

Research Article

Exploring early childhood centre managers' perceptions of their roles in promoting developmentally-appropriate physical environments in South Africa

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Abstract

The aim of this research was to explore the roles of Early Childhood Centre managers in promoting developmentally appropriate physical environments for birth to four-year-old children in South Africa, and then draw implications on the quality of leadership in the centres. While significant studies have been conducted on the phenomenon globally, little has been published on how centre managers understand their roles in promoting developmentally appropriate physical environments for infants and toddlers. This research was based on Merton (1957)'s Role Theory. This was further paired with a structural-functionalism paradigm, where every individual's place and corresponding role in a social or organisational structure is appreciated. Five South African centre managers within rural communities of Gauteng North District were purposively sampled for this empirical investigation. A qualitative approach with case study design using semi-structured interviews, spot observations and taking good quality photographs in collecting data was employed. Thematic data analysis was employed to analyse the collected data. The study established that some manager-participants were cognisant of their leadership role in constructing developmentally appropriate physical environments, whilst others were unaware or oblivious of their role and influence. In addition, results also allude to potential gaps in how centre managers understand and interpret policy and curricula to fashion and sustain developmentally appropriate physical environments amid contextual challenges. The researcher, therefore, recommended that the Education Department in the country develop a strategic plan to develop leadership skills in centre managers.

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Introduction

The independence of South Africa in 1994 resulted in large numbers of young children attending early childhood centres, a privilege that was only enjoyed by whites in the Apartheid education system. This put pressure on the existing centres, prompting the government to open more centres. Early Childhood Centre Managers (ECCM) play a very critical role in supporting, promoting and directing the development of age-appropriate physical environment. However, most of these new centres did not have qualified managers to steward them. Early Childhood centre leaders' understanding and interpretation of these advances were not observable in contextually and culturally unique practices. Hence, the rationale for determining roles and responsibilities of early childhood centre managers to promote such environments for children aged from birth to four years.

The physical environment in which a child is reared has a significant influence on his/her physical, interpersonal, and temporal development. Concerning early childhood centres and school environments, it is key that physical environments are created with age-appropriate resources that would encourage the holistic development of young children. It is doubtful that managers would meet the level of acceptable criteria for most centres in the country.

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Hence, appropriate quality design standards in catering for developmentally appropriate environments and quality interaction opportunities must be provided.

A Developmentally-appropriate environment is a slippery term. This suggests that it is very difficult to agree on a common definition of a conducive physical environment. Nevertheless, [Matthews and Lippman \(2019\)](#) have noted that various philosophers such as Maria Montessori, Reggio Emilia and others have put forward acceptable criteria that can be used to appraise the learning environment in ECD centres. The study sought to provide more insight and add to existing knowledge on the roles of ECD centre managers and the implications on the provision of quality education in these centres.

According to [Leo-Rhynie \(2015\)](#), committed, motivated and well-trained centre managers and teachers should take responsibility for designing suitable, quality and developmentally appropriate learning environments. To achieve this successfully, ECCMs need to demonstrate sound pedagogical leadership which is defined by [Coughlin and Baird \(2013:1\)](#) as, ‘the act of leading or guiding individuals or groups, understanding of how learning takes place, the philosophy and practice that supports that understanding of learning’. The South African Curriculum and Assessment Policy Statement ([DBE, 2011](#)) provides an outline for schools and teachers to design Developmentally-Appropriate Physical Environments (DAPE) for children between ages five and eight. For the younger child, ECCMs and teachers need to become familiar with additional social development and international policies to design DAPE and have adept knowledge of the young child’s teaching and learning needs.

The exposure of children to low-quality physical environments deprives them of learning and general wellbeing. According to [Meyer \(2009\)](#), if the learning environment is not designed to meet learners’ ages and developmental and individual learning styles, learning objectives may not be achieved. [Rao et al. \(2012\)](#) found that socioeconomic status and conducive learning environments with well-trained staff and good resources have an academic advantage over children from perilous surroundings.

In South Africa, very few studies have focused on ECCMs’ perceptions of their roles in promoting developmentally appropriate physical environments from birth to four-year-old children. In this research, the researcher intends to fill up this gap by exploring the ECCMs’ perceptions of their roles in promoting developmentally appropriate physical environments in the rural communities of Gauteng Province.

