RESEARCH ARTICLE

The Challenges Experienced by Practitioners from Under-Resourced Early Childhood Development Centres in South Africa: A Single Site Study

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ABSTRACT

Background: *The occupation of education prepares children for adulthood. Each child has the right to education, which has the power to end intergenerational cycles of poverty and inequality. However, poor access to and quality of education at early childhood development (ECD) centres continue to prevail in marginalised communities in South Africa.*

Aim: *This study aimed to identify the challenges experienced by ECD practitioners and coordinators regarding the quality of their ECD programme.*

Methods: *A qualitative, descriptive enquiry was conducted with six purposively sampled participants from an ECD organisation in South Africa. Semi-structured interviews were conducted with practitioners from under-resourced ECD centres from Bloemfontein, rural towns, and the organisation's ECD coordinator. Audio recordings of the interviews were transcribed verbatim. Deductive content analysis was used to analyse the data.*

Results: *Four themes were identified from interview data: (i) teaching and learning; (ii) management and leadership; (iii) ECD environment; and (iv) ECD legislation and policies. Practitioners indicated that they wanted to improve their qualifications and have access to a contextually relevant programme with appropriate resources.*

Conclusion: *If the expressed challenges were addressed on an inter-professional collaborative platform, the quality of this ECD service could be improved.*

Keywords: Teaching and learning; early childhood development; ECD policy and legislation; ECD practitioners; ECD programme; occupational therapy; South Africa.

INTRODUCTION AND LITERATURE REVIEW

It is said that access to quality early childhood education (ECE) has the power to end intergenerational cycles of inequality and improve the societies in which children live[1]. The occupation of education includes activities required for learning and participation in an educational environment and prepares children for adulthood by providing them with the knowledge and skills they need to succeed in life[2]. The occupational therapy profession is grounded on

understandings such as achieving health and well-being, and participation in life by engaging in occupations[2]. In the case of young children, these principles are specifically applicable to engagement in the occupation of education.

Globally, including in South Africa, a renewed vision to invest in early childhood education, care and development (ECECD) is evident. It could be ascribed to the view that investment in early child development (ECD) delivers substantial benefits[3]. Early childhood development (ECD) programmes or services are planned activities designed to promote the emotional, mental, spiritual, moral, physical and social development of children from birth to nine years of age, and to intervene in the lives of children at risk and may include a range of services such as education, health and social protection[4].

Early childhood education (ECE) is regarded as one of the main drivers of development towards achieving the Sustainable Development Goals (SDGs) proposed by the United Nations[5]. Goal number four of the SDGs states: "We recognise the necessity and commit to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"[6:14]. To address the right of each child's access to education[7], trends towards ECE on a population-based level include new approaches, innovative humanitarian actions, collaborative practice and inter-sectoral investment[1,8].

The challenging situation of ECE in South African

Research indicates that the reality of ECE for South African children (specifically for those under five years) is marked by extreme challenges in the delivery of quality ECE[9,10]. Early childhood development programmes and service delivery for children younger than five years remain inequitable, inadequate and inaccessible in many areas in South Africa[9,10]. These circumstances put children at risk of not reaching their developmental potential and trajectory to become healthy and productive adults[11]. There are many reasons for these challenges in the delivery of quality ECE. In South Africa, many children do not have access to ECECD services, including ECE[12,13], since most children are born into poverty, and formal education before the age of seven years was not compulsory until 2020[14]. A substantial number of ECD practitioners (78%) do not have an appropriate qualification to teach at preschool level[15], and 23% of ECD practitioners have no training of any sort[16]. Additionally, not all ECD training courses are registered with relevant bodies such as the South African Qualifications Authority (SAQA)[4]. Until 2012, with, the development of the South African National Curriculum Framework (NCF) for children from birth to four years of age, no formal curriculum was available for children under five years. Furthermore, most courses and ECD programmes are not aligned with the new NCF for learners 0–4 years[4]. Contextually relevant teaching materials, such as workbooks, practical activities, and audio-visual materials in support of this new curriculum, are in the process of being developed and becoming more readily available[17].

A lack of teaching resources, the poor nutrition of children, the alarming children to teacher ratio of 1:31, the poor infrastructure of centres, over a million children aged 3 to 5 years not attending ECD centres and the depriving circumstances in which children are growing up[17], are among the other challenges facing the state of ECE in our country. Furthermore, poor quality planning, managing, delivery, and monitoring of governmental services related to ECE, health and social services, amplify the problems related to ECE in South Africa[9,13,17–21].

