Perceptions of Teachers on Children's Learning Outcomes in Post-COVID-19 Hard Lockdown: A Case of Early Childhood Centres in Umjindi Township.

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Dedication

This research is dedicated to my family, my wife Mahlatse Rose Sithole, my children Patience Nelisiwe Fezile Sithole, Keneilwe Nei Sithole, Nkazimulo Kgotsofalo Fufu Sithole; my grandson Lukhanyo Khanyo Sithole, and to my late mother Sizakele Grace Ngwenyama-Khoza.

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Abstract

The COVID-19 hard lockdown resulted in prolonged closures of Early Childhood Development (ECD) centres, leading to significant disruption in teaching and learning processes. This study explored teachers' perceptions of children's learning outcomes post COVID-19 hard lockdown in selected early childhood centres in Umjindi, Mpumalanga Province. Anchored within an interpretive qualitative research paradigm, the sought to understand how teachers perceived changes in children's cognitive, social, and emotional learning outcomes following the resumption of face-to-face teaching.

A qualitative case study design was employed, and data were generated through semi-structured interviews with purposively selected ECD teachers. Thematic analysis was used to analyse the data, allowing for the identification of recurring patterns and meanings drawn from participants' lived experiences. The findings revealed that teachers perceived noticeable learning gaps, delayed language development, reduced concentration, and challenges in social interaction among children following the lockdown period. Teachers further indicated that curriculum streamlining, remedial teaching strategies, and play-based learning approaches were to address lost instructional time and content gaps, although these strategies were perceived as only partially effective due to limited resources and increased learner needs.

This study concludes that while teachers demonstrated resilience and adaptability in responding to post-lockdown challenges, sustained support in the form of professional development, curriculum guidance, and resource provision is essential to improve learning outcomes in ECD centres. The findings contribute to existing knowledge on post-pandemic early childhood education and provide insights that may guide pedagogical approaches and practices, curriculum planners, policymakers and other education stakeholders in strengthening learning recovery strategies in early childhood learning contexts.

Key words: ECD centres, teachers' perceptions, post-COVID19 lockdown, curriculum streamlining, play-based learning.

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CHAPTER ONE

1.1. Introduction

Education is considered to be a basic human right. In 2020 the Covid-19 pandemic changed not only the way we live, but also the way we learn. First-time learners were destined to experience learning in a different way other than their predecessors (Statistics South Africa, 2022). The Covid-19 pandemic compelled the department of Basic Education and Higher Education to change their normal operation with the development of new educational policies and regulations, including the adjustment of the academic time-table, new teaching programmes such as online learning platforms and flipped classroom, mode of delivery, catch up of the curriculum, health and safety measures as well as financial relief packages. This changes and adjustments in the education sector were due to the announcement by President Cyril Matamela Ramaphosa on 23 March 2020, to close educational institutions in South Africa. Because of physical distancing and the discrepancies between the realities in schools and the applicability of Covid-19 pandemic, lockdown protocols were not practically possible (Spaull & van der Berg, 2020)

The South African schooling system faced numerous challenges due to Covid-19 which aggravated the existing ones affecting the time for teaching and learning. Major challenges cited by SAHRC (2018) like the burning of educational infrastructure, barring of learners from accessing school premises and other sites of learning due to community protests were no longer that important. Whereas, there were already existing health challenges that were compromising hygienic standards such as overcrowded classrooms, insufficient learner support material, lack of clean running water, and unhygienic toilets (Muhati-Nyakundi, 2022; Pillay, 2021) the devastating and troublesome impact of Covid19 pandemic was on the physical, emotional, volitional well-being of children that intensified many of the challenges already faced by ECDC teachers (Kanyane, 2020).

Most ECD centres in the world like South Africa went through hardship during the Covid19 hard lockdown. This is evident through the research studies conducted to cover the development of

ECDs post Covid19 era by other researchers. According to Wantini, Suyatno, Dinni & Yusmaliana (2022), research was conducted in Indonesia on post-COVID19 teaching models designed to support language development, useful when discussing post-pandemic curricular innovations. Whereas Nwankwo, Nwani & Chidi-Ikeji (2022) conducted a study from Nigeria addressing ECD challenges and sector impacts from the pandemic frame, pointing to broader structural and learning outcomes.

Therefore, this study focused on examining the perceptions of teachers on children's learning outcomes in post-Covid19 hard lockdown but was limited to ECDCs in Umjindi area of Mpumalanga Province in South Africa. These ECD centres were chosen because they focus on foundational learning and cognitive development, making them critical in understanding the intensity of the impact caused by the disruptions of Covid19 hard lockdown on children's learning outcomes. Umjindi municipality's Early Childhood Centres located in Mpumalanga Province of South Africa serve a diverse population, which provided insight into how different children were impacted by the pandemic lockdown and their learning outcomes. Although accessibility of the centres was not possible then during the lockdown, the engagement with the ECD practitioners was to offer insights into the effects of that decision on learners' learning outcomes.

1.2. Background information

The disruption of schooling and loss of teaching and learning time is not new to the South African schooling system post democracy. Various parts of the country are often plagued by service delivery protests that vary from the citizens' anger over poor service delivery, and these inevitably affects teaching and learning (Basic Education Draft, 2020). ECDCs learners are barred from attending classes during this period for their safety, when very strict stay-at-home rules were in place to slow the spread of the virus (between 23 March to 30 April 2020). Teacher's planning and pacesetters remain behind, which was further perpetuated by the political unrest sparked by the arrest of the former President Jacob Zuma that started in Kwazulu-Natal (KZN) when the Covid-19 epidemic was devastating the National Economic Growth, and further escalated to some parts of Gauteng province from 9-17 July 2021 (Mahaye, Dlomo & Ajani, 2021).

During the hard lockdown, school office equipment, furniture, and other items were stolen from the affected areas. (Nair,2021). Furthermore, the Department of Education authorities, stakeholders, and experts in the education sector neglected teachers' involvement in planning recovery strategies for the lost time and ways to close the content gap that resulted from the school closure during the COVID-19 lockdown. As the then Minister of Basic Education, Mrs. Angie Motshekga, supported the reopening of schools, citing that, according to the Ministerial Advisory Committee, medical and science experts, learners are better off at school than in communities and homes where the infections were taking place (South African Government, 2023). The Department of Basic Education (DBE), in collaboration with Provincial Education Departments (PEDs) and various organisations, coordinated education resources and support programmes (DBE draft, 2020) without consultation with the teachers involved to solicit their views and to get their perceptions on how children's learning outcomes post Covid19 hard lockdown could be affected. The negligence of the education system in involving ECDC practitioners presented numerous challenges that were likely to impede the desired learning outcomes.

1.3. Problem statement

The COVID-19 pandemic and subsequent lockdowns caused numerous challenges to children's learning outcomes due to the lack of face-to-face teaching. Learners entering Grade R are expected to engage meaningfully with the Curriculum and Assessment Policy Statement (CAPS) over a thirteen-year period, and the loss of any time over this thirteen-year continuum must be addressed (DBE draft, 2020). The most important person to address the lost time with the development of a learner recovery plan is the teacher. Yet teachers were neglected and excluded from their knowledge, experiences, and competencies in the curriculum development that could help redeem lost time during the COVID-19 lockdown. It is therefore essential to understand what teachers perceived of the measures undertaken and how they impacted learning outcomes after the resumption of learning opportunities. Therefore, this study aimed to investigate the perceptions of teachers regarding children's learning outcomes following the COVID-19 hard lockdown.

1.4. Aim and Objectives of the study

The primary objective of this study is to investigate teachers' perceptions of children's learning outcomes following the COVID-19 hard lockdown. The objectives of the study are as follows:

a) To investigate the effectiveness of teaching methods applied post Covid-19 hard lockdown.
b) To assess how teachers addressed the content gaps and lost time created during the pandemic Covid-19 hard lockdown.
c) To evaluate the effectiveness of strategies used by teachers to remedy challenges learners faced post Covid19 hard lockdown.
d) To assess the effectiveness of the streamlined ATP's in addressing the learning outcomes post Covid-19 hard lockdown.
e) To understand teacher's perceptions about children's learning outcome after post Covid19 hard lockdown.

1.5. Research Questions.

This study was guided by the following question:

1.5.1. Main research question.

What are the perceptions of teachers on children's learning outcomes after the post-Covid 19 hard lockdown?

1.5.2. Sub-research question.

a) What are the perceptions of teachers on time loss and curriculum content coverage in post covid19 hard lockdown?
b) What are the perceptions of teachers on learners' learning outcomes post-COVID-19 hard lockdown?
c) What are the perceptions of teachers on the strategies they used to remedy challenges learners faced post-COVID-19?
d) What are teachers' perceptions of safety measures in the learning environment post-COVID-19 hard lockdown?

e) What are the perceptions of teachers in the teaching and learning in pre- and post-COVID-19?

1.6. Rationale of the study.

This study is important as it provides insights into the perceptions of teachers about children's learning outcomes post-COVID-19 hard lockdown and aims to determine a better understanding of children's performances in other grades, as well as the role teachers played in adapting to the realignment of content and addressing the time lost. In the Quality Learning and Teaching Campaign Workshop (QLTC), the then minister of basic education, Angie Motshekga alluded that there was an urgent need to renew the current basic education accord on turning schools into centres of excellence, and further meaningfully contribution to the building of coherent responses on the envisaged measures to reboot and rebuild the basic education system post-COVID 19 at different stages of learning (Dube, 2022).

Dr. Crough of the International Development Group mentioned the following issues identified in his presentation (Basic Education Sector Lekgotla Report, 2022) in the 7th Lekgotla, which aimed to discuss matters affecting the basic education in pursuit of quality outcomes under the Theme "Equipping learners with knowledge and skills for a changing world in the context of Covid-19". He identified reasons for the weakness in the development of EDC in the general systems that could be attributed to the lack of focus, effort, commitment, technical knowledge, or budget; however, a lack of systems or systems integration can cause serious implementation challenges hampering optimisation. Meaning that classrooms and curricula should be designed in a manner that is child-focussed, developmentally appropriate and activity-based to promote responsive EDC learning environments and provide investments in EDC so that it can promote equity and improve educational outcomes. Dr. Simelane, DBE (Basic Education Sector Lekgotla Report, 2022) suggested that DBE should focus on its mandate of teaching and learning to improve the children's learning outcomes in Early Childhood Development Centres (ECDC) whether governmental or privately owned and be relieved from infrastructure issues because effective teaching is fundamental for learners engagement and understanding, while a well-structured learning process supports learners in applying and retaining knowledge in post lockdown times. Devercelli, World Bank (Basic Education Sector Lekgotla Report, 2022) argued

in her presentation, emphasised the need for a well-structured learning process for ECDC's that will give children a good start in early education and stimulate their learning interest and opportunities. Hence, the period before transition to primary school is critical, because vocabulary development also takes place during this period, and children with access to EDC tend to have higher Reading and Mathematics scores (PISA scores) at 15 years (Basic Education Sector Lekgotla Report, 2022).

According to the Ontario Ministry of Education (2020), early primary programs are largely taught through play- and inquiry-based approaches. These play- and inquiry-based activities require teachers to probe learning and curiosity as it occurs. Due to the complex and multifaceted nature of early primary education, the shift to remote teaching and learning proved to be quite difficult for teachers, parents, and students (Timmons, Cooper, Braund, and Bozek, 2020). This study aims to advise policymakers, researchers, educators, and administrators (Stakeholders) about the various challenges and opportunities presented by the COVID-19 pandemic to Early Childhood Development Centres.

Therefore, how does this inform the learning outcomes of learners in the post-COVID lockdown phase into subsequent grades?

1.7. Definition of terms.

Early childhood is taken as the period between birth and 8 years of age, wherein a child's brain is highly sensitive to the environment around them (American School of Paris, 2021). In this stage of development children require a specialised educational approach to ensure that children learn key skills and foundational concepts to prepare them for later life.

Early Childhood Education (ECE)
In this study, Early Childhood Education (ECE) refers to the structured educational programmes and care provided to young children, typically from birth to the age of six, within Early Childhood Development (ECD) centres. The term is used to describe the context in which teaching and learning occur following the COVID19 hard lockdown. Early Childhood Development is defined

as a term that describes formal and informal educational programs guiding the growth and development of children throughout their preschool years (birth to age five) (GLAM, 2022). Thus, Early Childhood Education provides the setting and educational stage within which teachers' perceptions of learning outcomes are explored.

Coronavirus disease (COVID-19)

Coronavirus disease (COVID19) refers to the global health pandemic caused by the SARS-CoV-2 virus, which led to school closures and the implementation of a hard lockdown that disrupted early childhood education. This disease (COVID-19) is highly transmissible from person to person, spread via direct contact or via droplets from the coughing or sneezing of an infected individual (Moore et al., 2020). COVID19 is therefore used as a contextual variable influencing both teaching practices and children's learning outcomes.

Learning outcomes

Learning outcomes refer to the observable and perceived educational gains achieved by children in ECD centres after the COVID19 hard lockdown, as interpreted by teachers. It is described as, the concise statements that help students understand the knowledge and skills they will acquire after engaging in a specific learning experience (Teachmint, 2022). Learning outcomes in this study are not measured through standardised tests, but through teachers' professional observations, reflections, and experiences in post-lockdown classrooms.