The Rationale

As part of the routine visits to ECE centres on behalf of the Department of Basic Education, the researcher came to experience for herself the dire, neglected and developmentally inappropriate environments at the hands of un-informed centre managers. The teachers there believe in a “one-size-fits-all” teaching and learning approach for young children. To understand the perceptions of ECCMs, the researcher posed the question: What are the perceptions of ECCMs regarding their role in promoting DAPE for children aged birth to four years? Answering this research question requires a two-fold strategy: One, is to highlight the importance of a DAPE; and secondly, to describe the role of ECCMs in promoting DAPE.

Statement of the Problem

Currently, the South African government is focusing on shifting the functions of Early Childhood Education from the Department of Social Development to the Department of Basic Education. However, the physical learning environment in the early childhood sector continues to draw attention and is of concern. The physical environment plays a critical role in the holistic development of young children and this is an area that is most neglected in the early childhood centres. This statement is supported by [Miller \(2011\)](#), who states that the importance of the physical environment and the influence it exerts on the quality of educational activities provided to young children has been largely neglected. The quality of interaction between children, peers and teachers may be significantly affected by the physical environment. Early childhood centre managers play an influential role in seeing to it that children are exposed to appropriate physical environments. While significant studies have been conducted on the phenomenon globally, little has been published on how some Early Childhood Centre Managers understand their roles in promoting the developmentally appropriate physical environments for young children in the country.

Literature Review

The Developmentally Age-appropriate Physical Environment

There have been substantial studies conducted globally emphasising the importance of creating appropriate physical environments for children and the roles and functions played by ECE leaders in promoting quality practices in most ECE centres ([Matthews & Lippman, 2019](#)). Thorough preparation of the physical environment including classroom and play space design, as well as creating developmentally appropriate materials has been deemed essential to the

educational process (Falk, 2018). Among the developmentally appropriate materials are child-sized age-appropriate furnishings like chairs, tables, bookshelves and toys which should be accessible to every child.

The physical setting plays an important role in the lives of pre-schoolers and can be an important component of children's experience and development when it is wisely and meaningfully designed (Tadjic, Martinec & Farago, 2015). It is the role and function of the centre managers to ensure that the physical environment is developmentally appropriate according to the set millennium goals of children, acknowledged worldwide. Their commitment may be different but roles and functions are similar throughout the world. The United Nations (2000) points out the children's right to education. At the centre of this is developmentally appropriateness which is the focus of this study. The physical environment and children's learning and development are interwoven.

The holistic development of the young child is dependent on the quality of the socio-environmental contexts (Ruey, 2010). If the physical environment is designed carefully, it can inspire choices, discoveries, and communication with the other children and the teacher (Tadjic, Martinec & Farago, 2015). International scholars believe that a safe and stimulating DAPE is fundamental for the growth of every child regardless of age, ability, sex, race, religion or language. South Africa as a developing country has also prioritised scholarly discussions on ECCMs' roles and responsibilities to ensure DAPE.

Policies and Principles Pertaining DAPE

The Government of South Africa has enacted a policy in favour of ECE centres. The national policy goes beyond protection to provision for meeting the needs of infants concerning physical, mental, psychosocial, health education. At the policy level, the importance of pedagogical leadership that promotes the young child is advocated by the National Early Learning Development Standards (DBE, 2009). Whilst quality education in South Africa is governed by The Constitution of the Republic of South Africa (1996), The Children's Act 38 of 2005 and the National Integrated Plan for ECD in South Africa (2005) protects children among other issues. These policies not only align with the roles and responsibilities of centre managers but also offer guidelines for constructing the physical environment that caters for children's rights to holistic development and overall wellbeing (DBE, 2011).

It is therefore critical that the centre manager knows and understands that the children's holistic wellbeing is of paramount importance. The centre manager safeguards children's rights, promotes inclusive practices in daily activities and knows how to proceed in cases of potential harm or suspected abuse. Furthermore, the centre manager understands national and international legislation, regulations and the centre's policies and procedures regarding children's rights and protection.

The Roles of ECCM in Providing DAPE

The country's National Educational Policy has a bearing on the quality of education as it stipulates the standard requirements for the early education centres. In South Africa and other regional countries, there is a basic standard criterion required before a centre is given a licence to operate. Educational researchers consider the following as non-negotiable; whilst being considerate of the unique socio-economic and cultural contexts of the school, the centre manager has the responsibilities below adopted from the head start of Lane County 1995-2013.