Towards an improved ECE context in South Africa

Despite these numerous challenges, an increased focus on ECE in South Africa in terms of the quality, equity, and accessibility of ECE, is imminent[22]. This increased focus is demonstrated in pertinent documents, programmes, initiatives, collaborative actions, and consideration of programme evaluation.

First, some of the pertinent policies/documents include:
- The National Integrated Early Childhood Development Policy of 2015[17].
- The National Development Plan: Vision for 2030[23] (which recognises that ECD should be a top priority).
- South Africa's Medium Term Strategic Framework 2014 to 2019[24] (alluding to ECD in Outcome 1).
- The Action Plan to 2019: Towards the Realisation of Schooling 2030[25].
- The National Early Learning Development Standards (NELDS)[26].
- Guidelines for Programme Development and National Curriculum and Assessment Policy Statement (CAPS)[27].
- Changes to the South African Schools Act through the Basic Education Laws Amendment (BELA) for mandatory attendance at learning centres two years prior to grade 1[4].
- The development of a National Curriculum Framework (NCF) for learners 0–4 years of age, which did not exist prior to 2012[4]. The NCF has been envisioned as follows: "Working with and for all children in the early years in a respectful way to provide them with quality experiences and equality of opportunities to achieve their full potential"[4].

Second, many innovative projects are geared towards the improvement of ECE initiatives. Examples of such projects include toy libraries[28], intergenerational play[29], using interactive audio instructions to expand access to ECD[30], teaching maths through games[31], and story reading[32].

Third, collaboration in support of ECE and ECECD in South Africa has been reported to take place between civil society partners, non-profit organisations (NPOs), religious organisations and other stakeholders. These collaborations have developed from the increase in the number of non-governmental organisations (NGOs) (such as Ilafana Labantwana[33], the ELMA Foundation[34], Ntataise[35], Cotlands[36], the Sunshine Centre[37]), donor partnerships, research and development hubs (e.g., Innovation Edge[38]), institutes (e.g., the Children's Institute of the University of Cape Town[39]), and related research projects that have resulted in "pockets" of improved quality ECE.

Fourth, quality is considered a pivotal factor in the improvement of ECD. Organisations must adhere to standards of quality, since ECD programmes are often evaluated to sustain funding[40]. This increased focus on quality is evident in measures such as the Early Childhood Environment Rating Scale (ECERS)[41], Britto's ecological pyramid model[40] and the BRIDGE Reflection Tool Kit[40,42].

Finally, some improvements in the ECE sector in South Africa have been established nationally, such as an increase in the numbers of grade R enrolments[43]. In 2017, the Department of Higher Education and Training (DHET) published a policy on the minimum requirements for programmes leading to qualifications in higher education for ECD educators (Minimum Requirements for Teacher Education Qualifications – Early Child Development; MRTEQ-ECD)[44]. This is the first time that a professional and post-professional qualifications policy for educators working in

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the birth-to-four space has been set out for the Higher Education sector (National Qualification Framework/NQF Level 6 and higher). With regard to the Occupational Certificate: Early Childhood Development Practitioner, NQF Levels 3 and 4, continuous discussions, developments, and training are evident[44]. Furthermore, the establishment of ECE platforms, such as the BRIDGE organisation, has improved the access to and availability of practitioner training[45,46]. Another improvement is the development of the Early Learning Outcome Measure (ELOM)[47] aimed to evaluate pre-school programme outcomes. Regrettably, most ECD organisations do not have a formalised strategy for programme evaluation and do not necessarily belong to a quality control or accreditation body (such as governmental schools that need to adhere to the regulations of the Department of Basic Educations).

Challenges on a local ECE platform

A need was identified at a non profit organisation (NPO) in the Free State Province in central South Africa to evaluate the quality of their ECD programme. This organisation oversees a few centres in Bloemfontein and surrounding rural towns that lack equal and quality education, have no formal ECD programme, and have poor nutritional and healthcare services. For the purpose of this study, these centres have been referred to as 'under-resourced centres'.

Although the current intervention role of occupational therapists at this ECE organisation is the provision of individual and group clinical treatment to children identified with learning difficulties or developmental delays, this role has expanded. The organisation want occupational therapists to reach more children by collaboratively playing a role in the organisation's ECD programmes (development, evaluation, and improvement) on a population-based level.