An educator / Teacher (Early Childhood Context)

An educator (teacher) refers to qualified or practicing Early Childhood Development practitioner responsible for teaching and caring for children in ECD centres during and after the COVID19 hard lockdown. It is also explained as, someone with an extensive and specific set of abilities, skills, knowledge, training or experience in a particular discipline with the necessary qualifications to provide dedicated educational training to others (Indeed Editorial Team, 2023). Educators' views are central to the study, as they provide insights into how teaching strategies were adjusted and how children responded academically and developmentally after the pandemic disruptions.

1.8. Literature review

This chapter presents various related literature and studies to provide significant information and enhance the understanding of the problems addressed in this study. The literature review in this study plays a critical role in establishing a theoretical, empirical, and contextual foundation for investigating teacher's perceptions of children's learning outcomes following the COVID19 hard lockdown.

1.8.1. Review of the literature

A literature review is a piece of academic writing demonstrating knowledge and understanding of the academic literature on a specific topic placed in context (The University of Edinburgh, 2022), of which, its purpose is to gain an understanding of the existing research and debates relevant to a particular topic or area of study, and to present that knowledge in the form of a written report (Western Sydney University Library, 2017). In this research, literature will be used to gain a clearer understanding of how teachers perceive children's learning outcomes following the COVID-19 hard lockdown.

The literature review draws on studies that position teachers as key informants due to their daily interaction with learners and their role in assessment and curriculum implementation. The literature review synthesises previous research on children's cognitive, social, emotional, and language development in early childhood settings. It explores how learning outcomes are typically measured and observed in ECD centres and how disruptions such as COVID19 may have affected these outcomes (OECD, 2017). The literature review analyses research on teaching methods adopted after school reopening, including curriculum trimming, integration of play-based learning, formative assessment, and remediation strategies. This helps identify how teachers attempted to address learning gaps and lost instructional time caused by the hard lockdown (UNICEF, 2021). This will inform the analysis of how effective post-lockdown teaching methods were perceived to be and provide benchmarks against which teacher's perceptions of post-lockdown learning outcomes can be understood.

Various sources, including journal articles, books, dissertations, reports from organisations, newspaper articles, and policy statements, will be reviewed to examine teachers' perceptions of children's learning outcomes following the Covid-19 lockdown. The aim of this literature review

is to present the main conceptions that underpin the research study, to identify and discuss the literature surrounding these conceptions.

The structure of this literature begins with the role played by the Early Childhood Centres, the importance of nutrition in early childhood centres, the impact of the COVID-19 pandemic post-hard lockdown, and how it was interpreted in general, and how this influenced the perceptions of teachers about children's learning outcomes in the post-COVID-19 hard lockdown. Definitions of terms will also be covered by the literature review chapter (see Chapter 2).

1.9. Theoretical Framework

1.9.1. John Dewey's Theory: Reforming Education Through Experiential Learning

This study used John Dewey's educational theory, which foregrounds the value of experiential learning, often summarised as "learning by doing," where knowledge is constructed through active participation and meaningful engagement with real-world experiences (Pappas, 2023). Dewey's work has long been recognised as a foundational approach to fostering reflective, critical, and socially responsive learners, positioning education as a tool for both personal and societal transformation (Pappas, 2023).

In the context of post-COVID-19 teaching and learning, Dewey's theory is particularly relevant, Post COVID19 many young children experienced interrupted learning and reduced stimulation at home. Dewey's theory advocates for play-based learning activities; hands-on exploration (manipulative, drawing, building, role-play); and learning by doing rather than rote teaching. In ECD centres, this helps children to rebuild foundational cognitive, language, and motor skills that may have been delayed during lockdown. The pandemic compelled educators globally to rethink pedagogical approaches and leverage technology in ways that support equitable, high-quality learning while maintaining the central role of skilled and well-supported teachers (Muhigana, 2022). As schools work to rebuild and strengthen learning systems disrupted by lockdowns, Deweyan principles emphasise the importance of active learner engagement, collaboration, and authentic learning experiences to address learning recovery and promote holistic development.

A more detailed discussion of Dewey's theory and its application within this study will be presented in Chapter 2.

1.10. Overview of research design and Methodology

This section outlines the methodological framework that guided the study, including the research design, study context, target population, sampling procedures, sample size, data typology, and methods for data collection and analysis. These components collectively demonstrate how the inquiry was structured to ensure credibility, trustworthiness, and alignment with the study objectives. The methodological choices are grounded in established principles of qualitative inquiry, with the purpose of gaining rich, context-specific insights into teachers' perceptions of children's learning outcomes in Early Childhood Education Centres (ECECs) following the COVID-19 lockdown. A detailed theoretical and methodological justification for the selected approaches is presented in Chapter 3.

1.11. CREDIBILITY AND TRUSTWORTHINESS

To ensure the quality and rigor of this qualitative inquiry, it is essential to establish trustworthiness, demonstrating that the research process and findings are credible, dependable, transferable, and confirmable. Trustworthiness enhances confidence in the accuracy and authenticity of the data, as well as the interpretations drawn from it. This section provides a brief outline of the strategies employed to ensure trustworthiness in the study; however, a more detailed discussion of these procedures and their implementation is presented in Chapter 3.

1.12. Layout of thesis chapters

Chapter one

This chapter will provide an introduction and background to the study, as well as discuss important aspects such as the statement of the problem, aim of the study, main research question and sub-research questions, significance of the study, theoretical framework and literature review.

Chapter two: Literature review

Chapter 2 examined literature on the relationship between language and early numeracy development, highlighting that young learners acquire mathematical understanding more effectively when taught using their home language. Research in South Africa and globally

demonstrates that linguistic fluency enhances the development of number concept formation, symbolic understanding, and problem-solving, particularly in the early grades. Despite CAPS promoting mother-tongue instruction, indigenous languages such as isiNdebele remain underutilised in mathematics classrooms, contributing to persistent numeracy challenges. The review also drew on Vygotsky's socio-cultural theory, emphasising the importance of language, social interaction, and scaffolding in developing mathematical thinking. While studies in multilingual contexts highlight the benefits of culturally and linguistically responsive approaches, a gap remains regarding the experiences of isiNdebele learners with number recognition, reading, and writing. This gap underscores the relevance of the present study in exploring how isiNdebele-speaking Foundation Phase learners comprehend and express numerical values and symbols within their linguistic context**.**

Chapter three: Research methodology and design

Chapter 3 outlined the methodological approach employed in this study, which adopted a qualitative case study design to explore teachers' perceptions of children's learning outcomes in Early Childhood Education Centres following the COVID-19 hard lockdown. The chapter described the study context in Umjindi Municipality, the target population, and the purposive sampling strategy used to select eight teachers from four kindergartens based on their relevance and experience. Data were collected through questionnaires and unstructured interviews, supplemented by secondary records from the centres. Ethical procedures, including consent, confidentiality, and voluntary participation, were observed throughout the research process. The chapter further detailed the data analysis process, where qualitative data were systematically interpreted to identify themes, and explained how trustworthiness was ensured through credibility, transferability, dependability, and conformability strategies.

Chapter four: Data presentation and discussion

Chapter 4 presented the research findings derived from interviews, observations, and document analysis conducted in four Early Childhood Education Centres. The findings highlighted teachers' perceptions regarding children's learning outcomes after the COVID-19 hard lockdown, revealing concerns about delays in foundational skills, particularly in language and number readiness, concentration, social interaction, and confidence levels. Teachers reported

noticeable differences between younger and older children's learning recovery, with technology-adaptable learners showing quicker progress. Themes that emerged included limited parental involvement during lockdown, uneven home-learning support, and challenges in transitioning back to structured classroom routines. Despite these challenges, teachers also noted resilience, gradual improvement, and the critical role of play-based and guided learning strategies in supporting children's developmental recovery. Overall, the chapter demonstrated that while COVID-19 negatively affected early learning, targeted pedagogical support and consistent classroom routines contributed to gradual learning gains in ECD settings.

Chapter five: Summary of findings and recommendations

Chapter 5 interpreted and discussed the study's findings in relation to the literature and theoretical framework. The chapter highlighted how the COVID-19 hard lockdown affected children's early learning outcomes, with teachers reporting delays in foundational literacy, numeracy, social interaction, and concentration skills. These findings were linked to limited home-learning support, unequal access to resources, and disruptions to structured learning routines. Drawing on sociocultural and experiential learning perspectives, the discussion emphasised the value of play-based learning, teacher-guided support, and interactive classroom experiences in helping children recover and rebuild confidence. The chapter demonstrated alignment between the study's results and existing research on post-pandemic learning gaps, while also underscoring the resilience of young learners and the critical role of teachers in facilitating learning recovery in ECD centres.

1.14. CONCLUSION

This chapter provides an introduction and background to the study. It further indicates the perceptions of teachers regarding the children's learning outcomes after the COVID-19 hard lockdown. Aspects such as problem statement, aims and objectives, significance of the study, limitations and delimitations, and research methodology. Finally, this chapter also provides the definitions of key concepts and the division of all chapters included in this study.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1. Introduction

A literature review is a systematic procedure that identifies, evaluates, and locates documents that contain information relevant to the research topic. Early childhood education has been significantly impacted by the COVID-19 pandemic, particularly in terms of young children's learning outcomes. This review of the literature summarizes current studies on how early childhood educators perceive the learning outcomes of their learners, both during and after the strict lockdowns brought on by the pandemic in early childhood centres of South Africa and internationally.

2.1.1. The role of Early Childhood Education in rebuilding social skills post-COVID-19 pandemic

Early childhood educators have the responsibility of motivating, supporting, and advancing the rights, education, and care of children. These is supported by Rolfe (2020) who asserts that apart from providing a space for children and make sense of the world, early childhood educators also have a great responsibility to make sure that children feel safe and secure in their surroundings. Alharbi and Alzahrani (2020) contend that all children learn the most through playing and exploring. Hence, Early Child Development (ECD) centres need to provide children with a balanced education that incorporates healthy habits into daily routines so that they become second nature – well into the adult years. That is why quality ECD in South Africa and the rest of the world is so important – to teach children these behaviours from an early age to improve learning outcomes.

Though, in South Africa, as in many countries around the world, the short supply of Early Childhood Education (ECE) teachers to provide quality education becomes a challenge (Shikwambane, 2023). There is a 72% Black student population in South Africa enrolled in higher education, the same trend is not experienced in early childhood education (ECE), as research suggest that cultural and linguistic differences between home communities and university settings as well as meeting the academic demands of an institution that is unfamiliar

with students' home languages and cultures can be overwhelming (Shikwambane, 2023). The Force Field Model of Professional Development was regarded as an appropriate theoretical and practical model to be utilised to determine the forces that influence Black student teacher's experiences within the Early Childhood Education programme and which may shed light on the reasons for the low rate of enrolment and ways to encourage more student recruitment in this programme (Shikwambane, 2023)

Early childhood educators ensure the early learning outcomes, including skills, behaviours, and knowledge that a child should demonstrate at each age and stage of their development. They provide developmental programs in the learning outcomes frameworks, such as approaches to learning, social and emotional development, language and literacy, cognition, and perceptual, motor and physical development (Phillips, Tsuda, and Wyant, 2023). Early childhood education plays a crucial role in the cognitive development of children, enhancing their reasoning, memory, problem-solving, and thinking skills. These skills enable children to understand the world around them, as they reach each learning outcome at their own pace and achieve each early learning outcome at different points in their development (Phillips, Tsuda, and Wyant, 2023).

Saint Xavier University in Chicago, which prepares Early Childhood Educators, provides top-quality education that is internationally designed to develop teachers' skills and expertise as they prepare for the next step in their education or career (Saint Xavier University, 2023). The learning outcomes, such as the understanding of child development, advocacy for early childhood education and instructional strategies for literacy, numeracy, social sciences, sciences and the arts will reflect the specific competencies that teachers gain from the education programs, while the curriculum map portrays how these competencies will shape and prepare teachers for the real world (Campbell and Howitt, 2024). Care for kids in Australia present the expected learning outcomes from early childhood education (ECE) as follows: children will reap the benefits of an individualised early programme, the programme considers the child's particular interests and strengths, what they have learned from parents already, plus the learning opportunities on offer at ECE service. ECE creates a holistic development of a child that brings out the best of the child and supports learning as they grow. ECE also helps children

forge links and form relationships, and to see the world in different ways and harness their potential – now and going forward. ECE services keep records of each child's progress by putting together all the activities, photos, learning stories and observations along with examples of children's work for parent's viewing (Fabian, 2021). The parent's viewing process creates an opportunity for educators to interact with parents and provides feedback pertaining their children's progress. This process helps the institution to determine whether, intended children are learning outcomes are achieved or not.