The indoor and outdoor spaces will provide safe physical environments that are conducive for the different stages of development of each child. Appropriate space and materials will be provided to conduct a variety of activities that promote development in each developmental domain (Ata, Deniz & Akman, 2012). The physical environment supports positive behaviours. Firstly, the manager should conduct a safety inspection to ensure that indoor, outdoor spaces and other physical arrangements are consistent with the health, safety and developmental needs of children.

Secondly, the manager should adapt and modify space to meet the needs of all children (Tadjic, Martinec & Farago, 2015). It is critical to also consider the needs of children who are physically and/ or sensory challenged. The manager should establish traffic patterns for entering the room, moving to and from activity areas. This can be done by minimising large open spaces and obstacles. One important role of the manager is to organise the room so that he/she can see as much as possible from every location to ensure children's safety (Tadjic, Martinec, & Farago, 2015). In addition, the manager must provide individual spaces for each child to place their things. The things should be labelled using the child's home language.

Underscoring to the roles of the centre manager, Hoadley, Christie and Ward (2009), Hujala et al. (2016), Moen and Granrustern (2013), Modise (2019) and Shaw (2010), indicated that the manager among other roles should create, implement and sustain a quality child-centred environment. These authors further state that the role of a centre manager amongst others are to establish and maintain strong interpersonal relationships with staff, parents and children. They further mention that centre managers are to guide, mentor and continuously develop the knowledge and skills of staff; manage day-to-day managerial and administrative duties, including human resources and finances.

Centre managers according to the authors mentioned above make allusion that they are responsible for strategic functions such as goal-setting and quality improvement, and collaborating with community partners and setting up workable systems. They lastly agree that centre managers' roles is to provide leadership and management that shapes the educational institution; supervise curriculum coverage and assessment through instructional leadership. They are expected to also support educators in effectively implementing the cycle of planning to enhance programmes and practices.

According to [Van der Berg et al. \(2011\)](#), some ECCMs perceive their function as predominantly administrative and managerial; thus neglecting their role and responsibility of being an instructional leader and support for teachers to deliver the curriculum within a conducive DAPE. Furthermore, some leaders spent most of their time attending meetings, securing funds and donations, and buying groceries and supplies. An attitude adjustment and change in priorities are required to fit the notion of pedagogical leadership ([Coughlin & Baird, 2013](#)).

Understanding How Young Children Learn and Develop

Another component of pedagogical leadership, is that centre managers understand how young children learn, grow and develop in the first three years of their life (National Occupational Standards); thus they intentionally align content coverage and the DAPE with the guidelines Early Learning Development Standards (ELDS) ([DBE, 2015](#)). For the lasting holistic development of young children, it is significant for centre managers to encourage the development of age-appropriate milieus that have a long-lasting influence on children. In light of the list of roles and responsibilities for centre managers, educational researchers have delineated characteristics that DAPE should reflect.

While the issue of access to education can never be doubted, the importance of the physical environment in the provision of quality ECD education can also never be underestimated for it happens to be at the centre of the provision of a sound education. Stressing the importance of the physical environment in the provision of education, [Sidhu \(2000\)](#) argues that children cannot get the desired benefits from school if they are not housed properly, if they have no playgrounds, if they are taught in unhealthy surroundings and if the entire equipment provided to them is uncomfortable.

The ECCM, as a pedagogical leader with specialised knowledge and astute skills, has to provide an educational environment that: adheres to the health and safety regulations for constructing both indoor and outdoor environments. ECCM should have clear conceptualisation of the different stages of child development and capabilities, which will inform the provision of appropriate resources. The environment should allow children to explore the physical world with independence through play and experimentation.

According to [Doctoroff \(2001\)](#), [Gordon and Browne \(2017\)](#), [NAEYC \(2021\)](#), [Nelson \(2012\)](#), [Van Heerden and Du Preez \(2020\)](#), the manager should arrange safe indoor and outdoor areas for play, and nurturing spaces that support the emotional-social development of young children. Planning a place for children's growth and development becomes critical, managers need to consider physical elements, temporal dimensions, and the interpersonal atmosphere. Centre managers should promote play activities especially development complex play for all children through regulating group size and child-teacher ratio based on space organisation and material used in the classroom.