Examples of population-based intervention outcomes targeted at the improvement of occupational performance and participation are described in the Occupational Therapy Practice Framework (OTPF)[2]. The construction of playground facilities at ECD centres and play parks is one such example. According to the OTPF, occupational therapists have several intervention roles to play at under-resourced ECD contexts[2]. One example may be the education and training of practitioners and parents on childhood development, and the value of play. Another may be the role of advocacy where occupational therapists, ECD practitioners, parents and ECD organisations collaboratively engage on ECD platforms to advocate for improved ECD resources and opportunities for children in South Africa.

At the time of this study, this role of occupational therapy on a population-based level was not clearly defined in the literature pertaining to the South African under-resourced ECD context[48]. Therefore, this article does not focus on clarifying the occupational therapist's role on this population base level, but rather aims to investigate possible future areas of collaborative practice to support the under-resourced ECD context in South Africa.

The aim of this study was to identify the challenges experienced by ECD practitioners and coordinators regarding the quality of the current ECD programme offered by a NPO in the Free State Province of South Africa, in order to promote quality ECE for children 3–5 years of age.

METHODS

Study design

A qualitative, descriptive enquiry[49] was employed to explore the challenges experienced by the ECD practitioners and coordinator regarding the quality of the current ECD programme available at the organisation.

Study setting

The NPO had branches in all regions of the Free State, providing welfare services, poverty relief, and child and family care. One of the organisation's focus areas are to support under-resourced ECD centres identified in Bloemfontein and surrounding rural towns. The ECD coordinator of this organisation visits these centres on a regular basis. At the time of this study the ECD coordinator had reported that details regarding the existing programmes at these under-resourced centres were unavailable since there was no formal program.

Population and sampling

The study participants included the director of the NPO, the coordinator of the ECD centres, and a sample of ECD practitioners. Practitioners were ECD educators working at the NPO's identified under-resourced ECD centres. Practitioners included both formally and non-formally trained individuals providing an educational service in ECD (i.e. foundation phase education degree, NQF Level 1 to 5 ECD training). Participants were selected via non-probability purposive sampling[49,50]. Four practitioners out of potentially ten practitioners, were selected if they were currently employed at the selected under-resourced centre to participate in the study. No occupational therapists participated in this study.

Data collection and analysis

Data were generated by means of individual and group semi-structured interviews[51] conducted at the University of the Free State. Two researchers conducted the interviews in English, while the other four members of the research team were responsible for recording the interviews and taking field notes. The first interview was conducted with an ECD practitioner from Centre 1 in Bloemfontein. The second interview was done with the three other ECD practitioners from Centres 2,3,4 outside Bloemfontein interviewed in one group. The third interview was conducted with the ECD coordinator in her office. Due to time constraints, the director of this organisation could not participate in a personal interview and responded by email to some of the questions.

An interview guide (Table 1 p17) was compiled from literature about programme evaluation. The ecological model described by Britto, Yoshikawa and Boller[40] was considered. According to this model, quality with which a programme is delivered is viewed from different dimensions (child, adult, setting and system) and levels (resources, support systems, environment, communication/interaction, and values/culture/context)[40]. In addition, the recently developed BRIDGE Quality Reflection Toolkit[52], an example of a programme evaluation instrument was considered. This Reflection Tool Kit was developed from the ecological model[40] by the BRIDGE organisation[40,42,52], to identify practitioners' perspective and understanding of the quality of ECD in their specific contexts[43]. The BRIDGE ECD Quality Reflection Tool Kit, was developed for practitioners working in the South African ECD context[40,42,43,52] and was used for the purpose of this study. Like the BRIDGE ECD Quality Reflection Tool Kit, the interview guide for this study was structured into four themes, namely (i) teaching and learning; (ii) management and leadership; (iii) environment and policies; and (iv) frameworks[43]. Under each theme, questions were asked about the participants' challenges in terms of the ECD programme. The interview guide

Table I: Interview guide for the semi-structured interviews.

Themes	Questions
Teaching and learning	What are your needs in terms of teaching and learning? What are the problems you experience in terms of teaching and learning? What do you want in terms of teaching and learning?
Management and leadership	What are your needs in terms of leadership and management? What are the problems you experience in terms of leadership and management? What do you want in terms of leadership and management?
ECD environment	What are your needs in terms of the ECD environment? What are the problems you experience in terms of the ECD environment? What do you want in terms of the ECD environment?
ECD legislation and policies	What are your needs in terms of ECD policy frameworks? What are the problems you experience in terms of ECD policy frameworks? What do you want in terms of ECD policy frameworks?