2.1.2. Impact of COVID-19 on Early Childhood Education

Globally, the COVID-19 pandemic has caused significant changes in education. According to Kiconco (2023), over 1.5 billion students across 165 countries, or approximately 90% of the world's student population, have had their educational experiences interrupted by measures and regulations put in place to stop the spread of COVID 19. Kiconco (2023) further asserts that COVID-19 has caused the biggest simultaneous shock to all educational systems worldwide. When it comes to early childhood education specifically, this global health crisis has brought about previously unheard-of, profound, and drastic changes in the lives of young children and their families, as well as pre-service and in-service teachers, and early childhood teacher educators. In addition to pushing the early childhood education system to the brink of collapse globally, COVID-19 has spurred prominent early childhood groups to support COVID-19 funding packages that safeguard early childhood programs (Van Laere et al., 2021). According to a medical study, COVID-19 is not truly a "children's disease" because, as of right now, there aren't many verified cases of the Coronavirus in young people, and even when they do, the mortality rate is quite low (Chang, 2020). However, the significant effects of this worldwide pandemic become clear when we take into account every facet of young children's development. In addition to stopping common childhood activities like going to school, spending time with friends and family, playing outside, and experiencing the outdoors, COVID-19 also interfered with the socioemotional advantages that result from these experiences. Since children rely on adults to provide their most basic needs, they are naturally vulnerable. The very youngest people in these situations may suffer unimaginable tragedy if those adults are unable to handle the immediate, urgent, and numerous adaptive demands that a pandemic throws on families and if support networks are absent, deteriorate, or stop. Xafis (2020) observes that the people who are most impacted "are those individuals routinely disadvantaged by the social

injustice created by the misdistribution of power, money, and resources" (unpaged). Pandemics make issues worse, especially for children who are poor, disabled, chronically ill, face housing and food insecurity, live in remote areas, are marginalized by mainstream society (such as migrant workers and indigenous people), or are the victims of abuse or neglect. Even though these short-term and visible effects of COVID-19 on young children are alarming, nothing is known about the potential long-term implications.

The South African government, like many governments throughout the world, took swift and strong action to stop the COVID-19 virus from spreading. The president proclaimed a national state of calamity on March 15, 2020. A number of COVID-19 prevention and control measures were put into place, such as mask wearing, social distancing, alcohol sales limits, travel bans both domestically and abroad, and school closures. All schools were shut down during the first weeks of the lockdown, and face-to-face instruction ceased. In reaction to the rise in COVID-19 cases and the discovery of new virus strains, schools reopened and closed for different lengths of time after this shutdown.

New rules and regulations were put into place as a result of school closures. Among these were changes to school timetables, the implementation of rotational education to reduce the number of learners in classes at any one time, temperature checks for all learners at school entrances, and online instruction. Within the first two months of the pandemic, in-school instruction and learning resumed for a small percentage of learners, and only a small number of schools were able to adapt to the new method of operation. However, for the great proportion of children already attending public schools, learning essentially stopped during the study period due to structural and educational inequities.

2.1.3. Teacher Perceptions and their Role in Post-COVID-19 pandemic

Schools depend heavily on the wellbeing of teachers. According to research, a teacher's capacity to use effective teaching ideas and tactics that can raise student engagement and academic accomplishment is directly correlated with their well-being (Zee and Koomen, 2016). Narea et al. (2022) note that Early Childhood (EC) teachers' well-being and classroom practices, teacher-child interactions, instruction, and communication with families, as well as

young children's learning and development, are closely related. It has been demonstrated that EC teachers who are happy are more aware of their surroundings in the classroom and possess the mental tools necessary to encourage constructive relationships with young students (Narea et al., 2022). Additionally, Smith (2024) emphasized that maintaining an effective workforce and fostering positive educator-child relationships—both of which are vital to the learning outcomes and development of young children—require supporting the welfare of EC teachers. Other research by Chan et al. (2021), discovered that after the pandemic, primary school teachers in South Africa faced difficulties such work ambiguity, high task stress, and emotional weariness. Chan et al. (2021) assert that, there is an urgent need to promote teachers' health by enhancing their autonomy, emotional support, and effectiveness as teachers. After the epidemic, it is also crucial to comprehend and pinpoint the key elements influencing teachers' wellbeing (Chan et al., 2021). Furthermore, Kraft, Simon and Lyon (2021) argue that EC teachers play a crucial stabilizing role for kids during emergencies like the pandemic. This stabilizer and the development of the children are at jeopardy when EC teachers experience difficulties with their personal well-being. This stabilizer and the development of the children are at risk when EC teachers experience difficulties with their personal health. Kraft, Simon and Lyon (2021) detailed a significant relationship between teachers' professional well-being, their pupils' mental health, and the standard of the classroom environment. Teachers' well-being is inextricably linked to their expertise, classroom conduct, and connections with students. The pandemic's difficulties have had a lasting impact on EC teachers' general physical, mental, and occupational health. After the pandemic, teachers' perceptions of the numerous obstacles to their wellbeing persisted (Katsarou Chatzipanagiotou and Sougari, 2023).

Despite their best efforts, EC teachers continue to deal with demanding and stressful work circumstances. It has long been known that EC teachers face difficult working conditions and high levels of stress at work, which can result in emotional depletion and work-related stress (Jeon et al., 2022). An EC teacher's work is intricate and multidimensional, requiring resilience, a desire to take on a variety of problems, and a dedication to ongoing skill and strategy development to serve early childhood children (Jeon et al., 2022). EC teachers' emotional and professional well-being may be negatively impacted by the complexity of their work (Jennings et

al., 2019). According to Jennings et al. (2019), a third of teachers experience anxiety, and many of them decide to leave teaching during the first five years of their employment.

2.1.4. Strategies in managing teaching and learning post COVID19 hard lockdown

Many countries across the world have had a difficult time managing education after the COVID-19 harsh lockdown, and they have had to modify their approaches teaching and learning according to the pandemic's intensity, the resources at their disposal, and the infrastructure of their educational systems. Here are a few strategies used by many countries to deal with the change in education following the lifting of the strict lockdown:

2.1.4.1. China strategies

In the aftermath of the COVID-19 pandemic, China faced significant challenges in restoring educational continuity and supporting young children's developmental recovery following prolonged closures of early childhood education settings. When COVID-19 begins to spread throughout the country during the Chinese Lunar New Year in January 2020, the Chinese educational system responded swiftly to protect their children in schools. The People's Republic of China's Ministry of Education (MOE) announced a nationwide emergency school closure program. More than 200 million students in elementary through postsecondary education were affected by the school closure policy. With the goal of "suspending face-to-face classes without stopping teaching and learning" emergency remote teaching (ERT) was introduced nationwide among primary and secondary schools on March 6 (Feijóo et al., 2021). Prior to this announcement, on February 17, the MOE launched the "National Online Cloud Classroom" which provides free live streaming classes and digital textbooks to meet the learning needs of 50 million primary and secondary school students along with China Education Network TV Channel 4 "Taking the Same Class" (Feijóo et al., 2021). As part of its broader educational response, China implemented a combination of policy, pedagogical, and community-based strategies aimed at mitigating the effects of interrupted learning and strengthening early childhood development systems (Xu, et al, 2024).

Even though China's MOE and provincial governments have provided teaching and learning resources, schools have found it difficult to meet the demands of deep remote teaching and

learning on a broad scale (Zhang et al., 2020). To provide high-quality digital education, the Ten-Year Development Plan for Education Information and Communication Technology in China suggests encouraging the integration of educational ICT into instruction. The Chinese government demanded modifications to the models of instruction and the ecosystem of education (Zhang et al., 2020). The difficulties in integrating educational technology into teaching and learning, as well as teachers' lack of TPACK (technology, pedagogy, and content knowledge and instructional design knowledge for online settings) knowledge, have been noted by the Chinese Ministry of Education (Henry, 2024). These difficulties are particularly related to instructional design. The abrupt switch from in-person to remote instruction during the COVID-19 pandemic exacerbated teachers' lack of readiness and/or insufficient TPACK preparation (Henry, 2024)

2.1.4.2. United States of America strategies

Many school districts in the United States have implemented blended learning methods, which combine remote and in-person instruction. Many schools including ECE centres adopted hybrid learning environments, where some students attended classes in person while others took classes online, and teachers received training on how to use digital technologies (Darling-Hammond, Schachner and Edgerton, 2020. Understanding the stress on teachers, families, and students, many school systems in the United States expanded access to mental health assistance. In order to treat the emotional and psychological repercussions of the epidemic, psychologists, social workers, and school counsellors were called in (Pedrosaet al., 2020)

In order to close the digital divide, large sums of money were invested in technology. For pupils without access to electronics, the federal government funded schools to buy computers, tablets, and other digital tools. To ensure that schools could continue to adjust to evolving health recommendations, several states instituted flexible scheduling, enabling them to alternate between in-person and remote learning according to local COVID-19 conditions (Becker et al., 2020).

2.1.4.3. United Kingdom strategies

For a considerable amount of time during the epidemic, remote learning took over as the main educational method in the UK. Marston et al. (2021) contend that schools have embraced a combination of in-person and hybrid learning since the lockdown, allowing students to access classes both online and offline. As a result, digital tools and platforms like Microsoft Teams and Google Classroom have had to grow. To close the learning gaps brought up by the epidemic, the UK government implemented catch-up initiatives (Marston et al., 2021). By offering extra tutoring and summer classes, these initiatives aimed to assist the most underprivileged pupils during the lockdown. With programs designed to lessen the academic pressure brought on such disruptions, students' mental health and wellbeing were given priority. To help kids acclimate to the post-lockdown learning environment, schools expanded the amount of pastoral care they offered and had more staff available (Islam, 2025)

2.1.4.4. Ghana strategies

Ghana is one of the countries that share several common attributes with South Africa as they both are in the African continent. Both countries experience comparable challenges in education, like the disparities in access, resource limitations, and quality of teaching, particularly in rural and urban settings. Comparing strategies adopted post-Covid19 to improve children's learning outcomes in both countries could reveal shared obstacles and potential collaborative mitigations.

The loss of learning due to the COVID19 pandemic has impacted schools in Ghana, like other governments schools world-wide (Tuffour et al., 2021). The negative impacts of COVID19 pandemic on education lowered children's learning outcomes, led to high dropout rates and less-resilient education systems, as The United Nations Educational, Scientific and Cultural Organization (UNESCO) estimates that 10.5 million students in the Asia-Pacific region were at risk of not returning to school, and millions of students are at risk of falling behind and increasing the gaps in learning achievement (UNICEF, 2022). The pandemic has severely compromised their ability to finance school-related expenditures such as school kits, meals, and learning materials in Ghana. The government in Ghana substituted physical contact with teachers for content delivery with digital learning to avoid the fast spread of the virus which was

occasioned by the Ministry of Health's (MoH) regulations of social distancing (Tuffour, *et al.,* 2021). However, Tuffour, *et al.* (2021) further add that inaccessibility of technology or quick, dependable internet access has barred learners in rural regions, as the paucity of access to technology or sound internet connectivity was a hurdle to continuous learning, particularly for underprivileged families Furthermore, The Ministry of Education (MoE) in Ghana conducted mentorship and psychosocial counselling service programs for survivals of COVID-19 like learners, teachers, and its officials. The mentorship and counselling have covered Gender-Based Violence (GBV) victims, during the protracted school's closure period, and the support included teen pregnancies victims, drug abusers, and pornographic addicts among other psychologically and socially affected members of the school community (Tuffour, *et al.* 2021). Alternate learning pathways are prioritised for MoE to ensure that the disruption to the education sector is as limited as possible and ensures that MoE provides access to quality, equitable, and inclusive education to learners during and after the pandemic crisis to ensure continued learning (Tuffour *et al*., 2021).

2.1.4.5. South Africa strategies

According to Statistics South Africa (Stats SA, 2022), the impact of disrupted education since the Covid-19 outbreak has been devastating, with learners falling behind by 75% to a full school year. Rotational attendance, sporadic school closures, and days off for specific grades have resulted in schoolchildren losing 54% of their learning time (Stats SA, 2022). Being out of school not only led to learning loss but also mental distress, exposure to violence and abuse, missed school-based meals, and reduced development of social skills. It should not be assumed that learning losses due to the COVID-19 lockdown disruption will be greater than the actual days lost, in large part because disruptions resulted in learners forgetting some of what they had previously learned (Gustafsson & Deliwe, 2020). Gustafsson and Nuga (2020) further suggested that school closures will have severe long-term consequences for learning outcomes in the country. The class of 2020 faced a myriad of challenges ranging from the unscheduled closure of schools because of COVID-19 cases discovered at the schools, to the interruption of education, limitation of social interactions, and the creation of learning gaps. This school closure resulted in the loss of teaching time, which led to fewer topics being covered during the 1st and 2nd quarters (Department of Basic Education, 2022). The closure of schools also put children's learning, nutrition, mental health, and overall development at risk; some learners, particularly

girls, were at risk of never returning to school (The World Bank, 2021). The design and implementation of school reopening strategies, which include comprehensive services to support children's education, health, psychosocial wellbeing, and other needs, were supported by partners (The World Bank, 2021). In mitigating the damages caused by the COVID-19 hard lockdown disruption to schools, policies and improvement strategies were developed to manage children's learning outcomes post-COVID-19 hard lockdown, aiming to cover the lost time and content gap. The Mpumalanga Department of Education (2023) conducted an analysis of learner performance across all grades and subjects and then developed the 2023 Learner Performance Improvement Plan (LPIP).

In Early Childhood Development Literacy (ECDL), ECD practitioners will be trained on National Curriculum Framework (NCF) play based methodology; they will be supplied with electronic NCF documents to districts and ECD centres; the treasurer would bid for extra funds to improve the shortages of friendly infrastructure in ECD centres and schools; registration of ECD centres through Jamboree and Vangasali Campaign; to conduct physical and Electronic ECD Advocacy to increase parental awareness on children's Early Stimulation Development (Mpumalanga Department of Education, 2023). The above-mentioned strategies aimed to improve children's learning outcomes following the COVID-19 hard lockdown.