Creating Opportunities for Professional Development of Teachers

[Mestry \(2017\)](#), emphasises that centre managers are responsible for creating opportunities for teachers to continue with their professional development programmes to improve their practices and remain relevant and useful to the young child by adhering to the training requirements of the South African Council for Educators (SACE). In-service teachers need to be encouraged to equip themselves to become innovative towards developing recyclable resources to facilitate the active engagement of children in their physical environment. It is the researcher's view that the centre manager should encourage other staff members to engage in professional development as well. The innovative side of a centre manager will come to play when sharing their own experiences as young children with teachers of creating own resources than relying on bought resources. It becomes apparent that upskilling and sharing of best practices are of great significance in the early childhood education sector.

The Research Aim, Question and Objective

This research purposed to explore the role of Early Childhood Managers in promoting the developmentally appropriate physical environment in early childhood centres.

This research therefore aimed at answering the research question below:

What are the perceptions of ECCMs regarding their role in promoting DAPE for children aged birth to four years?

To answer the research question the following objective below needed to be achieved:

- to explore the perceptions of early childhood Center managers' role in promoting a developmentally appropriate physical environment.

Theoretical Framework

For analysis and interpretation of data, the study used the Role Theory of the American sociologist Robert [Merton \(1957\)](#). The common notion of the theory is that roles are associated with social positions (or statuses), [Biddle \(2013\)](#). A social position generally is an identity that designates a commonly recognised set of persons. [Merton \(1957\)](#) believed that everyday activity or behaviour can be socially defined according to categories. Daily, humans exhibit social roles which differ in nature, for example, rights, duties, expectations, norms, whilst others are behaviours one has to face and fulfil. Each social role carries both benefits as well as risks. [Biddle \(2013: 8\)](#) defines Role Theory as:

“A science concerned with the study of behaviours that are characteristic of persons within the context and with various processes that presumably produce, explain or are affected by those behaviours.”

The theory argues that each individual has a role to play in society which is informed by social norms; one's behaviour within this social role reflects whether his/she confirms or rebels against role norms or expectations; depending on individual characteristics, historical time, and cultural context; social roles can be rendered or changed by society establishing a new norm for prosocial behaviour which is rewarded or punished ([Biddle, 2013; Hunter, 2001](#)).

For this inquiry, an understanding was framed by the Role Theory when exploring centre managers' roles and responsibilities towards developing DAPE which adheres to predetermined standards and expectations set by the government and the society schooling serves. This theoretical framework guided an interpretation of how perceptions are shaped at school, formal and organisational levels; thus including all role-players from staff to policy-makers set government. The early childhood leader's central role expectation is goal-achievement of their centres

Method

Research Design

Empirical evidence for this investigation was generated using a qualitative research design with a case-study approach implemented from an interpretative paradigm. As [Hennink, Hutter and Bailey \(2020\)](#), explains, the most distinctive feature of qualitative research is that the approach allows you to identify issues from the perspectives of your participants and understand the meanings and interpretations that they give to behaviour, events or objects. Thus, the researcher wanted to obtain a rich and clear understanding of ECCMs' experiences, constraints and enablers, when promoting DAPE.

Participants

The research sites (cases) and their directly associated population were purposefully sampled. Five early childhood centres from the rural community of Gauteng North District were selected. The selected ECE centres had to meet the following criteria to be included in the research: they should be accommodating birth-to-four-year-old children, come from low-income socioeconomic areas within marginalised rural communities of Gauteng, the centre should be registered with the Department of Social Development (DSD) and Education – Gauteng North District. Participants were purposefully sampled with the following criteria taken into consideration: should be ECCMs with more than five years teaching experience in the rural areas of Gauteng Province, the ECCM being the founder, owner and functioning as both the teacher and the principal.

Upon identifying the most suitable manager-participants, the researcher discussed the purpose of the study with them to obtain informed consent and voluntary participation. The professional and qualification profiles of the respective participants are summarised and presented in table 2 below:

Table 1.