Table II: Demographic information of participants.

Participants	Gender	First Language	Role in the organisation	Location of ECD centres/office	Highest level of education
P1	Female	Afrikaans	Director of the NPO	Bloemfontein	Bachelors degree in social sciences
P2	Female	Afrikaans	ECD coordinator	Bloemfontein	Bachelors degree in foundation phase education
P3	Female	Afrikaans	ECD practitioner	Bloemfontein (centre[1])	NQF Level 5
P4	Female	Sesotho	ECD practitioner	Wesselsbron (centre[2])	NQF Level 1
P5	Female	Sesotho	ECD practitioner	Lindley (centre[3])	NQF Level 4
P6	Female	Sesotho	ECD practitioner	Fauresmith (centre[4])	NQF Level 1

(see Table I) was used to direct the semi-structured interviews. The concepts were explained to the participants and examples were provided followed by the questions.

All semi-structured interviews were audio-recorded and transcribed verbatim by the student researchers. A deductive strategy of content data analysis was used. Different approaches to content analysis can be applied, such as emergent coding and a priori coding[53]. For this study, a priori coding was used where the researchers created a set of pre-set codes beforehand, derived from the BRIDGE Toolkit[52] and then applied to the transcribed text. These pre-set codes were used for the four main themes that included (i) teaching and learning; (ii) management and leadership; (iii) ECD environment; and (iv) ECD legislation and policies (see Table II, above). Template coding (an a priori coding system drawn from template analysis) was selected as a tool for framing data into meaningful categories and sub-categories to be interpreted[53].

Trustworthiness

Trustworthiness was established and ensured by means of credibility, transferability, dependability and confirmability[50,54]. Credibility was established through prolonged engagement with the participants during the interviews. An interview guide was used for the semi-structured interviews, and the same two interview facilitators conducted all the interviews to ensure consistency throughout the interviews. Furthermore, the transcripts were confirmed by all six student researchers before meaningful catego-

ries and sub-categories were identified. The student researchers also had an external auditor (the project supervisor) who reviewed the themes, categories and sub-categories and confirmed the interpretation of data. Transferability was addressed by providing a description of the research context for other researchers or clinicians to judge whether the findings would be applicable to similar contexts. Dependability was ensured by providing clear descriptions of the research population and sampling, participants, data collection and analysis. The researchers adhered to the approved research protocol throughout the research process. Confirmability was established through keeping and audit trail (field notes) and researchers reaching consensus about themes that emerged from the analysis. The researchers had a neutral stance to the participants since they have not worked at these centres, limiting research bias.

Ethical considerations

Ethical approval was obtained from the Health Sciences Research Ethics Committee of the University of the Free State (reference number UFS-HSD2017/0124). Thereafter, written, and informed permission was received from the NPO's director and ECD co-ordinator to conduct the study with practitioners from the under-resourced ECD centres. In addition, permission was obtained from the respective headmasters of each under-resourced centre represented by the practitioners, and all the participants provided informed consent prior to the study.

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Table III: Themes, categories and sub-categories identified from the transcribed semi-structured interview audio recordings.

Themes	Categories	Sub-categories
Teaching and learning	ECD practitioner training	Strategies for handling and disciplining children Managing and screening of developmental delays/disabilities Teaching methods
	ECD programme	Contextually relevant programme Programme aligned with National Curriculum Framework (NCF) Selection of age-appropriate activities Activity analysis, grading and adaptation Culturally appropriate stimulation Holistic stimulation Learning through play Assessing progress
Management and leadership	Human resources	Teaching assistants
	Systems	Early learning outcome measure (assessment of programme outcomes) Referral system
	Communication	Collaborative practice (community of practice platforms)
ECD environment	Non-human resources	Age-appropriate, culturally relevant, educational toys Creative use of resources Developing stimulating playgrounds
ECD legislation and policies	Knowledge of policies	Awareness of policies and existing programmes

RESULTS AND DISCUSSION

Demographics

Table II (p17) shows participant demographics. Both the director and ECD coordinator were female and Afrikaans-speaking. All the practitioners were female, one was Afrikaans-speaking and the other three were Sesotho-speaking. One practitioner had a degree in foundation phase education, one had a NQF Level 1, one a NQF Level 4, and one a NQF Level 5 ECD training.

Four themes, seven categories and nineteen sub-categories were identified from the data analysis and are presented in Table III (above). The 19 sub-categories related to areas where occupational therapists could play a role as articulated in the Occupational Therapy Practice Framework (OTPF)[2].

