper placing of learners in various schools.

It is therefore important that the government review the inclusive education policy and ensure support structures put in place to so that learners can fully cope in schools, and teachers can also cope in managing LSENs, with a reviewed funding system that aims of ensure equitable funds are allocated to schools, based on the number of LSENs present in the schools at every financial year. School managers should ensure that buildings are well adapted and universally accessible for all learners, with a proper channel for acquisition of adaptive equipment.

Teachers should aim at improving their knowledge on inclusive education, familiarise themselves with the roles of occupational therapists and other members of the multi-disciplinary team for appropriate referral. This will prevent teachers from compensating for the roles of occupational therapists, which in turn will minimise the feeling of being overwhelmed by the workload and feeling unskilled to work with LSENs. Parents should be more involved in collaboration with schools heads, teachers, occupational therapists and other health professionals, for the purpose of ensuring a smooth carry over between home and school.

CHAPTER 6: CONCLUSION

6.1 Introduction to Conclusion

This chapter will summarise the main conclusions under each objective of the study. This study used a descriptive qualitative method through exploratory design to identify teachers' perceptions, challenges and the access to occupational therapy in mainstream schools with LSENs. The results revealed a number of issues that were similar to previous studies that have been carried out in the past.

6.2 Conclusions made regarding each objective

6.2.1 Conclusion to objective 1

To explore the teachers' perceptions of inclusive education in mainstream primary schools in Gaborone, Botswana

There was a negative attitude towards inclusive education because teachers felt that they were unskilled and uninformed to be able to support and cope with LSENs, with the government and relevant stakeholders in the multi-disciplinary team not providing them with enough resources and support to ensure a successful inclusive education system. Support from the government is necessary to ensure that all systems starting with an implementation policy, are put in place for a successful inclusion on LSENs all over the country.

6.2.2 Conclusion to objective 2

To explore the challenges teachers face in the education of learners with special educational needs in mainstream primary schools in Gaborone, Botswana.

There is a general feeling by most teachers, to segregate LSENs because of the lack of support, limited knowledge, and pressure to achieve good results, inaccessibility and schools not being well equipped to manage an inclusive system. Occupational therapists and other members of the multi-disciplinary team should work collaboratively to create awareness on each member's role amongst themselves and to the community at large and to offer relevant support necessary.

6.2.3 Conclusion to objective 3

To explore the teachers' perceptions of the role of the occupational therapist in the inclusive education context and the access of learners with special educational needs to occupational therapy services in Gaborone, Botswana.

Due to the lack of knowledge on available existing support, teachers make more effort in compensating for the roles of or referring to occupational therapists rather than referring LSENs. Teachers also end up depending on parents and caregivers to provide support that would have been given by other professionals. Other teachers also do not see the need for occupational therapists, since they believe occupational therapists' are only to activities of daily living and disabilities like hydrocephalus. Occupational therapists in Botswana should take it upon themselves to educate teachers, parents and school managers on their roles, while advocating for employment of more therapists in the education system to offer relevant support.

6.3 General recommendations arising from the current study

The general recommendations from the discussion and conclusion of this study have been summarised in the table below. Due to the complexity of the system of inclusive education, and challenges faced on all levels of the system, the recommendations have been classified accordingly.

The **Macro level** recommendations pertain to the level of intervention that would be followed at a large scale. This level of intervention focuses on the country and inclusive education system as a whole, and does not specifically target individuals.

The **Micro level** recommendations pertain to the level of intervention which affects individuals directly involved in inclusive education, therefore the teachers, parents and school managers.

The **Mezzo level** recommendations pertain to the level of intervention that would be implemented by the workers who are in between the government and the schools. In this case, and with reference to the scope of the current study, this level refers to the health care professionals, or more specifically the occupational therapists working in the field of education. This may also be implemented by community members, as the schools are often at the centre of the community in terms of employment and family and friends attending the schools. Schools are also often venues for community interactions and meetings, and therefore the physical accessibility and resources can affect many interactions of community members, and therefore indirectly affect the LSENs.

Table 6.1 Recommendations made with reference to level of implementation and subthemes

Level of recommendation	Recommendations	Reference to discussion subtheme
Macro level • Government of Botswana • Ministry of Education • Central resource centre	Review of inclusive education policy	Subtheme 2.2
	Review of assessment and placement process and policy of LSENs into mainstream schools	Subtheme 2.2, 2.4 and 3.3
	Including training regarding inclusive education in basic training of teachers	Subtheme 2.1 and 3.1
	Increased government funding and provision of resources to equip mainstream school for inclusive education	Subtheme 2.1, 2.2, 2.3, 2.4 and 3.2
Mezzo level • Health care professionals • Occupational therapists • Community members	Occupational therapists should endeavour to promote their services to school managers and teachers to ensure appropriate referrals of LSENs	Subtheme 1.1, 2.1 and 3.1
	Occupational therapists should endeavour to educate and improve knowledge of teachers and school managers regarding the roles of occupational therapists in education, to reduce the misconceptions regarding their roles.	Subtheme 1.2
	Occupational therapists should support school managers and teachers in modifications, adaptations and support in managing the curriculum to assist LSENs in coping with mainstream curriculum.	Subtheme 2.4, 3.2, and 3.3