Demographic Details of Participants and Their Pseudonyms

Respondents	Age	Seniority	Education Level	Further study
Site-manager A	58	22	Diploma in Grade R	Honours
Site-manager B	58	23	Diploma in Grade R	No
Site-manager C	35	10	Diploma in Grade R	No
Site-manager D	53	27	Level 5 ECD	Diploma in Grade R
Site-manager E	32	12	Diploma in Grade R	No

Data Generation

To explore the complex social roles that ECCMs have, semi-structured interviews and high-quality pictures were utilised as a medium to capture their perceptions textually and visually. The semi-structured interviews further allowed

the researcher to establish participants' (ECCMs) perceptions regarding their experiences relating to their research topic (McIntosh & Morse, 2015). High-quality pictures of the physical environment were also taken and supplemented with observations of how the physical learning spaces were arranged and resourced. A narrative interpretation of pictures

Data Analysis

To make meaning of the generated data and to gain a comprehensive understanding of the phenomenon, the interview data-sets were transcribed verbatim and supplemented with printed pictures and additional observation notes before analysis. The thematic analysis enabled the researcher to identify patterns of meaning across data-sets that provided some insight on how to potentially answer the research question. The process of identifying patterns and themes was rigorously performed using data familiarisation; search for emerging patterns; data-coding; and data reduction by categorising evidence in distinct themes.

Table 2.

Aerial View of Indoor and Outdoor Physical Spaces at Some Selected ECD Sites

Observation notes and pictures

Bedroom: Birth to one year



- This room has feeding bottles and baby cots.

Nappy changing station



- A separate demarcated room for nappy changing.

Classroom: Two to four years



- Two to three years olds classroom with an assistant teacher.

Outdoor play area



- Sheltered and unsheltered outdoor play area.

The table above show the pictures of how physical indoor and outdoor spaces for the young children has been arranged in some selected ECD centres.

Observation Notes and Pictures

Pictures of the indoor classroom and outdoor environments were taken and their analysis was presented together with the emerged themes and the questions asked. Pictures were labelled one to four. Picture one presented birth to a one-year sleeping area. This room had noticeable features of the age group. Feeding bottles were placed on the shelves. However, the baby cots did not have any hanging rattle making toys. Picture two was a classroom representation of birth to four years old children. Two to three-year-olds classroom was used for theme discussions, the size of the class was too small for individual space of each child. There were also two adults in the classroom, the teacher and the assistant.

The third picture was a separated nappy changing room with no visible toys or equipment to keep the child busy or make nappy changing exciting for the child. The bed was made of a wooden door – which made the researcher question the comfort of such a bed for the children. The fourth and last picture is the sheltered and unsheltered outdoor play area. The space looked very neat and clean without any play equipment for children to access freely at any time. Toys are brought out when children are outside otherwise they are being packed away after free play. Looking

at the unsheltered play area, resources or play equipment were readily available and it was noted that they were one size fit all. These results indicate that the centres are impaired by a lack of adequate standard physical environment.

In the subsequent paragraph, the researcher presents the related semi-structured interview questions, data coding and emerged sub-themes.

Question 1: *What is your understanding of the role and responsibilities of an early childhood centre leader?*

Data coding and sub-themes: Overall safety of the centre, Inspect teachers’ preparations
Day-to-day operations of the centre.

Question 2: *According to your understanding, what does an effective teaching and learning environment entail?*

Data coding and emerged sub-themes: Inviting, clean and well-prepared environment, Age-appropriate equipment and information, Safety and functionality of resources, Age-appropriate equipment and materials, safe and trusting environment.

Question 3: *Which documents/policies guide your daily practices and implementation of the curriculum?*

Data coding and emerged sub-themes: Policy documents for Grade R education
National Curriculum Framework (CAPS) that is prescribed for Grade R.

Question 4: *How do you ensure that favourable environments for children are created?*

Data coding and emerged sub-themes: Mentoring one another, Design own educational toys, Community and parental involvement. Affordable commercial resources, Friendly environment, safety, loving and caring.

Table 3.

Emerging Themes from the Research

Themes	
Theme 1	Centre managers’ central focus
Theme 2	Physical educational environment
Theme 3	Government involvement
Theme 4	Devising educational services

Results and Discussion

Based on the textual and visual information, the researcher has come to realise that the participants and the researcher may not share the same conceptual or scholarly understanding of what roles and responsibilities mean to promote DAPE for the very young child. The evidence of the four emerging themes (see table 3) will now be interpreted using the theoretical framework as a guiding principle. To increase the transparency, trustworthiness and credibility of the findings, the origin of the quotation is added in brackets. For clarity, abbreviation SM-A, SSI: Q1 stands for ECCM from research site A, semi-structured interview: Question