Theme 1: Teaching and learning

This theme related to the participants' perceptions of teaching and learning aspects within the organisation's programme. Their perceptions revolved around two categories, specifically ECD practitioner training and the ECD programme.

ECD Practitioner training

The practitioners expressed their need for continuous education and training in the NCF and other ECD programmes, and obtaining higher NQF qualification levels. Practical training in the use of teaching resources (electronic and hands-on) and first-aid were mentioned as lacking areas, as reflected by the following remark:

> "…we need the training, because some of them [resources] we don't use because we don't know how to use them" (P2).

The practitioners identified their lack of skills in certain areas, such as handling a large number of children, disciplining and rewarding the children in their classrooms and managing negative or aggressive behaviour.

> "...to take us to courses so we can have more knowledge in terms of teaching the kids" (P3).

Other skills they wanted to acquire were related to the management, screening, and referral of children with developmental delays, decreased attention span, abused or troubled children and other children with special needs. They also identified that they were unable to up and downgrade activities to meet the needs of children with developmental delays, special needs, and disabilities.

> "One is a disabled [child], … I don't know how to handle them" (P1).

Practitioners wanted to learn various teaching methods, how to implement the prescribed daily programmes correctly and perform effective classroom preparation. Similarly, according to the director, the practitioners needed to improve their skills to practically implement the theoretical knowledge they had received. The coordinator said:

> "Our practitioners find it difficult to implement the theory, using appropriate methodologies" (P2).

These findings were similar to previous findings that 78% of ECD practitioners do not have a diploma to teach at this pre-school level[15,19], and 23% of ECD practitioners have no training of any sort[16]. Although several ECD training courses were recently made available for an ECD practitioner in SA, for various South African Qualification Authority (SAQA) training levels (e.g., UNISA and Damelin), most ECD practitioners do not have access and finances to attend these facilities. Hence, large non-governmental organisations such as Ntataise[35], Cotlands[36], Sunshine Centre[37], Smartstart[38] and the BRIDGE organisation[52], have designed accredited courses for ECD. However, most of these courses are not aligned with the new NCF for learners from birth to four years of age, and therefore the practitioners need to receive training in the NCF[4].

However, the training of ECD practitioners, whether at a higher educational institute level, a community of practice level or informally, has to be a shared responsibility of various professionals, since ECD is a multifaceted construct and does not only require an educational lens[17,55]. Although occupational therapists'

role as clinicians addressing early childhood developmental problems on an individual level is well known, and often practiced in urban areas, our role as consultants in under-resourced contexts to enhance ECD on a population-based level is not clearly defined and described in literature[48]. The collaboration of occupational therapists within the multi-professional school-based team[56], and as a consultant in under-resourced educational settings, may improve the educational outcomes of learners, and has benefits for all team members[57].

Occupational therapists can make a valuable contribution by contributing to practitioners' training in areas within the scope and body of knowledge of occupational therapy (i.e. activity selection, creative use of resources, adapting or modifying their equipment, materials and environment, handling and disciplining children, screening and assessment of developmental delays and disabilities)[2,47,55]. This is aligned with the Policy on Screening, Identification, Assessment and Support (SIAS)[58], an area where occupational therapists employed by the Department of Basic Education can implement this as intended. However, pre-school children are currently not the responsibility of the Department of Basic Education where occupational therapists can provide educational services. Pre-school children may receive occupational therapy services rendered at government hospital and clinics[55].

The White Paper on Education and Training stated the need for the Department of Education to collaborate with representatives of various sectors within the field of ECD to ensure the holistic development of each child[59]. If the importance of early childhood interventions is not addressed through a multi-professional approach, it can lead to various consequences that may contribute to the burden of a society[60].