Micro level • School managers • Teachers • Parents	Teachers should attend training to improve their knowledge and understanding of inclusive education	Subtheme 2.1,
	Teachers should familiarise themselves with the roles of occupational therapists in education use the available support of occupational therapists, and should not try and compensate for the lack of services through attempting to fulfil the roles themselves	Subtheme 1.1, 1.2, 1.3
	School managers should ensure that their buildings and facilities are universally accessible to those with assistive equipment and wheelchairs	Subtheme 2.3
	Parents of LSENs should be involved in their education and liaise with the school managers, teachers and occupational therapists regarding important information affecting the successful inclusion of their children into the mainstream school.	Subtheme 2.5, 3.2 and 3.3

6.4 Recommendations for future studies

There is a need for occupational therapists to enhance the knowledge regarding occupational therapy to teachers, parents and relevant stakeholders, in order to motivate for the need for school-based occupational therapy services. It is recommended that an educational programme or campaign is designed and tested through a study to ascertain its effectiveness.

From the teachers' experience, there is clearly an indication for the need of occupational therapy services. However, there is no documentation or research indicate to government stakeholders to promote the need for posts. Most teachers mentioned problems that are within the occupational therapy scope of practice, and therefore it is recommended that effectiveness studies should be done in schools in Botswana to provide evidence for the need for occupational therapy services.

Due to the limitation of the current study only focusing on government schools in Gaborone, it is important to duplicate the study within a private school environment, and if possible a larger sample size for more generalizable findings.

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APPENDICES

Appendix A: Ethical Clearance

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

R14/49 Ms JA Makonyango

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M170931

NAME: (Principal Investigator)	Ms JA Makonyango
DEPARTMENT:	School of Therapeutic Sciences Department of Occupational Therapy Medical School University
PROJECT TITLE:	Teachers' perceptions of the role of occupational therapists in mainstream schools with learners with special needs in Gaberone, Botswana
DATE CONSIDERED:	29/09/2017
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Ms J Freeme
APPROVED BY:	Professor CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	09/03/2018

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 B: Permission Ministry of Education

jessicamakonyango@gmail.com

Tel: +26774618164

20/06/2017

The Permanent Secretary,

Ministry of Basic Education,

P/Bag 005,

Gaborone,

Botswana

RE: PERMISSION TO CONDUCT RESEARCH IN PRIMARY SCHOOLS AROUND GABORONE

Dear Sir/ Madam,

I Jessica Makonyango, a student of University of Witwatersrand, currently studying Master of Science in Occupational Therapy, under the supervision of Juliana Freeme, would like to seek permission to carry out Research in primary schools around Gaborone.

The aim of my research is to explore inclusive education in Gaborone, teachers' perceptions, challenges and the access to occupational therapy in mainstream schools with learners with special needs. In order to collect necessary data, I will conduct focus groups with teachers who have worked with learners with special needs in both private and primary schools.

The results of the focus groups will only be used for investigation in this study. Confidentiality and anonymity of the participants will be maintained by ensuring no names will be used in the demographic forms and in the transcription of data. Participants will be given codes instead.

The results of this study will be used to facilitate for better understanding of teachers on the roles of occupational therapists in schools, and will also guide therapists in Botswana in developing and offering better services.

It is with hope and I appreciation that I be granted permission to carry out the research beginning February 2018 to March 2019

Yours sincerely,



Jessica Makonyango

Appendix C: Information letter - Principals of schools

Department of Occupational Therapy

WITS UNIVERSITY

7 York Road, Parktown, 2193 South Africa • e-mail: Leilane.Mackay@wits.ac.za • Tel: (+27)11 717 3701 • Fax: (+27)11 717 3709

Principal

_____ School

Gaborone

Botswana

PERMISSION TO PERFORM RESEARCH AT SCHOOL

Dear Sir/Madam,

My name is Jessica Makonyango and I am an occupational therapy postgraduate student at the University of Witwatersrand currently completing my master's degree. One of the requirements of this course is to produce a research report on a topic of interest. The title is: **INCLUSIVE EDUCATION IN GABORONE, BOTSWANA: TEACHERS' PERCEPTIONS, CHALLENGES AND TO OCCUPATIONAL THERAPISTS IN MAINSTREAM SCHOOLS WITH LEARNERS WITH SPECIAL NEEDS.**

This letter of information is to help you decide if you would agree for the teachers at your school to take part in this research study. Before you agree, it is important that you understand what it involves. If you have any questions regarding areas that are not fully explained in this letter, please do not hesitate to contact the researcher on 74618164 or Jessica.makonyango@gmail.com.