Theme 1. Centre Managers’ Central Focus

The roles and responsibilities of an early childhood centre manager as discussed in the literature review consists of diverse tasks that range from pedagogical leadership, managerial and administrative tasks, and creating a DAPE to name a few (Hujala & Eskelinen, 2013, Shaw, 2010). Some of these tasks require daily attention, others weekly or monthly. The five respective participants, each representing their institution, shared their daily routine in terms of roles and responsibilities during the semi-structured interviews. As an observing researcher to understand the daily functioning of the centre manager, the researcher decided to present each participant’s verbatim response sequentially using an overarching heading to get an idea of their day-to-day tasks. From a role theory perspective (Hunter, 2001), the set of normative expectations that defines a position (centre manager) or status (authority) in the social structure (education) influences their corresponding roles, behaviours and interaction with others that share this communal environment. From the illustration below (figure 1), it seems that the typical day for two participants is to ensure their early childhood centre “runs smoothly”, inspecting the premises and interacting with staff, parents and children. It seems the task of ensuring safety indoors and outdoors is highly valued and to inspect curriculum coverage. One participant only expressed his/her concern about proper behaviour whilst another participant also elaborated on various other tasks that overlap with what scholarly literature summarises.

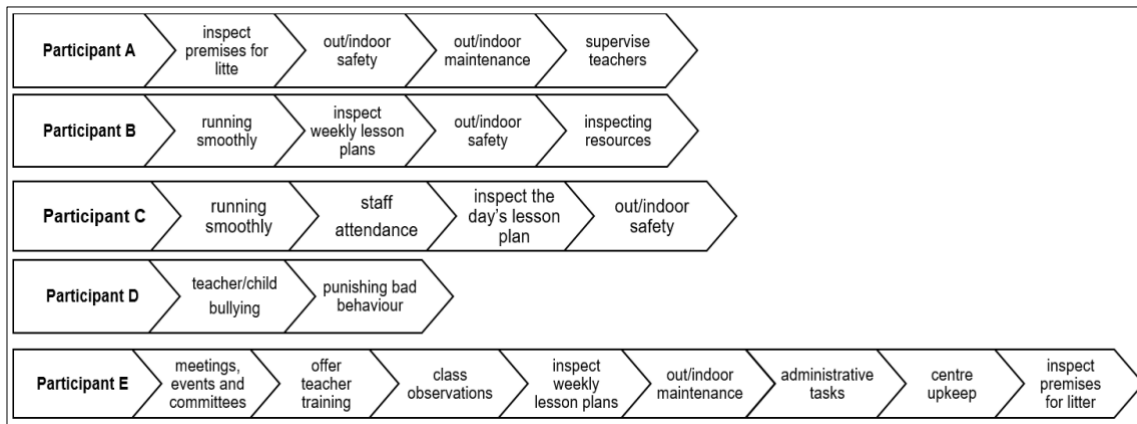


Figure 1.
Sequential Summary of Roles and Responsibilities

Theme 2. Physical Educational Environment

The physical educational environments for children must be intentionally developed to meet the emerging and current developmental needs of the 0-4-year-old children whilst keeping in mind the appropriateness and safety of the space and furniture. From a Role Theory point of view, the centre manager should understand that the young child and the teacher’s wellbeing is of importance, thus connection and access to resources can promote feelings of security and directions for behaviour (Aarsten & Hansen, 2019). Each of the participants described a DAPE in extensive detail and most of their descriptions accurately reflect the body of scholarship on this topic. The quote from site-manager D reads as follows:

“... a developmentally appropriate physical environment comprises of a learning environment consisting of the following classrooms, Indoor play area, outdoor play area with age-appropriate equipment like, Jungle gyms, balls, scooters etc. that are small.”

The expression of site-manager E is:

“I prefer a spacious outdoor playground with various equipment: jungle gyms, sandpits, swings, see-saws, balls, tyres, bicycles, tricycles, and water-toys.”

The above verbatim expressions by the two centre managers concur. They both clearly articulated what a developmentally appropriate physical environment entails.