ECD programme

The ECD practitioners from three of the centres highlighted that they don't have an established (pre-planned) programme to follow. A practitioner from one centre expressed concern about the program being outdated, incomplete, and needed to be more contextually relevant. The participants requested to have a comprehensive, hard copy, day-by-day and contextually relevant programme with a manual to address this problem. The programme should give special attention to lesson plans and culturally relevant activities (e.g., cultural-specific games) that include songs, rhymes, worksheets, and educational and do-it-yourself toys. They also experienced difficulties in identifying checklists or instruments that could be used to assess the progress of children in their class. The practitioners also experienced a lack of confidence in using different methods of teaching, as they were not all taught how to use different methods, do not have experience with trying out different methods, and due to lack of resources are unable to effectively implement these methods. (These ECD teaching methods may for example include play-centred, hands -on demonstration, learning through experience, and thinking-feeling-doing). The following two remarks capture their experience:

> *"...I don't know how I can explain it. Maybe it's my self-esteem [confidence in methods], I don't know" (P3).*
> *"In my situation, I don't know for sure if this thing [teaching the program] is it right or is it wrong" (P3).*

Additionally, practitioners recognised the value of activities prescribed by the ECD programme, but experienced problems with the selection of activities that were age-appropriate and educational according to the theme being taught. If the theme is 'my body', the practitioners do not have any activity ideas as example of how to teach that. Additionally, the grading or adaptations to activities to make it age appropriate were mentioned as areas of difficulty.

> *"The things [activities and themes] we must do, we struggle to find them" (P2). "We're thinking of it ourselves" (P3).*

This lack of a structured ECD programme also hinders the coordinators' ability to guide the practitioners effectively. A structured program would enable the practitioners to plan the content and method of daily teaching and help develop the children holistically[46]. This may allow the coordinator to spend more time on monitoring and evaluation.

> *"My biggest need is a programme that I can take to those schools who need it… where you basically tell them ... what they have to do. Like uhm… you receive the children in the morning and then you take them to the carpet. Then they got a little bit of free play, with block ... on the carpet ... " (P2).*

These reported challenges regarding the ECD program is a critical aspect that needs to be addressed, since evidence shows the effectiveness of ECD programmes to achieve the development of children's full potential[61,62.].

According to the Department of Basic Education[26], South Africa has a vision to develop all children holistically, which explains why the cultural aspect of the programme, as requested by the practitioners, is such a vital factor. It envisions the promotion of the inclusion of all learners and facilitate the growth of each unique individual, which also aligns with the ethos of occupational therapy[63].

Occupational therapists can play a collaborative role in enabling the occupation of education for children in the ECD environment[63,64]. The activities in which children participate should be step-by-step, analysed, age-appropriate and culturally relevant, and stimulate the child holistically (all domains of development)[65]. Play is the main occupation of a child, therefore all activities in an ECD programme should involve learning through play to ensure that all developmental and learning outcomes are achieved[65].

Theme 2: Management and leadership

This theme highlighted how the participants perceived management and leadership within the organisation as it pertains to human resources, systems, and communication.

Human resources

According to the National integrated ECD policy of 2015, ideally an ECD centre should comprise of different human resources categories, including qualified ECD practitioners, ECD coordinators/supervisors, teaching assistants, community-based rehabilitation workers, health care practitioners, toy librarians and related workers such as administrative staff, cooks and cleaners to name but a few[17]. Practitioners in this study pointed out that there was a need for more human resources from the different categories to deliver quality ECD services. At some centres, there were no teaching assistants available to help supervise the children, for the preparation of teaching material, and to assist with their educational activities. At one centre the assistant only came in to take sick children home.

"So, the assistants, they do not help you teach" (P2).

Quality of a programme (and the associated child development outcomes) are closely related to the levels of qualification and skills of ECD practitioners[17,55]. However, practitioners emphasised that the level of qualification and related skills needs to be improved.

"They are only doing [the teaching] out of their minds. She doesn't know, ... uhm, about games, the kids' games, so ... she's asking the others to help" (P3).

The employment of more practitioners and assistants is strongly recommended by guiding policy documents, since the practitioner-child ratio should be taken into account to maintain quality ECD services[62]. Furthermore, the supervision, mentoring and support is central to improving quality of an ECD programme[40,55]. Drastic strengthening of all categories of human resources for ECD is needed in under-resourced ECD settings,

Systems
Managerial systems implemented in school-based settings have numerous positive outcomes, which can result in the overall empowerment of an organisation. These outcomes that may result in the overall empowerment of an organisation, include improved access to information, efficient administration and enhanced use of school resources, the improvement of employees' abilities, knowledge and skills along with motivation[66].

The management and practitioners at the centres in this study were challenged by the limited management systems[66] in place and might have influenced the quality of their services rendered. Both the practitioners and coordinator expressed the need for a quality assurance system, a monitoring and evaluation system, and an evaluation system for promotion.

"Maybe if the matron [coordinator] can visit her and evaluate what she is teaching. And that thing that she is teaching, is it right or not. So, she can advise them" (P3).