2.1.5. Strategies for improving learning outcomes post-COVID-19 pandemic

Since the COVID-19 pandemic severely disrupted early childhood education worldwide, several countries have made improving learning outcomes in early childhood institutions a top priority. Countries have adopted a variety of measures that prioritize both children's emotional care and academic rehabilitation to address the learning gaps and developmental delays caused by the lockdowns. These are a few tactics employed by several nations to improve learning outcomes in early childhood education facilities during lockdowns.

2.1.6. Early childhood and primary education support

Schools in different countries were supported in different ways to recover from the impact of the COVID-19 pandemic. In Ghana, schools were closed for 10 months, starting in March 2020, when the first cases of COVID-19 were detected in the country, and for the country to avert learning losses, the International Development Association (IDA) funded the Ghana

Accountability for Learning Outcomes Project (GALOP) (The World Bank, 2022). This project supported the Government of Ghana in delivering remote education to an estimated 4.45 million students, provided over 5 8 million children with daily school meals and sanitation kits, and the GALOP helped to develop a Learning Management System for online learning, as well as facilitating ongoing communications between learners, parents, and teachers. Abubu Habiba, a University Staff primary school, stated that, this innovative project in terms of the deployment of digital technologies in education is expected to become a permanent part of Ghanaian education which will improve children's learning outcomes post COVID-19 pandemic crisis (The World Bank, 2022).

Whereas, in East Asia and Pacific region, they continued, to increase and protect investment in quality early learning programmes and programmes that support the transition to primary school, especially for marginalized children; they introduced a play-based early childhood education curriculum for positive impacts on learning; developed tailored school-readiness and catch-up programmes in the first three years of primary education to strengthen foundational learning outcomes; supported positive transitions from pre-primary to primary school to encourage positive emotions towards school, which are crucial for learning; and designed targeted preparation for teachers of children in the pre-primary setting as well as in the early years of primary education (UNICEF, 2022).

South African Government approved a Presidential Employment Stimulus initiative to compensate ECD employees for some of the remuneration they forfeited during the lockdown and to employ more staff to enforce compliance at ECD centres with COVID-19 regulations and ECD norms and standards (Bayat and Madyibi, 2023).These strategies were to ensure that learning was effective and efficient in the foundational literacy and numeracy learning outcomes post Covid19 pandemic, and will improve academic performance of the learners (Teachmint, 2022).

2.1.7. Support for low-performing learners

Structured remedial catch-up programs targeting low-performing or vulnerable children are an essential strategy for the Kingdom of Eswatini's Education Ministry to recover learning lost due to school closures and to close equity gaps in learning (Motsa, 2021). Motsa (2021) further stated that, as much as schools needed resources to reconstruct the damage caused by the

COVID-19 pandemic and the closure of schools for all children, strategies should target and provide more support to the children whose education has been severely impacted by the pandemic – the vulnerable children. Strategies for improving foundational literacy and numeracy skills are a structured learning intervention that explicitly targets the skills needing improvement. These include strategies for early-grade reading and mathematics interventions, mother tongue and multilingual education programs, and structured school readiness catch-up programs, as well as developing targeted learning programs for specific groups of low performers (UNICEF, 2022).

The strategies in South Africa to give equal opportunities for the low-performing or vulnerable children during and after the "COVID times" mean devising policies and programmes that ensure education that is shaped in such a way to consider the dominant structural barriers to their education, as further brought about by the pandemic (Gaynor & Wilson, 2020). In addition, Nuga and Gustafsson (2020) state that improvement is also enhanced by an increased focus on learning outcomes, access to pre-school education since the turn of the millennium, better access to books and texts by young people, the entry of skilled young teachers into teaching, and a stable curriculum policy with more explicit expectations. This will eliminate inequalities in educational access, experiences and opportunities, with the end goal being equitable educational outcomes for the vulnerable children and those not affected by vulnerability (Hart, 2019).

2.1.8. Measurement and monitoring of learning outcomes.

Measurement and monitoring of learning outcomes can help improve learning when data are applied to policies and plans (UNICEF, 2022). Assessments of learning outcomes of all types – from formative assessments at the classroom level to large-scale international assessments – are a critical strategy for recovering lost learning and addressing learning crises (UNICEF, 2022). Valamis (2023) defines learning outcomes as measurable achievements that the learner will be able to understand after the learning is complete. School participation is a crucial indicator of access to education, but assessing learning outcomes offers valuable insights into the quality of education and the skills students are equipped with for global citizenship (UNESCO, 2021). South Africa believed in strengthening the feedback loop between assessments and policy development and planning to ensure that assessments and monitoring

leads to better curriculum alignment, learning and teaching practices as well as appropriately targeted interventions (Irons and Elkington, 2021).

2.1.9. Professional development of teachers

Efforts to improve teachers' professional development are central to enhancing learning outcomes and recovering learning lost due to the COVID-19 school closures, as they are at the heart of boosting learning for low performers (UNICEF, 2022). Teachers are in an unprecedented situation, where they must make up for the substantial loss of instructional time from the previous school year and teach the current curriculum (The World Bank, 2021). Teachers will need training, coaching, and other forms of support to accomplish this. The most successful strategies for helping struggling students may be through structured pedagogy programmes specifically aimed at helping teachers teach foundational literacy and numeracy or other missing skills (UNICEF, 2022).

Most countries' strategies post-COVID-19 entail recruiting experienced candidates for the teaching force (preferably from the same linguistic groups as their students) and providing quality professional education programs and more in-depth training. They also involve renewing and innovating teacher and school leadership preparation systems to prepare them for shifts in curricula, materials, or assessment systems. This also includes formative assessment practices in all teacher preparation systems, investing in structured pedagogy and teacher mentoring programs, particularly for teachers of children who are falling behind, and encouraging a practical, hands-on approach (Selemani-Mbewe, 2023). Establishing clear education and career pathways to improve teacher motivation through certification programmes, improvements in compensation structures, better school leadership, and clearer appraisal systems, and introducing iterative assessments of teachers' practices as well as coaching and mentoring opportunities to facilitate targeted improvements in teaching practice (UNICEF, 2022).

Around the world, there is a common trend in the education system known as "emergency e-learning," which refers to the rapid transition to online education prompted by COVID-19, a highly infectious virus (Murphy, 2020). Hence, school closures also demonstrated that in addition to digital skills, teachers may also need support to adapt their pedagogy to deliver instructions remotely (The World Bank, 2021). However, virtual teaching was not very common in countries like India before the COVID-19 pandemic; now, it is the primary medium used to

address the knowledge void that emerged due to lockdowns (Henderson et al., 2020). As a result of the nationwide lockdown, educators began to teach virtually as they had no option. They were confronted with obstacles, including a lack of basic infrastructure at home, technological problems, and a lack of necessary skills to teach and administer online exams (Kamal & Illiyan, 2021). Due to the COVID-19 outbreak, 63 million teachers have been affected globally, and hardly any country has provided training to the teachers on virtual teaching (UNESCO, 2020). Hence, partners in education globally advocated for teachers to be prioritized in COVID-19 vaccination campaigns, after frontline personnel and high-risk populations, and provided capacity development on pedagogies for remedial learning and digital and blended teaching approaches (The World Bank, 2021).

In South Africa, little thought or speculation had been given to the possibilities of digital transformation in basic education until the global COVID-19 pandemic, which served as a catalyst for digital transformation in education (UNICEF, 2020). The pandemic compelled educational institutions to adopt virtual teaching and learning as a temporary measure in response to national closures (Mofokeng, 2023). Most schools in South Africa suspended teaching and learning, except for privileged students attending well-equipped schools whose population is very insignificant (Mofokeng, 2023). Major challenges in the country include poverty, limited resources, high access costs, a lack of technical skills among teachers and learners, inadequate equipment to navigate the digital world, and poor or non-existent internet connectivity. According to Saneka and de Witt (2019), challenges that are often overlooked in the South African education system include the language barrier, as English dominates the digital space even though it is not the native language of the locals, which prevents both learners and teachers from effectively engaging in digital transformation that meets global standards. Software applications are developed according to Western models, which affect the children's learning outcomes.

The primary issue with the transition to the digital space following the COVID-19 lockdown in South African education is that the focus is on technological capabilities rather than the needs of learners (Letseka, 2016). There are also misconceptions that view virtual learning as a form of distance learning, rather than as a shift to the digital world, leading both teachers and learners to resist digital transformation (Chomunorwa, Mashonganyika, & Marevesa, 2023).

Therefore, a framework should be established to equip teachers with appropriate skills to enhance children's learning outcomes post covid19 hard lockdown. Currently, teacher education programs are not keeping pace with technological advance, which leads to an imbalance in teaching and learning progress. Zhao Watterston (2021) therefore suggest that teacher education requirements need to be rethought to align with global development standards.

2.2. THEORETICAL FRAMEWORK

John Dewey's Theory: Reforming Education Through Experiential Learning

John Dewey's educational theory emphasises experiential learning, or "learning by doing," where children construct knowledge through active engagement with their environment rather than passive absorption of information (Pappas, 2023). This theory was developed by John Dewey himself in 1938, the American philosopher and educational reformer who argued that education should be grounded in experience, reflection, and active learning rather than passive memorization (Pappas, 2023). Dewey positions learners as active participants in meaning-making processes, emphasizing experiential learning, or "learning by doing," where children construct knowledge through active engagement with their environment rather than passively absorbing, advocating for learning experiences rooted in interaction, inquiry, and real-life contexts. In the post-COVID-19 era, this theoretical stance is particularly relevant, as the pandemic highlighted the limitations of traditional, passive instructional practices and accelerated the global shift toward learner-centred, technology-enabled pedagogies (Muhigana, 2022). These theory approaches are relevant and comprehended in Early Childhood Development centres in the post-Covid19 hard lockdown period, where children experienced disrupted learning, limited social interaction, and emotional stress (UNESCO,2020; UNICEF, 2021). Dewey's theory further, advocate the support to experiential learning as a strategy to mitigate learning losses and developmental delays (World Bank, 2021). The emphasis of the theory is on social reform through education aligns with current efforts to close such equity gaps by ensuring that all children have access to meaningful learning opportunities. For example, evidence from Southeast Asia showed significant disparities in learning outcomes by gender, socioeconomic status, and school location, underscoring the need for instructional strategies that actively engage diverse learners and respond to their social realities (UNICEF, 2022).

Operationalising Dewey's philosophy in post-pandemic ECD settings entails prioritising learning environments where children explore, experiment, collaborate, communicate, and reflect. This approach supports foundational literacy and numeracy recovery by allowing young learners to manipulate concrete materials, engage in guided play, and apply emerging skills in authentic contexts. In alignment with Dewey's vision, integrating digital tools not as substitutes for teachers, but as complementary resources, enables more interactive and personalised learning experiences (The World Bank, 2021). This includes digital storytelling, interactive literacy and numeracy platforms, and technology-supported formative assessment. As the aim of the study is to investigate the effectiveness of teaching methods applied post-COVID19 hard lockdown and to assess how teachers addressed curriculum content gaps and time lost during the pandemic. John Dewey's theory experiential learning theory provides a strong theoretical lens through which these aims can be examined.

Furthermore, Dewey's belief in schooling as a socially responsive institution reinforces the need for holistic recovery in ECD centres-one that prioritises not only academic skills but also socio-emotional wellbeing. These advances that the theory is grounded in the principle that learning occur through meaningful experiences, reflection, and active engagement, rather than through passive transmission of knowledge. This theoretical position was preferred and particularly relevant in the post-COVID19 context, where traditional teaching timelines and content coverage were disrupted. Through Dewey's theoretical lens, the study examines how teachers prioritised foundational concepts over curriculum quantity; integrated missed content into play-based and experiential activities; used observation and interaction to identity learning gaps; and adjusted teaching sequences rather than strictly following pre-COVID19 plans. This theory aligns with post-pandemic recommendations that teachers focus on depth of learning rather than coverage to address learning loss effectively (World Bank, 2021).

2.3. CONCLUSION

This chapter reviewed the body of literature related to the teachers' perceptions on children's learning outcomes post Covid19 hard lockdown. Both the national and international literature reviewed reveal that the teachers played a significant role in improving children's learning outcomes beyond the COVID 19 lockdown.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1. INTRODUCTION

Building on the literature review and theoretical perspectives presented in Chapter 2, this chapter outlines the research methodology and design employed in this study. This chapter outlines processes, and the population and sampling strategies employed to select participants. It further elaborates on issues of trustworthiness and research ethics. The research instruments and strategies employed in this study are intended to support a rigorous inquiry into teachers' perceptions of children's learning outcomes following the Covid-19 hard lockdown in ECD centres located in Umjindi Township, Mbombela Municipality, within the Ehlanzeni District of Mpumalanga Province.

3.2. RESEARCH PARADIGM

This study used interpretivism as a paradigm. A research paradigm is a foundational framework that guides how research is conducted, shaping the way researchers understand and approach the world, and ultimately influencing their methodologies and interpretations. Ahmadi, Nilashi, Shahmoradi and Ibrahim (2017) define research paradigm as frameworks or models developed from a perspective or belief system about the idea of information and existence. This view is supported by Ryan (2018) by affirming that there are various qualitative research paradigms which the researcher can utilize in his/her study, such as interpretivism, positivism, and post positivisms. Nonetheless, this study adopted the interpretivism paradigm: data were collected, reviewed, and examined within an interpretive paradigm framework.