Theme 3. Governmental Involvement

The vision for early childhood education is to work with and for children respectfully and appropriately that provides them with quality experiences and equality of opportunities to reach their full potential (DBE, 2015). Regarding the early learning development areas, education for the young child should promote their: well-being, identity and belonging, communication, creativity to explore knowledge to understand the world. According to Rosen and Poage (2021), the National Association for the Education of Young Children (NAEYC) defined methods to promote the optimal development and learning of children through a strengths-based, play-based approach to joyful, engaged learning.

Considering from a role theory standpoint, authorities (social and education policy-makers) should offer social agents (centre managers) with official guidelines on how to ensure children receive appropriate and quality education (Hunter, 2001). Thus, the centre manager serves as a connecting link between government and society to equip future child citizens with knowledge, skills and values to function in society. Centre managers’ knowledge of policies, white papers and the curriculum framework is imperative. This is clearly articulated in the National Occupational Standards NQF Level 5.

Each participant was allowed to share their experiences of an official government document and how they utilise them to inform their roles and responsibilities. Four of the five respondents referred to official policy documents for recruitment, finances and curriculum. Two participants indicated that they utilise additional curricula frameworks seeing that the national curriculum statement is intended for Grade R children and not the very young child (DBE, 2012). One participant expressed: “I use none. It’s general knowledge” (SM-A). Probing further on their awareness that the CAPS (2011) do not cater for the educational needs of the children, not one of them was aware of the National Early Learning Development and Standards (NELDS) as an alternative curriculum-related policy nor the Early Learning Development Standards (ELDS) as an umbrella to plan experiences for children's holistic development.

Theme 4. Devising Educational Resources

Learning and teaching support materials are used in classrooms and are especially helpful for young children who require ample sensory input (Van Heerden & Du Preez, 2020). This equipment, media, material or resources are integral to all education systems and should be managed, utilised and maintained to ensure access and support to the delivery of quality education. In poor socio-economic communities, the Department of Social Development (DSD), serves as the main provider of ECE funds for purchases. To get the funds ECE centres need to register with the DSD and meet the set criteria. For ECE centres to register with the DSD requires compliance with a set of stringent norms and standards which are impossible to achieve for many centres, particularly those serving poor and rural communities (Giese & Budlender 2011). This process then leaves centre managers to find additional donations from various sources.

Role Theory emphasises that the interaction of social systems should be aimed at keeping relationships healthy to promote wellbeing, thus sharing resources promotes a sense of belonging (Aarsten & Hansen, 2019). Parents and members from the wider community serve a crucial role in creating and sharing educational resources. Some of the experiences shared by centre managers read as follow: “Every Monday we sit together to mentor each other about the environment. We also involve parents to provide us with recyclable materials.” (SM-A, SSI: Q4-Q5), like: “parents bringing all sorts of empty boxes, plastic bottles, and other things to help make kids’ resources useful for learning” (SM-E, SSI: Q4-Q5). An elaborative explanation was shared by the participant from research site C:

“Most of the time we create our resources, sometimes we buy. We involve the kids in developing the resources and sometimes some teachers are involved, most parents donate money. Every month the Department of Social Development gives us money to buy toys and other resources. If we do not get funds, as ECD teachers we create our own toys.”

Conclusion

Drawing from the data sets it seems that centre managers have a good understanding of their roles and responsibilities about certain categories of duties, whilst other expertise is seriously neglected and questioned. Concerning the photographs and the interview discussion, some of the following disparities can be highlighted. There is an understanding of what defines a developmentally appropriate physical environment for the Grade R child; however, not for the birth to four-year old children. Awareness of a lack of resources in rural areas and that ECE centres rely on donations or assistance from outside. Some participants were not very keen about carrying out their responsibility in creating DAPE themselves as experts; rather this responsibility is hastily outsourced to parents and members from the community who do not know very young children and what their learning needs are. Obliviousness notion presents that the Grade R curriculum can be adapted to serve the needs of babies and toddlers. Limited knowledge of the specialised curriculum needed to plan for holistic education of the very young children as catered for by developmental standards. Illiteracy of official government policies that prescribe educational, managerial, administrative and human resource practices at the school level. Inattentiveness towards providing continuous professional development of staff and teachers regularly. These findings contrast the competencies laid down in NQF Level 5. Preoccupation among participants about administrative and managerial obligations as opposed to pedagogical leadership, which focuses on quality and holistic education that inspires children to self-discover, solve problems to gradually become more independent.