Additionally, for day-to-day classroom management of the children a daily record-keeping tool, a resource manual, a discipline and reward system, and a referral system for children with special needs, disabilities and developmental delays were lacking.

"No, we don't have a system. Well, I think they know they not supposed to spank them or yell at them ..." (P2).

Since young children in South Africa (up to six years of age) are currently the responsibility of either the Department of Social Development or the Department of Health, sufficient referral systems need to be in place and taught to practitioners to ensure that children at ECD centres are referred to and receive appropriate services[62]. With regard to the evaluation of a programme's outcomes, an outcome measure, such as the Early Learning Outcomes Measure (ELOM)[47], can be used by ECD organisations (although not used by the NPO evaluated in this study). The ELOM instrument is standardised on South African pre-school children aimed to provide evidence of the performance of early learning programmes. The ELOM assessment findings point to programme areas that need to be strengthened in order for children to transition into and have a good start in Grade R[47]. Occupational therapists can assist an organisation that has identified an area that requires improvement, for example, children's fine motor skills. The occupational therapist can evaluate the current programme and make activity suggestions to improve these aspects in children.

Communication
A vital aspect of any ECD organisation is communication among all the stakeholders involved. However, any communication method and management system cannot be 'superimposed' in any particular setting, unless the societal intentions and understandings within each unique ECD context are clearly understood[67]. Similarly, the practitioners expressed a need to have frequent meetings with management, to be involved in decision making, and for trusting relationships between all stakeholders. The following statement by one of the participants reflects their concerns regarding communication:

"She says they don't have a platform of opportunity sitting with management and talking about what is the problem between them and the management. It's always management saying you have to do this, you have to do that ..." (P3).

The results also confirmed that the practitioners had a need to belong to a community of practitioners[42]. The community of practice is described by Excell as a "co-participation in the shared practice of the community"[42:4]. The three dimensions recognisable in a community of practice are; mutual engagement, joint enterprise, and a shared repertoire. Hence, it is recommended for smaller organisations such as the one involved in this study, to connect with an established community of practice platforms, such as the BRIDGE organisation[39]. Furthermore, active collaboration between stakeholders such as families, parents and ECD practitioners, is important to ensure that all children reach their optimal potential[52].

The ECD sector is multi-faceted. It is therefore important for occupational therapists to belong to multi-sectorial ECE platforms in order to contribute to the improvement and development of ECD in South Africa.

Theme 3: ECD environment
This theme focussed on the ECD environment as it pertains to non-human resources. Environmental practices refer to aspects such as space, materials, equipment, routines, and activities, that practitioners and families can intentionally adapt to support each child's learning across developmental domains[4,17,26].

Non-human resources
The practitioners expressed an overall lack of and poor access to non-human resources, such as indoor and outdoor equipment and infrastructure.

"More educational toys because there is not enough in the class especially when they do inside door methods in terms of teaching" (P3).

According to the practitioners, no funding was provided by management and the practitioners used their own money to buy resources. Although practitioners mentioned past experiences in fundraising efforts, they were no longer participating in fundraising activities because of mismanagement of funds and a lack of transparency pertaining to funds. Inadequate storage space and poor organisation and control of resources were mentioned. Availability, access, and

quality of teaching materials, as well as knowledge on creatively using these resources, have been a source of contention amongst ECD practitioners.

"I think we need the training because some of them [teaching resources] we don't use because we don't know how to use them" (P2).

Practitioners commented on two aspects of indoor non-human resources that needed to be addressed, namely toys and technology. Age-appropriate and culturally relevant educational toys were identified as a need, because available resources were old, broken and not suitable for teaching. Additionally, practitioners expressed their need for supportive technological devices and programmes to support their teaching (e.g., internet access, television sets, computers, printers, photocopiers, and radios).

" … I need more educational toys because there is not enough in the class especially when they do inside door methods in terms of teaching" (P3).

The centres also experienced problems with the restoration of broken outdoor equipment and infrastructure resulting from the poor application and lack of financial resources. The development of stimulating playgrounds and modifications to existing equipment at the centres were pointed out as a need.

These findings were in accordance with previous studies[68,69], the Guidelines for Early Childhood Development Services[62], other action plans proposed by the Department of Basic Education[25] and the Department of Social Development[19]. Non-human teaching resources are important to ensure that all children develop to their optimal potential. Availability of resources such as a curriculum, educational games, and materials, play resources, books, indoor and outdoor equipment, toy kits, lesson plans, apps, videos, programmes, posters, puzzles, activities, and arts and crafts, can contribute to the holistic stimulation of children[19,44].