The rationale for using interpretivism was to collaborate with the participants in the investigation process. To assess and investigate how participants construct meaning from the specific situation. According to Thorn (2016) the motivation for using the interpretivism paradigm is for a qualitative case to achieve validity. Therefore, it ought to be conducted utilising participants who have effectively interpreted their own situation. The interpretivist paradigm helps researchers find the kind of teachers' perceptions on children's learning outcomes after the COVID-19 hard lockdown in ECD centres. Through interviews and questionnaires, data collection was conducted face-to-face with ECD practitioners and teachers who had been in

service for less than five years and those who had served for more than five years, at the four selected ECD centres in Umjindi (Barberton), within the Mbombela municipality. This study was conducted to understand their perceptions of children's learning outcomes following the COVID-19 hard lockdown. This knowledge helped the researchers to understand the impact of the pandemic on the school curriculum and on children's learning outcomes. This means that an interpretive paradigm supports close interaction between the researcher and their participants and acknowledges that individual teachers' views and perceptions are complex qualities that can be better understood in a relative context (Nickerson, 2024).

3.3. RESEARCH METHODOLOGY

Sreekumar (2023) defines research methodology as a structured and scientific approach used to collect, analyze, and interpret quantitative or qualitative data to answer research questions or test hypotheses. Sreekumar (2023) further states that research methodology describes the techniques and procedures used to identify and analyse information regarding a specific research topic. A research methodology is like a plan for conducting research, helping researchers stay on track by limiting the scope of the study. Pauwels (2017) confirms that research methodology is a meticulous data collection process and analysis, which researchers skilfully use to achieve their research objectives. A qualitative research approach was employed in this study to explore participants' feelings, views, attitudes, and perceptions of teachers concerning the children's learning outcomes post the COVID-19 hard lockdown of ECD centres.

Hennink, Hutter, and Bailey (2020) state that the qualitative approach is based on a naturalistic methodology that tries to investigate the phenomenon in context in a real-world setting and overall, whereby the study is conducted. Through semi-structured interviews and document analysis, the researcher gained an understanding of the views and attitudes of participants regarding the impact of the pandemic and the hard lockdown on the children's learning outcomes in the ECD centres. By employing a qualitative approach, this study examined the opinions, behaviors, and experiences of teachers in a specific school setting. The researcher found the qualitative approach to be appropriate for this study, as it can ordinarily be utilized to respond to questions concerning complex ideas of phenomena (Smith & McGannon, 2018). The researcher also employed a qualitative approach to describe and understand the phenomenon from the participants' perspective. The researcher collected data from kindergarten teachers

and practitioners on the children's learning outcomes before and after the COVID-19 hard lockdown, which was situated within their everyday work environment. This did not attempt to control the phenomenon being studied (Merriam & Grenier, 2019).

3.3.1. THE METHODOLOGY PROCEDURE FOR THE DATA COLLECTED

The researcher employed semi-structured interviews as the primary data collection instrument to achieve the research objectives. The semi-structured interviews were triangulated with questionnaires. These semi-structured interviews allowed every participant to be asked the same questions, and the researcher ensured that there was flexibility in how the questions were asked, at times, additional probing questions were asked. The interview schedule consisted of five questions, each with sub-questions. Participants were asked to respond to the interview questions based on their experience, knowledge, and perspectives on the research topic. The time and venue for these interviews were arranged according to the participants' availability did not disturb the teaching and learning process. Both Senior Teachers and Junior Teachers' classrooms were used as the interview venue.

Participants were purposively sampled based on their experience and knowledge relevant to the phenomenon being explored. The researcher applied the purposive sampling technique to interview Junior Teachers who are well-informed and understand the research topic being studied. Senior Teachers were purposively selected because senior teachers often have years of teaching and management experience. They have observed how children's learning outcomes have changed over time and can identify patterns, challenges, and successes in ECD centres. They are familiar with the intended learning outcomes for young children and can explain how these are taught and assessed in practice. Senior teachers can describe what learning looked like before and after specific changes, such as COVID-19 disruptions, policy updates, or new teaching methods. Senior Teachers oversee other educators and have a broader view of how teaching practices affect children's learning outcomes across classes or age groups. It was advantageous to use these different categories of participants because they shared their experiences regarding their perceptions of children's learning outcomes after the COVID-19 hard lockdown, thus helping to remove potential external variables from the study's findings. The researcher began with the data analysis process by first transcribing data generated through interviews. The researcher carefully and extensively listens to the voice

recording of interviews from all interviewees to make sense of their responses. The researcher took notes as he listened, grouped all participants' responses, and summarized them accordingly. Hence, the researcher gathered the transcribed data into themes. Furthermore, the researcher categorised and analysed themes for similar interview questions but responded to by different participants as one theme.

3.4. RESEARCH DESIGN

As Bhandari (2025) states, a research design is a strategy for answering your research question using empirical data. It would serve as a catalyst for data collection and evidence that can give appropriate clarifications and answers to the research problem and questions. Creswell and Poth (2025) state that research design is a part of logical research concerned with the rationale of collaborating with evidence (body of knowledge) gathered. A case study design was employed, focusing on selected ECD centres to allow for a rich, contextualised exploration of teacher perceptions. As noted by Yin (2018), case studies enable researchers to investigate a phenomenon within its real-life context, providing detailed insights that are not easily captured through quantitative methods.

A well-planned research design helps ensure that your methods align with your research objectives and that you employ the appropriate analysis for your data. Hence, the primary objective of research design is to articulate a plan for utilizing the data at hand. Creswell and Poth (2025) state that a research design limits the ambiguity of research evidence, helps researchers make a substantial inference that can stand up to hypothesis testing, and enables them to foresee competing clarifications prior to data gathering. Lastly, a qualitative research designs tend to be more flexible and inductive, allowing you to adjust your approach based on what you find throughout the research process.

3.5. DATA COLLECTION METHODS

Several data collection techniques were employed in this research to accumulate sufficient data, namely interviews, questionnaires, and document analysis. Bhandari (2023) defines data collection as a systematic process of gathering observations or measurements, whether for research purposes in business, government, or academia. Data collection allows you to gain first-hand knowledge and original insights into your research problem. Therefore, the decision of more than one data collection technique is considered adequate to strengthen the reliability and

quality of data. The process of using more than one data collection technique was for the purpose of triangulation. These data collection techniques enable the researcher and their participants to exchange thoughts and co-operatively develop a significant understanding of the data (Saldana, 2021). The data collection techniques are discussed below.

3.5.1. Interviews

Deterding and Waters (2021) state that an interview is the most effective instrument for producing a large amount of data and is of greater value within a limited timeframe from participants. Additionally, interviews allow the researcher to investigate the hidden perspectives, sentiments, and practices from participants (individual or groups) in various settings, and pose questions regarding facts and individuals' convictions. The individual or face-to-face interview offers the researcher a chance to test the assertions from the interviewee and empowers them to connect effectively until they finish the interview with minimal actual weariness experienced (Karp, 2017), unlike group interviews, which are utilised to understand how a group of individuals feel or consider an issue being investigated. Face-to-face conversations enable researchers to ask questions directly and facilitate probing and follow-up questions for greater clarity.

The researcher administered individual or face-to-face interviews in this study, as they were considered ideal for gathering rich data and facilitating in-depth analysis from the participants (Ranney, Meisel, Choo, Garro, Sasson, & Guthrie, 2015). Senior ECD teachers with more than five years of experience and junior ECD teachers with five years or less of experience were individually interviewed by the researcher. The semi-structured interview was used for all interviewees, with a similar set of arranged questions to ensure consistency and standardization in the questions asked and the responses and results produced. The reason for engaging senior teachers and junior teachers in individual interviews lies in the interpretive paradigm, which focuses on understanding individual experiences and social development through a more profound understanding (Myende, Ncwane, & Bhengu, 2020).

Senior ECD teachers are regarded as leaders and mentors to junior teachers, who bring years of experience and a deep understanding of children's learning and developmental stages. They ensure that ECD centres provide quality early learning programmes that align with national standards and curriculum frameworks. Senior ECD teachers often take on leadership roles in

planning, monitoring, and evaluating programs in the centre. Subsequently, the researcher required more time to draw on their unique experiences, interpretations, plans, and clarifications of their perceptions regarding the children's learning outcomes after the COVID-19 hard lockdown. According to Enosh and Ben-Ari (2016), the primary goal of interpretive research is to enable the researcher to investigate and comprehend individual emotional experiences, with the conviction that knowledge construction is a personal process. Additionally, knowledge construction can prompt innovative reasoning and the discovery of new thoughts and opinions that are essential for providing relevant responses to the research problem.

The researcher utilised the cell phone voice recorder during the interview process to capture information from participants. The cell phone recordings helped the researcher in taking field notes. After each interview, the researcher transcribed the recordings of the interviewee's contribution to reflect on the data obtained and simultaneously to prepare for the data analysis stage. All participants were guaranteed confidentiality before any interview session; they were advised not to mention any specific place, person, or even a name. Prior to each interview session, the researcher explained to participants that the main purpose of cell phone recording is to ensure quality and strengthen the evidence for objectiveness, record, and reference for data analysis at a later stage. The researcher saved the audio records on a personal laptop with a password-protected file to prevent unauthorized access to this information.

The interviews were conducted in four selected ECD centres in the Umjindi circuit in Barberton. A total of eight participants, comprising both senior and junior teachers, were sampled from two centres (one senior and one junior teacher per centre). In other centres, there were only seniors with no junior teachers. Semi-structured interview schedules, consisting of five main questions with sub-questions (Appendix A), were utilized. Each interview session took approximately 45 to 1 hour and 30 minutes.

3.5.2. QUESTIONNAIRES

A questionnaire is a research instrument that consists of a set of questions or other types of prompts that aim to collect information from respondents. According to Bhandari (2021) a questionnaire is a list of questions or items used to gather data from respondents about their perceptions, attitudes, experiences, or opinions. A questionnaire for qualitative research serves as an essential tool to collect detailed and in-depth data about people's thoughts, experiences,

or attitudes. In essence, a qualitative research questionnaire is narrative-focused, exploratory, adaptable, and rigorous. Taherdoost (2022) states that a questionnaire is a crucial instrument in a research study, enabling the researcher to collect relevant data regarding the research topic. This is a convenient tool for researchers seeking a deep, layered understanding rather than surface-level metrics. The researcher's qualitative research questionnaire sought to explore how COVID-19 disruptions have affected children's learning outcomes and development in ECD centres, from the perspectives of ECD teachers. Permission was granted by the ECD centres for the researcher to conduct the study.

The research questionnaire, which included four open-ended questions (Appendix B), was physically distributed to senior and junior ECD centres in four selected ECD centres, allowing them to share their experiences and perceptions at the Umjindi circuit. A total of eight participants, both senior and junior teachers, two teachers per centre (one senior and one junior) were selected to complete the research questionnaires. A research questionnaire typically consists of a mix of closed-ended and open-ended questions. Each participant was given a research questionnaire consisting of four open-ended questions to share their perceptions of the children's learning outcomes after the COVID-19 hard lockdown. Senior and junior teachers used the same open-ended questions. Participants were given five days to complete the research questionnaires, and the researcher shared his contact information with them to offer support in case they had any questions.

3.5.3. POPULATION AND SAMPLING

A researcher should explicitly define the earmarked population. According to Hancock & Algozzine (2017), a population is a group of elements or cases that conform to explicit standards and to which the researcher expects to generalize the results of the study. It is not possible for the researcher to survey all the members of the population, because it is too large. Eight participants were selected to participate in the questionnaires, two from each centre, while the other eight participants were selected to participate in an interview, also two per centre. Hence, a sample ought to be selected from the population to represent the entire population. As indicated by Turner (2020), Sampling is the selection of a subset of the population of interest in a research study. Sampling techniques can either be probability (statistical) or non-probability (non-statistical). Probability sampling is logical, and everyone from the population has an equal

opportunity of being chosen (Sarstedt, Bengart, Shaltoni & Lehmann, 2018). According to Nikolopoulou (2023), purposive sampling refers to a group of non-probability sampling techniques in which units are selected because they have characteristics that you need in your sample.

The researcher adopted purposive and convenience sampling in this study. Not all ECD teachers were selected, though; some junior teachers who had been working prior to the hard lockdown were purposively selected, because they are at liberty to provide data relevant to the research questions on understanding, and their perceptions on the children's learning outcomes post hard lockdown of the kindergartens. As stated by Fleetwood (2023) that, a sample is a smaller set of data that a researcher chooses or selects from a larger population using a pre-defined selection method.

The researcher did not consider gender, age, and race when sampling participants because the study focused on the perception of teachers on the children's learning outcomes post-COVID-19 hard lockdown of ECD centres**.** This study was conducted in four ECD centres in Umjindi Circuit at Ehlanzeni district in Mpumalanga province of South Africa. These Kindergartens were purposively and conveniently sampled. Nikolopoulou (2023) refers to purposive sampling as judgemental sampling, because this sampling method relies on the researcher's judgement when identifying and selecting the individual kindergartens and teachers that can provide the best information to achieve the study's objectives. For example, a subset of teachers in kindergartens was sampled, and the advantage of purposive sampling is that participants who are relevant to the study are selected. These ECD centres were purposively selected because their teachers were appropriate for the design and purpose of the study. Convenient sampling was used because the four ECD centres were easily accessible and in proximity to the researcher's residence. Eight (08) participants from the four sampled ECD centres were purposively selected to participate in the study.