Well-prepared early childhood environments should aim at developing the child in totality. It, therefore, challenges the centre managers to create environments that are developmentally appropriate with age-appropriate resources that cater for the educational uplifting of the children. Although teachers are also responsible, they do need support from leaders and other stakeholders. Parents, as some of the stakeholders, could contribute by helping to develop resources for their children, including volunteering their services at the ECE centre which will help in relieving the duty-load of staff members. However, it remains the duty of the centre manager to take the leading role as an expert in ensuring that physical environments are well-arranged and appropriately resourced. Their leadership and expertise should be evident in the way environments are arranged, managed and used to implement curricular goals and objectives.

Recommendations

Recommendations for Applicants

This study offers empirical data on how early childhood education centre managers within rural areas in the Northern Gauteng district may perceive their roles and responsibilities towards promoting DAPE. The data sets once again offer evidence that our childhood centres for the very young children require urgent support and dedication from the government, social development, early childhood leaders, policymakers, trainers and Non-Governmental Organisations (NGOs) to capacitate them with knowledge, skills, values and tools on how to: (a) give equal and quality

attention to each domain associated with being a centre manager, (b) develop, maintain and sustain DAPEs for the very young child, and (c) implementing a style of leadership that will be engendered to bring about meaningful change in their centres.

For example, the researcher dealing with policy documents noted that most of the time some of the early childhood centre managers do not acquaint themselves with existing policies but they rather pass them on to their subordinates without mediating, monitoring implementation, and supporting the guiding principles offered in the policy. It has become evident that early childhood centre managers are not aware of the other policy document that is of much relevance and significance to guide ECE teachers to uplift children's interest and performance in indoor and outdoor activities. Although this policy is not prescriptive, it does guide if one struggles with what needs to be done when dealing with birth-to-four year children at their centre. Knowledge and understanding of relevant policies play an important part in facilitating a productive ECE environment. Accordingly, leaders have to be aware of the existence of policies relevant to their sectors to dissect them for an incisive understanding to transfer relevant aspects of the document to practitioners so that they keep abreast with modern developments and strategies. They also need to keep referring to the norms and standards for providing active learning for early childhood children. This will compel them to ensure that active learning takes place effectively and efficiently in a developmentally appropriate physical environment.

The findings, through interviews, revealed very limited knowledge and understanding of a centre manager's role that would set apart their responsibility from those of the teachers. Leadership is about facilitating meaningful positive change that helps followers to contribute holistically towards the enhancement of the institution. Hence, ECE leaders should be influential in making meaningful contributions by exposing children to physical environments that are developmentally appropriate. Thus, early childhood centre managers need to rethink their roles and responsibilities as leaders, in line with the National Occupational Standards NQF Level 5, mandatory competencies.

They must be transformational-minded and constantly monitor and evaluate their school situations which will elicit an appropriate leadership style that would benefit all role-players and enable them to resolve a variety of socio-economic, political and environmental challenges encountered within and around their centres. Pedagogical and transformational leadership styles are among those that are advantageous to upgrade the quality of ECE environments. This will require them to be fully involved in transforming their physical environment which will cater for all children of different ages at their centres. The findings also revealed that some resources provided in ECE physical environments were inappropriate; even the set-up of the environments lacked meeting the required standards. For example, the outdoor area had resources inappropriate for birth-to-four-year-old children, but rather for older children. Leaders at ECE centres must take full control of their leadership role in providing and resourcing developmentally appropriate physical environments.

Planning, designing, and structuring indoor and outdoor areas have a great influence on how children behave and feel. In this regard, the physical environment should be well-organised, comfortable, and welcoming to offer a variety of activities for cognitive, social, emotional, and physical development. Although centre managers remain the primary implementation agents for DAPE, they are often incapable of executing this function. This paper explored the reasons for this incompetency and recommends urgent intervention. It was established that educators needed to be provided with the training and guidance necessary to promote the holistic development of the child by using DAPE strategies. Outcomes presented in this paper have implications for policy and practice more so with the function shift of birth to four-year-olds from DSD to DBE. They offer insight into the context of the ECCMs understanding of their roles in promoting developmentally appropriate physical environments to children.

Limitations of Study

The study limitation factors are stated below:

- The study was limited to only one province while South Africa has nine Provinces.
- Gauteng Department of Education has fifteen (15) districts servicing the schools and community based Early childhood centres and the study was only limited to one district, with data collected from only five community-based centres.

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