Poor implementation of ECD policies may lead to a deficiency in non-human resources, poor infrastructure, and a shortage of funding and other resources[25]. All these shortcomings eventually may result in poor access to and the quality of the early learning experience[44] and affect children's development.

Occupational therapists are qualified to recognise and analyse how a learner's context is related to their environment and how it influences performance and participation[2]. Focusing on holistic development and understanding the importance of play for learning may enable occupational therapists to play an active role in developing playgrounds to ensure that children's developmental needs are addressed. Additionally, occupational therapists have acquired the skills and knowledge to create user-friendly, relevant, cost-effective, and self-made non-human teaching resources in support of and aligned with the NCF[20].

Theme 4: ECD Legislation and policies

Discussion of this theme revealed the participants' insufficient knowledge and experience of relevant ECD policies pertaining to their ECD programme context.

Knowledge regarding legislation and policies

Practitioners affirmed the lack of awareness, understanding and acknowledgement of the names, content, and value of legislation and policies such as the NCF, Children's rights, National Early Learn-

ing and Development Standards (NELDS)[26], the White Paper on Education and Training[59], and the National Integrated ECD policy[17]. Because they are not familiar with the content of these policies, they express their fear of professional misconduct.

"Yes, it is a problem because we don't know what we are doing is right or wrong"
(P3).

They communicated their need to receive training to improve their knowledge of these policy documents. Practitioners were of the opinion that insufficient awareness of these policies also resulted in the poor implementation of legally required policies.

"Yes, with training we could use it" (P2).

These results are supported by the literature with regard to poor policy implementation caused by the large disparity between legislation and policy levels, and the delivery of quality service [25,70]. "Even though the National Integrated Plan for Early Childhood Development provides an enabling framework"[69:14], partial or incomplete delivery of these integrated services threatens the rights of children to have access to ECE[70]. It is commonplace that public policy impacts on the occupational life of individuals, communities, and populations[71]. Occupational therapists therefore need an awareness of their social responsibility as political beings[72], to foster social transformative practice[73] in the ECD landscape of South Africa.

LIMITATIONS OF THE STUDY

The sampling selection used for this study restricted the selection of participants to practitioners from only one organisation in the central Free State. Consequently, the findings of this study were specific to these participants, their organisation, and the research setting. Transferability of the findings to other ECD settings in South Africa may therefore be limited. The different investigation methods could have influenced responses of participants. The practitioners participated together in one semi-structured group, the coordinator was interview individually and the director responded via email. Despite the limitations, this study gives a voice to practitioners in under-resourced ECD centres.

Conclusion and Recommendations

The aim of this study was to describe the challenges experienced by ECD practitioners and coordinators from under-resourced ECD centres, regarding the quality of their current ECD programme.

The findings identified areas that require improvement to this ECD programme at these centres, specifically in the areas of teaching and learning, management, and leadership, the ECD environment and ECD legislation and policies. To improve the access to and availability of practitioner training, and resources it will be beneficial for the organisation in this study to join larger organisations and established communities of practice.

The authors argue that occupational therapists can play a role on a collaborative platform towards the support and training of practitioners, and promotion of ECE for children 3–5 years of age in under-resourced settings.

The profession of occupational therapy is strategically positioned to address ECE not only on a traditional, individual clinical level, but also on a collaborative population-based level. We recommend that such a broader contemporary approach be fostered in occupational therapy curricula, clinical and commu-

nity practices and research in South Africa. Accessible, equitable and quality early childhood education is the right of each child and the shared responsibility of a whole country. It is therefore crucial for South Africa to invest in human capital through ECD, because investment in children's early years of life may lead to rewarding return rates to the country and its society, ensuring sustainable development.

CONFLICTS OF INTEREST

AUTHORS' CONTRIBUTIONS

Marieta Visser identified the research topic. Marieta Visser, Jessica Grossmark, Susann Krüger, Carmen Smith, Marzel van Zyl, Zuandré Willemse, Caitlyn Wright formulated the research aims and objectives, and contributed to the conception and design of the work. Jessica Grossmark, Susann Krüger, Carmen Smith, Marzel van Zyl, Zuandré Willemse, Caitlyn Wright collected and interpreted the data, prepared a first draft of the manuscript, and approved the final version of the manuscript. Susan Kruger assisted with the second draft of the manuscript. Marieta Visser finalised and approved the final version of the manuscript.

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