3.6. DATA ANALYSIS, DISCUSSION, AND PRESENTATION

According to Calzon (2023), data analysis is the process of collecting, modelling, and analyzing data using various statistical and logical methods and techniques. Bengtsson (2016) defines data analysis as the interpretation of information and the translation of what individuals have

said about a specific phenomenon through various research strategies. Data analysis summarizes the collected data, which involves interpreting data gathered using analytical and logical reasoning to determine patterns, relationships, or trends (Karin, 2023). This simply implies that it is a process of making sense of what has been said by participants. Moser and Korstjens (2018) concur that data analysis involves a cautious examination of data to gain an in-depth understanding of the meaning of data generated through various data collection strategies. The researcher initiated the data analysis process by first transcribing the data generated from interviews. The researcher carefully and extensively listened to the voice recording of interviews from all interviewees to make sense of their responses concerning the teacher's perceptions on children's learning outcomes post the Covid-19 hard lockdown of ECD centres, in ensuring that the research question is answered. The researcher took notes as he listened and grouped all participants' responses, then further summarized them accordingly. Therefore, the researcher verified that the data developed from the interviews complemented the data collected through questionnaires, ensuring they were in alignment with the research question (Tracy, 2019).

3.6.1. Data transcription

Moser and Korstjens (2018) define data transcription as the process whereby the researcher write down all interview information recorded through an audio voice recorder into notes. They further contend that data transcripts allow an investigator to conduct a thorough review and verification of participants' responses. In this study, the researcher followed up with participants to clarify any information that was unclear from the audio recordings. After writing down all participants' responses from the interview session, the researcher later reconciled the recorded inputs and responses. As Birt, Scott, Cavers, Campbell, and Walter (2016) emphasize, returning to participants to confirm or clarify data promotes accuracy, reflexivity, and transparency, which are essential for the trustworthiness of qualitative research.

3.6.2. Thematic content analysis

According to Friese, Soratto, and Pires (2018), a qualitative approach involves identifying, examining, and reporting patterns (themes) that develop from the data. The qualitative data collected in this study enabled the researcher to identify themes related to the main research question, sub-questions, and the study's aims. The researcher used the research question to

determine information relevant to themes (Atkins, Francis, Ivers, Foy, Duncan, Colquhoum, Grimshaw & Lawton, 2017). From transcribed data, a pattern of unique interpretations from the interviewees became evident and were noted in themes for better descriptions and understanding of the phenomenon under study (Hoffmann, Gustafsson, & Tommaso, 2020). For effective thematic analysis, Xu and Zammit (2020) outline the following steps that need to be considered: familiarizing yourself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. The researcher considered all the strategies mentioned above during data analysis; they helped the researcher come up with conclusions that are appropriate to the aim and purposes of the research questions. These strategies are briefly discussed below:

- **Familiarising yourself with data**: Data collected by means of interviews was recorded on a cell phone voice recorder and transcribed verbatim. The researcher familiarises himself or engages with data by transcribing and then re-reading the transcript and/ or listening to the recordings. From transcribed data, a pattern of unique interpretations from the interviewees became evident and were noted in themes for better descriptions and understanding of the phenomena under reach (Hoffmann, Gustafsson & Tommaso, 2020). Data collected through questionnaires with answers that handwritten, was also transcribed in a digital table.
- **Generating initial codes**: After being familiar with the data, the researcher started identifying initial codes, which are the data features that appear interesting and meaningful.
- **Searching for themes**: The researcher started the interpretive analysis of the collated codes by ensuring that relevant data extracts are sorted according to overarching themes.
- **Reviewing and naming themes**: The researcher reviewed and checked themes in relation to the coded extract and the overall data set.
- **Defining and naming themes**: The researcher refined and defined the themes and potential sub-themes within the data. Analysis of the data is an ongoing process to further enhance the identified themes. The researcher provided theme names and clear working definitions that capture the essence of each theme briefly and effectively.

- **Producing the report**: Finally, the researcher transformed the analysis into an interpretable piece of writing by using vivid and compelling extract examples related to the themes, research question, and literature.

Data collected from the documents were added to predetermined themes, with descriptors serving as the themes. The researcher has analysed documents through thematic analysis. Important and distinct facts are noted as themes (Kukano, 2020), and facts are linked to one another.

3.6.2. Data coding

According to Wort (2019), data coding is the process of breaking down and rearranging data themes or categories that enable the researcher to compare or organize patterns within the same category, which aids in the development of concepts. In support of this, Beyers (2020) defines data coding as an interpretive act in which a large volume of data is organized by applying codes to text in order to make sense of participants' responses and descriptions. In this case, data from interviews, questionnaires, and documents were compared and organised to develop categories. The researcher used the descriptive code approach because its features closely resemble and meet the requirements of a qualitative interpretive research approach in this study. The purpose of using the descriptive code strategy was to describe and understand social phenomena in terms of the meaning people bring to them (Mbhele, 2018).

3.7. RESEARCH ETHICS

All educational studies incorporate research ethics, as they involve data collected from and about people (Alderson & Morrow, 2020). Ethics is described by Awad, Dsouza, Kim, Schulz, Henrich, Shariff, Bonnefon, and Rahwan (2018) as a set of moral principles that are commonly accepted and may offer rules and social expectations about the most appropriate behaviour, about experimental subjects and respondents. Research ethics are centered on what is ethically appropriate and inappropriate when engaging with participants or accessing recorded data. Regarding research ethics, this study guaranteed that all participants and sampled ECD centres were treated in a manner that considered this investigation morally and ethically legitimate through respect and consideration for the constitutional rights of all participants.

3.8. CHAPTER SUMMARY

An overview of the research design and approach utilised was outlined in this chapter. This chapter discusses the qualitative research approach, using the interpretivist paradigm, within which the study is situated, along with its significance and relevance to the study. The sampling method was discussed with reasoning for using convenience sampling and purposive sampling for this study. The data collection methods, including semi-structured interviews, questionnaires, and document analysis, were discussed. This chapter also outlines the process of data analysis using thematic content analysis. The chapter further discussed researcher ethics. The next chapter outlines data presentation, analysis, and interpretation in detail, and the themes and patterns identified by the researcher in this study.

CHAPTER 4
FINDINGS AND DISCUSSIONS

4.1. INTRODUCTION

This chapter presents and discusses the findings of the study on teachers' perceptions of children's learning outcomes in ECD centres following the COVID-19 hard lockdown. The purpose of this chapter is to report the findings that emerged from the data collected through interviews with teachers and to interpret these findings in relation to the research questions and objectives of the study. The findings are organised thematically, reflecting the key areas as guided by the research questions as follows:

- What are the perceptions of teachers on time loss and curriculum content coverage in post Covid19 hard lockdown?
- What are the perceptions of teachers on learners' learning outcomes post-COVID-19 hard lockdown?
- What are the perceptions of teachers on the strategies they used to remedy challenges learners faced post-COVID-19?
- What are teachers' perceptions on safety measures in the learning environment post-COVID-19 hard lockdown?
- What are the perceptions of teachers in the teaching and learning in pre- and post-COVID-19?

Each theme is presented using direct insights from participants, supported by relevant literature where appropriate, to illustrate both areas of convergence and divergence in teachers' experiences. Before the presentations and discussion of themes, the researcher presents the demographic data of the participating ECD centres. The discussions are integrated with the presentations of findings of each thematic area to provide a critical interpretation of the findings.

4.2. PROFILING OF PARTICIPATING SCHOOLS AND PARTICIPANTS

This study was conducted in four ECD centres in the Umjindi Circuit at Mbombela municipality (Ehlanzeni District), Mpumalanga Province, South Africa. To maintain anonymity, the participating ECD centres were designated as Centre A, Centre B, Centre C, and Centre D. The

real names of the participants were not disclosed in the study. Moreover, eight participants from the four ECD centres participated in the study, with two teachers from each centre. Eight participants were interviewed: four senior teachers, named Senior Teacher 1, Senior Teacher 2, Senior Teacher 3, and Senior Teacher 4, and four junior teachers, named Junior Teacher 1, Junior Teacher 2, Junior Teacher 3, and Junior Teacher 4. All the participants from each ECD centre were profiled.

4.2.1. Profiling of participating ECD centres

Table 4.1: Profile of participating ECD centres

Characteristics of schools.	**Centre A**	**Centre B**	**Centre C**	**Centre D**
Province	Mpumalanga	Mpumalanga	Mpumalanga	Mpumalanga
District	Ehlanzeni	Ehlanzeni	Ehlanzeni	Ehlanzeni
Circuit	Umjindi	Umjindi	Umjindi	Umjindi
Type of Institution	ECDC	ECDC	ECDC	ECDC
Number of Senior teachers	01	01	01	01
Number of Junior teachers	01	01	01	01
Learner enrolment	50	40	48	54

TABLE 4.2: Centre A participants

Characteristic of ECD centres	**INTERVIEWS**	
	Junior Teachers 1 (JT1)	**Senior Teacher 1 (ST1)**
Gender	Female	Female
Age	34	39
Qualification	BED: Foundation	BED: Foundation
Experience in current position	05	11
Grade taught	R	2

TABLE 4.3: Centre B participants

Characteristic of ECD centres	**INTERVIEWS**	
	Junior Teachers 2 (JT2)	**Senior Teacher 2 (ST2)**
Gender	Female	Female
Age	32	42
Qualification	BED: Foundation	BED: Foundation
Experience in current position	04	08
Grade taught	R	R

TABLE 4.4: Centre C participants

Characteristic of ECD centres	**INTERVIEWS**	
	Junior Teacher 3 (JT3)	**Senior Teachers 3 (ST3)**
Gender	Female	Male
Age	28	38
Qualification	Dip: Foundation	Dip: Foundation
Experience in current position	05	10
Grade taught	1	2

TABLE 4.5: Centre D participants

Characteristic of ECD centres	**INTERVIEWS**	
	Junior Teacher 4 (JT4)	**Senior Teachers 4 (ST4)**
Gender	Male	Female
Age	30	45
Qualification	Dip: Foundation	Cert: Foundation
Experience in current position	05	07
Grade taught	1	R

The qualifications and experience of the participants determine whether they can contribute to this study through the answers they provide. The researcher focused on Senior Teachers (with more than six years of experience) and Junior Teachers (with less than six years of experience)

who had worked at their ECD centres for years, teaching both before and after the Covid-19 hard lockdown. Teachers who can provide detailed information on their understanding of the children's perceptions of learning outcomes post-COVID-19 hard lockdown. Gender and age were not issues of concern when selecting participants, as the study focused on teachers' perceptions of children's learning outcomes following the COVID-19 hard lockdown. However, the researcher tried to get views from both genders. The researcher wanted to get the perceptions of senior teachers who had worked for more than six (6) years, as well as those who had worked for less than six (6) years.

4.3. PRESENTATION OF ANALYSED DATA COLLECTED THROUGH INTERVIEWS

I conducted in-person interviews with ECDC educators, specifically senior teachers and junior teachers, to gather data on their perceptions of children's learning outcomes following the COVID-19 hard lockdown. The study objectives: 1) to investigate the effectiveness of teaching methods applied post Covid-19 hard lockdown, 2) to assess how teachers addressed the content gaps and lost time created during the pandemic Covid-19 hard lockdown, 3) to determine the effectiveness of strategies used by teachers to remedy challenges learners faced post Covid19 hard lockdown, 4) to determine the effectiveness of the streamlined ATP's in addressing the learning outcomes post Covid-19 hard lockdown, and 5) to understand teacher's perceptions about children's learning outcome after post Covid19 hard lockdown. I have acquired substantial knowledge regarding these objectives, and this information is organised and presented in the following sections according to the emerging themes.

The following themes emerged from data collected through interviews:

- Perceptions of teachers on the time loss and curriculum content coverage in post Covid19 hard lockdown.
- A perception of teachers on children's learning outcomes post-COVID-19 hard lockdown.
- Perceptions of teachers on remedial teaching strategies applied in post Covie19 hard lockdown.
- Perceptions of teachers on challenges in teaching and learning post Covid19 hard lockdown.
- Key role of government or ECDC management post Covid19 hard lockdown.

- Factors on safety measures in the learning environment post Covid19 hard lockdown.
- Integration of technology in teaching pre and post hard lockdown.

4.3.1. The time loss and curriculum content coverage in post Covid19 hard lockdown.

The COVID-19 hard lockdown led to significant disruption in the teaching and learning process, with ECD centres experiencing considerable time loss. This disruption directly affected curriculum coverage, as teachers struggled to address learning gaps while simultaneously adapting to new teaching conditions.

For purposes of outlining theme 1, Participants responded to the following question:

What are the perceptions of teachers regarding time loss and curriculum coverage during the post-COVID-19 hard lockdown?

To understand the time loss and curriculum content coverage in ECD centres, I had to assess the adaptive mechanisms employed by them post-COVID-19 hard lockdown. that led to the formation of the following sub-themes:

- Significant time loss
- Curriculum coverage gaps
- Accelerated and condensed teaching
- Learner readiness and engagement

These sub-themes are discussed below.