I would therefore like to invite teachers who have worked with learners with special needs for a minimum of six months at your school to take part in my research. The study aims at exploring teachers' perceptions of the roles of occupational therapists in mainstream schools with learners with special needs in Gaborone. The information gathered in this

research will help me understand how teachers perceive occupational therapy roles, and to try and identify what occupational therapists can do to improve collaborative work with teachers in helping learners with special needs.

The research will be done through carrying out at least two focus group sessions with willing participants, to explore ideas. These focus sessions will be audio recorded to assist the researcher in proper and true analysing of information. Willing participants will be required to sign two consent forms before taking part in the research, which include willingness to participate and consent for audio recording. A demographic form will also be completed to guide the researcher on the participants' history with learners with special needs. The ideal number of participants in each focus group is 10, and each focus group will be approximately two hours long.

This study protocol has been submitted to the Faculty of Health Sciences Research Ethics Committee of the University of Witwatersrand and the ethical clearance has been granted.

The results of the focus groups will only be used for investigation in this study. Confidentiality and anonymity of the participants will be maintained by ensuring no names will be used in the demographic forms and in the transcription of data. Participants will be given codes instead. All audio recordings will be kept in a secured locked location and will be destroyed after six years according to HPCSA regulations.

Participation is totally voluntary and participants have the right to withdraw from the study at any time, without stating any reason for doing so, and without any penalty. Withdrawal from this study will not affect the relationship with the occupational therapists in the area.

All information obtained during the course of this study is strictly confidential. Data that may be reported in scientific journals will not include any information which identifies the teachers in this study. Upon request by participants, feedback will be given.

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.za. Contact details for the administrative offices: Ms. Z Ndlovu/ Mr Rhulani Mkansi/ 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

Thank you,

Yours sincerely,



Jessica Makonyango

Occupational therapist

74618164

Jessica.makonyango@gmail.com.

Appendix D: Permission to perform research - Principals of schools

I _____ give permission for the research study entitled **'INCLUSIVE EDUCATION IN GABORONE, BOTSWANA: TEACHERS' PERCEPTIONS, CHALLENGES AND TO OCCUPATIONAL THERAPISTS IN MAINSTREAM SCHOOLS WITH LEARNERS WITH SPECIAL NEEDS'** to be carried out in _____ primary school.

In signing below, I give permission for the researcher to conduct the research mentioned in the above letter.

Name: _____

Signature: _____

Date: _____

I, Jessica Makonyango, herewith confirm that the abovementioned person has been informed fully about the nature, conduct and risks of the above study.

Researcher's name: _____ (please print)

Researcher's signature: _____

Date: _____

Witness's name: _____ (please print)

Witness's signature: _____

Date: _____

Appendix E: Information Letter Participants

Department of Occupational Therapy

WITS UNIVERSITY

7 York Road, Parktown, 2193 South Africa • e-mail: Leilane.Mackay@wits.ac.za • Tel: (+27)11 717 3701 • Fax: (+27)11 717 3709

Hello,

My name is Jessica Makonyango and I am an occupational therapy postgraduate student at the University of Witwatersrand currently completing my master's degree. One of the requirements of this course is to produce a research report on a topic of interest. The title is: **INCLUSIVE EDUCATION IN GABORONE, BOTSWANA: TEACHERS' PERCEPTIONS, CHALLENGES AND THE ACCESS TO OCCUPATIONAL THERAPY IN MAINSTREAM SCHOOLS WITH LEARNERS WITH SPECIAL NEEDS.**

This letter of information is to help you decide if you would like to take part in this research study. Before you agree, it is important that you understand what it involves. If you have any questions regarding areas that are not fully explained in this letter, please do not hesitate to contact the researcher on 74618164 or Jessica.makonyango@gmail.com.

I would like to invite you to participate as you have worked with learners with special needs for a minimum of six months at your school. The study aims at exploring teachers' perceptions of the roles of occupational therapists in mainstream schools with learners with special needs in Gaborone. The information gathered in this research will help me understand how teachers perceive occupational therapy roles, and to try and identify what occupational therapists can do to improve collaborative work with teachers in helping learners with special needs.

The research will be done through carrying out at least two focus group sessions, and would like to invite you to join in only one of the groups. The focus groups will be audio recorded to assist me in proper and true analysis of information. If you are willing to participate, I would like you to sign two (2) consent forms for participation in the focus

group and for the audio recording. I will also ask you to complete a demographic background form before the group starts. The focus group will be arranged at a time that suits all participants, and it will be held at a neutral venue that is easily accessed by all participants. The ideal number of participants in each focus group is 10, and you will only be asked to participate in one focus group, which will be approximately two hours long.