4.3.1.1. The Significant Time Loss

Senior teachers responded as follows:

Senior teachers responded that the Covid19 hard lockdown caused a substantial loss of instructional time. Extended school closures, phased reopening, rotational attendance, and strict safety protocols all contributed to reduced contact time with learners. Most Senior teachers indicated that by the time learners returned, several months of scheduled curriculum delivery had been missed.

The following quotes represent the senior teachers' perceptions of the significant time loss.

ST1 elaborated on the effects of prolonged school closures and time lost.

"…. we have to stay at home without coming to school; therefore, instructional and contact time was reduced due to the safety measures that restricted interaction. The prolonged school closure made the children forget everything learned prior to the pandemic, and we lost time to cover the curriculum and the Annual Teaching Plan. In a true sense, the elongated school holidays created a huge gap in the curriculum coverage".

ST2 indicated that the school closure hindered the completion of their work:

"…the school closure during the pandemic was affected immediately without preparing us. Therefore, portfolios of work, assessment activities, and checklists were left unfinished due to school closures. Incomplete assessment records made it difficult to determine each child's baseline when schools reopen".

ST3 stated that time loss according to her was a disaster because she could not have sufficient time to assess learners' progress and performance.

"It was a disaster due to the limited observation opportunities, especially the direct classroom observation. The primary method of assessment was impossible during lockdown. I missed chances to track children's language, motor, social skills development in real time".

ST4 emphasised the consequences of the time loss on curriculum coverage post-lockdown.

"…. I struggled to cover full scope of the curriculum, as lockdowns shortened teaching time. I felt activities involving physical, emotional, and social development were compromised".

Junior teachers responded as follows

The perceptions of Junior Teachers are similar to the findings shared by senior teachers, though they also have their own perceptions that were not mentioned by senior teachers regarding the loss of time caused by school closures during the hard lockdown. Junior teachers responded as follows:

JT1 indicated the impact caused by the loss of time to her physical assessment due to prolonged school closures.

"The time loss and school closure negatively affected my assessment, especially the motor skills in physical education. We had to skip the physical education assessment because it requires physical interaction. we could not assess learners to observe the safety protocols. This created a backlog because, with the limited time we had, we had to cover the work not done in the previous grade, which coerced me to work extra hours and offer additional classes. These extra classes allowed me to give individual attention to my learners because they are not the same and have different challenges. I had enough time to assess them holistically".

JT2 emphasized the importance of interaction during the teaching and learning process, which was compromised by the prolonged school closures.

"Learners forgot everything they learned prior to the hard lockdown, and when they return to school, we have to start afresh. We had limited time to interact with our learners. Hence, I am saying time lost created a huge content gap because we could not finish the ATP".

4.3.1.2. Curriculum Coverage

Participants highlighted that the curriculum could not be fully covered in the shortened academic year. Teachers prioritised core areas such as literacy and numeracy, leaving less time for creative arts, physical education, and enrichment activities. This selective coverage created content gaps that progressed with learners into subsequent grades. The following are participants' responses to teachers' perceptions on the curriculum coverage post the hard lockdown.

ST1 indicated that he converted lessons of music and play to cover the curriculum content within the limited time post-COVID-19 hard lockdown

"I have converted my lessons to music and play. These learners have forgotten everything they learned before the hard lockdown. The music and games helped them remember some of the lessons they had learned prior to the hard lockdown. This kind of method helped me to bring back the school vibe".

ST3 shared how she managed her curriculum coverage post-hard lockdown:

"I have prioritised the core learning outcomes where I have focused on essential skills in language, literacy, and numeracy development rather than trying to cover every original activity. I have also integrated learning areas to address multiple outcomes simultaneously by incorporating counting, vocabulary building, and cultural themes into my storytelling activity. I have organised structured play to address their cognitive and emotional delays to help children adjust back to the learning environment and address their post-lockdown anxieties."

ST4 shared her curriculum coverage strategies implemented after the hard lockdown.

"My strategy to cover the lost curriculum content was to prioritise the core learning outcomes by focusing on reading and writing in languages, counting, and literacy development. I have revisited the key concepts more frequently but in shorter spaces to help children catch up quickly. I have broken tasks into smaller steps, where I initially assist them and then gradually encourage them to work independently. I dedicated my time to help children adjust back to the group learning environment, since emotional readiness improved learning efficiency".

Most of the junior teachers shared similar perceptions to those found in the findings shared by senior teachers. However, some of their views were not stated by senior teachers on curriculum coverage post the hard lockdown.

JT1 *"So I think the curriculum was not covered. There was a lot that was not done, and at that stage, our efforts were minimal. We had to teach them limited things, because most of the time they stayed at home. I also think it was okay, because they gave us new ATPs, and we had to work according to them. However, the ATPs did not cover everything according to the caps document. So, it did not cover everything. Uh, hence, we did not have enough time to finish".*

4.3.1.3. Accelerated and Condensed Teaching

To address lost time, senior teachers adopted accelerated teaching approaches, condensing key concepts and skipping certain developmental activities. While this helped in meeting minimum requirements, teachers expressed concern that deep learning and mastery were compromised. The following findings reflect the responses of participants regarding the acceleration and condensation of teaching after the COVID-19 hard lockdown.

ST1 indicated her teaching approach to facilitate and accelerate learning after the COVID-19 lockdown.

"I began using integrated themes to cover multiple learning outcomes at once, for example, combining language, art, and numeracy into one activity. This helped me to make my teaching more efficient while maintaining holistic development. In some cases, I have introduced simplified home learning activities to extend learning outside the classroom. I also created a parent WhatsApp group where I guide parents on how to support their children in doing the activities."

ST2 emphasized the importance of focusing on essential skills after the hard lockdown.

"Apart from focusing on essential skills in languages, numeracy, literacy, and emotional development first, rather than trying to cover the whole ATP, I have increased structured learning time by extending school hours since most of the parents fetch their children two hours late after school. I use this time to play structured games and songs embedded with academic concepts, which help them revise the content they have learned. I have noticed that games and songs make rapid learning less stressful for children. Then in the morning, I will focus on delivering the critical curriculum content while children are most attentive".

ST4 indicated that her accelerated teaching approach after the COVID-19 hard lockdown increased the workload.

"… when schools reopened, we had to concentrate on core literacy, numeracy, and socio-emotional skills, and we had to neglect creative and physical development due to time pressure. We were forced to use informal, rapid assessments rather than extended observation cycles. We had to assess quickly and intensively to identify learning gaps. This exercise increased my workload and reduced my time for detailed documentation. This led to some assessments to become more about catch-up tracking than holistic developmental evaluation".

The perceptions of Junior Teachers most of them are like the findings shared by senior teachers, though some of the acceleration and condensation factors of teaching were not highlighted by senior teachers. Junior teachers responded as follows:

JT1 indicated what helped her accelerate her teaching within the limited time post-hard lockdown.

"I have followed the streamlined ATP given by the government, and they did not train us on how to follow it, we have just figured it out ourselves. Due to the limited time and the time lost due to school closures, we were unable to cover all the curriculum content as outlined in the streamlined ATP document. The department has just prioritised certain topics that should be covered within the short space of time".

JT4 outlined how she accelerated her teaching after the COVID-19 hard lockdown.

"I have converted my lessons to music and play. These learners have forgotten everything they learned before the hard lockdown. The music and games helped them remember some of the lessons they had learned prior to the hard lockdown. This kind of method helped me to bring back the school learning vibe."

4.3.1.4. Learner Readiness and Engagement

Teachers reported that many children returned to school with reduced attention spans, poor concentration, and diminished learning routines, making it more difficult to cover the curriculum efficiently. Additional time was required for revision and re-establishing classroom routines, further limiting curriculum coverage. The following findings reflect the senior teacher's perceptions of learner readiness and engagement post-hard lockdown.

ST1 highlighted her perceptions on the challenges experienced when children returned to ECD centres.

"*I have noted a lot of gaps in the unpreparedness of the learners to return to school; they were no longer able to read. They have forgotten everything and are failing to focus on class. Others were struggling to hold a pen. I had to make them recite words sing them. Those who forgot to hold their pen, I must remain with them after school for twenty minutes to practice those ways of holding a pen and the sitting posture when writing in class".*

ST2 noted several unpreparedness and challenges in the children when returning to centres.

"*Learners were still traumatised and not ready to return to school, and there were noticeable learning gaps that I have observed. My learners were struggling with number recognition,*

counting and basic problem-solving. Other struggles I noticed were weaker hand-eye coordination and pencil grip, reduced balance, and impaired jumping and coordination skills due to less active play during lockdown. Others had difficulties working in groups or sharing materials".

ST3's perceptions suggested that the centre was not ready to host learners, as she was not supplied with teaching and learning materials appropriate for safety protocols.

The centre to me was not ready to resume teaching and learning, because they have never provided me with resources that are compliant with safety protocols during the teaching and learning process. We are still subjected to the traditional way of interacting with our kids. My ECD management complained about the delays of the Government relief funds for ECD centres that they want to use to buy resource materials. She promised to provide resource materials when they received the relief funds, but up to today, nothing has been provided to me. I develop materials on my own or rely on colleagues from other ECD centres".

The perceptions of junior teachers regarding learner readiness and engagement indicated that some of their views were already covered in the findings by senior teachers. for example:

JT2 outlined her perceptions regarding the state of children's readiness to return to school after the COVID-19 lockdown.

"*Learners felt not belonging due to social distance, learners do not participate like before. Skills were less developed. Grade R went to Grade 1 unprepared".*

4.3.1.5. Discussions of the Findings

The findings align with broader evidence indicating that school closures during the pandemic led to unprecedented learning disruptions globally (UNESCO, 2021). In South Africa, the Department of Basic Education (DBE, 2020) acknowledged that the hard lockdown resulted in significant learning losses in the curriculum, particularly in the foundation phase, where consistent exposure and repetition are crucial. Time loss was compounded by rotational timetabling and smaller class sizes, which were necessary to accommodate distancing protocols, resulting in learners not receiving consistent daily instruction (Spaull & van der Berg, 2020). The prioritisation of numeracy and literacy reflected an attempt to meet essential learning outcomes but inadvertently marginalised holistic development, which is central in early

childhood education (Naude, 2020). The acceleration and compression of teaching content, reported by participants, echoed findings from international studies where teachers felt pressured to “catch-up” at the expense of depth and engagement (Kim, 2021). This suggests that while emergency curriculum adjustments, such as streamlined Annual Teaching Plan (ATP), provided guidance, they did not fully address the developmental realities of young learners who require time, play, and repetition for meaningful learning (DBE, 2021).

This study concludes that time loss during the COVID-19 hard lockdown had a direct and significant effect on curriculum coverage in ECD centres. Teachers adopted strategies such as curriculum prioritisation and accelerated teaching, but these often came at the expense of holistic and play-based learning. Learner readiness and engagement were negatively affected, further limiting curriculum progress. Government support, in the form of streamlined ATPs, was useful but insufficient without a comprehensive recovery plan tailored to early childhood development.

4.3.2. Improving the children’s learning outcomes post Covid19 hard lockdown.

The ECD teachers' responses about their perceptions of children’s learning outcomes post-Covid-19 hard lockdown should be reflective, experience-based, and balanced. They are expected to explain how the lockdown influenced children’s development, what gaps or gains they have observed, and how teaching and learning were adapted.

To explain the perceptions of teachers on the learning outcomes post Covid19, the participants responded as follows to the question:

What are the perceptions of teachers on learners’ learning outcomes post-COVID-19 hard lockdown?

The sub-themes that arose were identified as tactics:

- Learning Gaps and Regression
- Socio-Emotional Challenges
- Increased Role of Parental Involvement
- Emphasis on Holistic Development

4.3.2.1. Learning Gaps and Regression

The perceptions of teachers regarding learning gaps and regression findings reported noticeable learning regression among children after they returned to ECD centres from the hard lockdown. Foundational skills in literacy, numeracy, and language development were disrupted, with many learners struggling to recall knowledge they had previously acquired.

Teachers responded as follows:

ST1 pointed out that children had forgotten almost everything taught before the lockdown, which resulted in poor performance.

"*… learners struggled to read and write, and they were unable to count. Some, before the hard lockdown, were counting to thirty, but post the hard lockdown, they struggled to reach fifteen in their counting".*

ST3 indicated the learning gaps and regression observed when learners returned to school.

"… I have observed reduced vocabulary and weaker sentence construction due to limited peer interaction, and lower listening and comprehension skills. I have also noticed that they have difficulties in recognizing letters, sounds, rhyming patterns, with less interest in book handling and storytelling routines".

ST4 stated that learners' learning gaps and regression were noticeable to them when they returned to school.

"*… I have noted that they are struggling to work in groups or share materials. The weaker hand-eye coordination and pencil grip were common, accompanied by a reduced interest in book handling and storytelling activities. The other learning gap I have noticed was the reduced vocabulary and failing to construct sentences".*

JT2 stated that learners struggled with mathematics or numeracy.

"*Learners forgot to count."*

JT4 emphasised that learners depicted learning gaps and regression by forgetting lessons learned prior to the hard lockdown.

"*What do you expect from a little kid staying at home for so long? Some have forgotten songs and are failing to read. It was just a disaster. They have forgotten everything. Others couldn't write properly, and the book is upside down. To sum it up, learners were disoriented at all. Demonstration games and songs have helped me a lot in covering the gaps, especially in demonstrating how to hold a pen properly and how to sit when writing. Some of the demonstration songs will just come from nowhere during the gap identified*".