This study protocol has been submitted to the Faculty of Health Sciences Research Ethics Committee of the University of Witwatersrand and the ethical clearance has been granted.

The results of the focus groups will only be used for investigation in this study. Confidentiality and anonymity will be maintained by ensuring no names will be used in the demographic forms and in the transcription of data. Your name will not be used and you will be given a code instead. All audio recordings will be kept in a secured locked location and will be destroyed after six years according to HPCSA regulations.

However, confidentiality among group members cannot be guaranteed since participants will be required to interact together during the focus group discussions, even though anonymity will be observed. Participants will however be required to respect each other during focus groups and commit to confidentiality of the focus group discussion.

Travel costs of all participants attending the focus group will be reimbursed after every focus group discussion.

Participation is totally voluntary and you have the right to withdraw from the study at any time, without stating any reason for doing so, and without any penalty. Withdrawal from this study will not affect the relationship you have with the occupational therapists in the area.

All information obtained during the course of this study is strictly confidential. Data that may be reported in scientific journals will not include any information which identifies you. If you would like to know about the results of the study, you are welcome to contact me and I can arrange for feedback to be given to you.

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.za. Contact details for the administrative offices: Ms. Z Ndlovu/ Mr Rhulani Mkansi/ 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

Thank you,

Yours sincerely,



Jessica Makonyango

Occupational therapist

74618164

Jessica.makonyango@gmail.com.

Appendix F: Informed consent - Participants

I, _____ hereby consent to participate in research with the title: **INCLUSIVE EDUCATION IN GABORONE, BOTSWANA: TEACHERS' PERCEPTIONS, CHALLENGES AND THE ACCESS TO OCCUPATIONAL THERAPY IN MAINSTREAM SCHOOLS WITH LEARNERS WITH SPECIAL NEEDS.**

By participating in one focus group.

 I have read and understood the information letter.

 I understand that participation in this research is voluntary and my decision to withdraw participation at any point in time will be without consequences.

 I understand the expectations of the researcher towards the participant.

 I understand that my confidentiality will be maintained and my identity will only be known to the researcher.

Name: _____

Signed at: _____

Signature: _____

Date: _____

Appendix G: Demographic information form

INCLUSIVE EDUCATION IN GABORONE, BOTSWANA: TEACHERS' PERCEPTIONS, CHALLENGES AND THE ACCESS TO OCCUPATIONAL THERAPY IN MAINSTREAM SCHOOLS WITH LEARNERS WITH SPECIAL NEEDS

This questionnaire is aimed at determining the demographics of each participant, in a research to determine perceptions, challenges and the access to occupational therapy in mainstream schools with learners with special needs in Gaborone, Botswana.

Please provide an answer and explanation where applicable:

1. Age _____years
2. Gender _____
3. Years' experience as a teacher _____ years
4. Teaching qualification _____
5. Which grade do you currently teach?

   _____
6. Have you ever worked with learners who have special needs? _____
7. How many (approximately) children with special needs have you taught in your classroom? _____
8. What challenges did you face?

   _____

   _____

   _____
9. Did you refer them to a therapist? _____
10. If yes, which therapist? _____
11. Is there a school-based occupational therapist that visits your school? _____

Appendix H: Consent for Audio Recording

I _____ (full name) give permission for the researcher to audio record the focus group sessions for purposes of research study entitled **'INCLUSIVE EDUCATION IN GABORONE, BOTSWANA: TEACHERS' PERCEPTIONS, CHALLENGES AND THE ACCESS TO OCCUPATIONAL THERAPY IN MAINSTREAM SCHOOLS WITH LEARNERS WITH SPECIAL NEEDS.'**

I understand that once the research is complete, the audio recording will be destroyed.

Signature: _____

Date: _____

Appendix I: Focus group schedule

INCLUSIVE EDUCATION IN GABORONE, BOTSWANA: TEACHERS' PERCEPTIONS, CHALLENGES AND THE ACCESS TO OCCUPATIONAL THERAPY IN MAINSTREAM SCHOOLS WITH LEARNERS WITH SPECIAL NEEDS

1. How do you feel about having learners with special needs in your class?
2. What challenges have you faced in educating learners with special needs?
3. What do you feel facilitates your ability to include learners with special needs in your class
4. What do you think can be done to help you cope with educating these learners effectively?
5. Describe what you perceive an occupational therapist does and what their work context is?
6. What do you feel can an occupational therapist do in your context?
7. Describe a learner who would require the services of an occupational therapist.
8. Why do you feel there is/isn't a need to have occupational therapists in your school?