4.3.2.2. Socio-Emotional Challenges

The teacher's perceptions of socio-emotional challenges findings highlighted that children returned with heightened anxiety, limited social interaction skills, and reduced concentration. This emotional strain often impeded effective engagement in learning activities.

Teachers responded as follows:

ST1" Too *much staying at home made these learners to get more attached to their parents. Many children struggled with separation from parents, as they had spent extended time at home during lockdown. Some learners showed clinginess, frequent crying or reluctance to stay at school."*

ST2 "*I have noticed that these children were struggling with sharing, turn-taking, and cooperation when returning to school. I have also observed that learners lost the confidence and self-esteem they had gained prior to lockdown, showing hesitation to participate in class activities or express themselves".*

JT3 "*My children were emotionally affected by the pandemic hard lockdown. Staying away from school made them become shy and socially withdrawn, because their interaction with friends was reduced. Returning to school after the COVID-19 lockdown led to difficulties in rebuilding friendships. They often displayed shyness, preferred to play alone, and avoided group activities".*

JT4 "*As I have said, it was an emotional trauma. Just remember that others have lost their relatives, and they displayed fear of illness, which was influenced by repeated COVID-19 safety messaging at home. Others were anxious about wearing masks and maintaining social distance. Also, the absence of some peers who did not return created a sense of loss and confusion, which affected their sense of belonging*".

4.3.2.3. Increased Role of Parental Involvement

The findings on teachers' perceptions of the increased role of parental involvement revealed that children whose parents supported them at home during the lockdown showed better continuity of learning. However, inconsistent parental involvement contributed to inequality in outcomes.

Senior Teachers' responses highlighted the difference between children whose parents were helping them at home during the hard lockdown and those who were not learning during the same period.

Teacher's responses are as follows:

ST2 emphasis the differences made by children who were engaged and those who were not during the hard lockdown.

"*Children who were more engaged during remote learning maintained some routine and structure, which helped them to retain pre-lockdown knowledge. And those who were less engaged and had limited exposure to structured learning during lockdown depicted setbacks in core skills like reading, counting, and problem-solving".*

ST4 reflected the way children adapted to classroom routines post-lockdown**.**

"…*children who were engaged during the remote learning adjusted faster post-lockdown. They adapted more quickly to classroom routines and quickly caught up on missed content. While children who were less engaged needed me to reteach basic concepts before introducing new ones, this delayed curriculum progress.*

JT1 indicated the performance between children who received help and those who did not during the hard lockdown.

“Parents who helped their children during lockdown read stories to their children, encouraged their children to speak, and involved them in conversations developed stronger vocabulary and communication skills, while other learners returned with limited vocabulary growth and weaker expressive language skills”.

JT3 explains the distinction between learners who got assistance during lockdown and those who did not**.**

“*With parental engagement, learners were more likely to maintain progress in literacy, numeracy, and problem-solving skills since parents helped with reading, counting, or home-based activities. Learners showed learning gaps, forgetting previously learned content, and struggling with concentration when schools reopened”.*

ST4 reflected the differences in performance between learners from educated and illiterate families.

“*You could see those from the educated families; you could see when you assess them or teach, they were just flowing, and the disadvantaged were just lost. Then that’s when I started to notice that some kids were being helped at home, while others were not. The disadvantaged learners performed bad and the expected learning outcomes were not achieved compared to those learners from the educated families who were able to educate their children at home”.*

4.3.2.5. Emphasis on Holistic Development

The perceptions of teachers on the emphasis on holistic development findings reflect that ECD teachers emphasised that learning recovery required addressing both academic and socio-emotional needs. Activities such as storytelling, outdoor play, and expressive arts were reintroduced to rebuild children’s confidence and motivation to learn.

4.3.2.6. Discussions of the findings

The findings mirror global concerns about learning loss during COVID-19 disruptions, particularly for young learners (UNESCO, 2021). In South Africa, Spaull and van der Berg (2020) warned that school closures could widen existing inequalities, especially for children in low-resource ECD centres. The regression in literacy and numeracy aligns with DBE (2020), which reported that the foundation phase was most vulnerable to learning gaps due to its reliance on structured repetition and exposure. The teacher's emphasis on socio-emotional recovery supports Naude (2020), who argues that emotional readiness is a prerequisite for cognitive engagement in early childhood education. This is emphasised by the Dewey's theory that integrates emotional well-being into learning-critical in post-pandemic, because emotional well-being directly influences learning outcomes in early childhood (Denham, 2006).

The role of parental involvement underscores the importance of the home-school partnership during crises. However, the unequal capacity of families to provide support created disparities (Kim, 2021). The use of technology for continuity was innovated but uneven, given the digital divide in South Africa *(Mhlanga & Moloi, 2021). The strategies adopted by teachers suggest that recovery requires integrated approaches, encompassing not only academic catch-up but also well-being, equity, and developmental appropriateness. In conclusion, children's learning outcomes post-COVID-19 hard lockdown were significantly affected, with academic regression and socio-emotional challenges identified as major barriers. Improving learning outcomes requires balancing curriculum recovery with socio-emotional development through holistic, play-based approaches. Teacher adaptation was key to mitigating learning loss, but sustained improvement depends on systemic support, parental involvement, and access to resources. The crisis revealed the urgent need for resilient, flexible teaching models in ECD that integrate technology, parental engagement, and remedial support.

4.3.3. Understanding the effectiveness of the teaching strategies applied in post Covie19 hard lockdown.

Having highlighted the challenges experienced by children in cognitive, social-emotional, and physical development, the study also explored the strategies that teachers applied to support children's adaptation in the post-COVID-19 hard lockdown. Teachers played a crucial role in

mitigating the setbacks caused by the hard lockdown. Participants described various strategies they used to help children adapt and recover their learning outcomes

The following question assisted in understanding the effectiveness of the teaching strategies they have applied to help with the adaptation.

"What are the perceptions of teachers on the strategies they used to remedy challenges learners faced post-COVID-19?"

Participants responded to the following question, and the themes that emerged from the responses are as follows:

- Remedial and Revision-Oriented Teaching
- Play-Based and Experiential Learning
- Small Group and Individualised Support
- Integration of Technology
- Social-Emotional Support Strategies

4.3.3.1. Remedial and Revision-Oriented Teaching

The teachers' perception of the remedial and revision-oriented teaching findings indicated the adoption of remedial teaching strategies to address learning gaps. This included revisiting prior content, repeating foundational lessons, and providing targeted support for learners who had regressed in literacy, numeracy, and motor skills.

Teachers responded as follows:

ST1 "*I use the same methods except that I upgraded parental involvement to help learners with schoolwork at home, which makes my work easy now. I'm glad because parents are happy with the interaction. Some parents are calling to appreciate that at least they know what their learners are doing in the centre, and they are not lost about the kind of help they should provide in their children's assessment activities. There is an improvement in the children's learning outcomes through this adopted strategy*".

ST2 "*Apart from focusing on essential skills in languages, numeracy, literacy, and emotional development first, rather than trying to cover the whole ATP, I have increased structured learning time by extending school hours since most of the parents fetch their children two hours*

late after school. I use this time to play structured games and songs embedded with academic concepts, which help them revise the content they have learned.

JT4 stated the kind of recover and remedial strategies employed to close the content gap

"The gap in terms of the content, you know, a child who has missed something or a lesson in a certain grade will show. Remember, the curriculum is continuous. When you reach grade 2, the staff will teach grade 2 students what they have learned from the previous grade. The work for that grade will not allow practitioners or teachers to go back and teach curriculum of the previous grade".

4.3.3.2. Play-Based and Experiential Learning

Teachers' perceptions of play-based and experiential learning findings highlighted the effectiveness of play-based learning as a tool to re-engage children who struggled with concentration and motivation. This is supported by Dewey's experiential learning theory that is grounded in the principle that learning occurs through meaningful experiences, reflection, and active engagement, rather than through passive transmission of knowledge. Activities such as storytelling, art, singing, and outdoor play helped to ease children back into structured learning.

The teacher responded as follows:

ST1 indicated the simple ways to help the learners remember lessons prior to the lockdown.

"*These learners have forgotten everything they learned before the hard lockdown. The music and the games helped them to remember some of the lessons that they learned prior to the hard lockdown. This kind of method helped me to bring back the school vibe*."

ST2 stressed the importance of simplifying lessons through games and songs.

"*I have noticed that games and songs make rapid learning less stressful for children. Then, in the morning, I will focus on delivering the critical curriculum content while children are most attentive".*

JT4 emphasised the importance of the play-based method.

"*Instead, I have strengthened the play-based method of teaching because with the curriculum structured games, you can cover a lot within a space of time."*

4.3.3.3. Small Group and Individualised Support

The teachers viewed small-group and individualized supported teaching, as well as one-on-one interventions, for struggling learners. This approach was found effective in addressing both academic challenges and social reintegration. Teachers responded as follows:

ST2 *emphasised* the vital role individualised attention played post covid19 hard lockdown.

"I also applied the individualised attention to tackle and address the individual challenges seen in the children. It enabled me to assess each child's unique needs, provide one-on-one guidance, and design personalised learning activities".

JT3 stressed that the individual and small group approach applied to help learners came with challenges.

"*I always give every child attention to tackle individual challenges because the challenges are not the same. Some learners forgot everything they learned prior hard lockdown. I gave extra lessons to revise or to help them recover work done prior to the pandemic, and during contact time, I proceeded with the streamlined ATP. I also grouped my learners in small groups to focus and pay attention to learners who needed extra reinforcement. By dividing learners into smaller groups, activities can be tailored to their different developmental levels, ensuring that children who have fallen behind can catch up through guided play, literacy, and numeracy tasks. This approach helped to foster peer learning and social interaction, which helped to rebuild the confidence of the children and the collaboration skills lost during isolation".*

4.3.3.4. Integration of Technology

Teachers' perceptions on integration of technology findings stated that, where resources allowed, some teachers integrated technology such as digital learning applications and online resources to supplement classroom activities. However, this strategy was not uniformly accessible due to the digital divide.

Teachers responded as follows:

ST1 indicated the essence of technology to facilitate teaching and learning in ECD centres

"*The use of technology, especially WhatsApp, has made my work easy. I was compelled during the lockdown period to become more familiar with digital teaching tools such as WhatsApp,*

Zoom, and educational videos. I continued to use these tools during lockdown for communication with parents to share learning materials and extending classroom learning".

ST2 stressed that technology is used to supplement effective learning and teaching.

"*The use of technology was minimal, and I used gadgets such as a laptop for short educational videos, playing audio stories, or showing picture slides. I used technology to supplement learning and teaching, but it is not a replacement for play-based and interactive teaching".*

JT2 indicated that the limited access to technology impeded the integration of technology-based learning.

"The lack of digital devices and internet connectivity restricted the integration of technology-based learning introduced during lockdown. We could not continue with digital learning activities post-lockdown due to unequal access. We tried to use WhatsApp to share videos with parents, but most families don't have smartphones or data".

JT4 clarified the role played by technology pre- and post-hard lockdown.

" *Pre-lockdown, we never used technology a lot, even meetings with parents were physical. Post lockdown, technology usage has improved, and parents' meetings are conducted through conference calls, with minimal physical contact. Activities and feedback are forwarded to parents via WhatsApp. Parents could access educational content and communicate more frequently with teachers, helping to bridge the gap between home and school learning, which means parents became part of our teaching team. We share teaching materials such as short videos and songs they could play at home to help their children".*

4.3.3.5. Social-Emotional Support

The findings on teachers' perceptions of social-emotional support indicated that teachers incorporated strategies such as storytelling, classroom discussions, and peer collaboration to rebuild children's confidence, resilience, and social interaction skills.

Teachers responded as follows:

ST2 stated the methods applied to rebuild the learner's confidence.

"…I have also observed that learners lost the confidence and self-esteem they had gained prior to lockdown, showing hesitation to participate in class activities or express themselves. To support the learners in those manifested social-emotional skills and physical development, I have introduced predictable daily routines such as morning greetings, story-time, and play to help children feel safe and understand what to expect each day".

JT4 mentioned approaches used to manage emotional trauma manifested by children.

" *I provided individual support to those learners who showed signs of emotional trauma, separation anxiety, or fear of illness. I conducted one-on-one conversations, comforting gestures, and reassurance. But in severe cases, I referred learners to counsellors or child psychologists for additional support. My individualised approach assisted children in regaining trust and confidence in the learning environment"*.

4.3.3.6. The discussions of the findings

The findings reflected that teaching strategies post-lockdown were adaptive, child-centred, and remedial in nature, aligning with best practices in early childhood education during crises (UNICEF, 2021). As Dewey (1938) in his theory, states that effective teaching methods are those that engage learners actively; build on learners' prior experiences; promote problem-solving and inquiry; and encourage reflection and interaction. The use of remedial teaching is supported by Spaull and van der Berg (2020), who emphasize that learning recovery in South Africa requires systematic re-teaching of lost content, particularly in the foundation phase. Teachers' reliance on play-based learning aligns with research by Naude (2020), which emphasizes that play not only enhances cognitive outcomes but also supports emotional well-being following traumatic experiences. Small-group and individualised approaches demonstrated effectiveness but posed challenges in overcrowded or under-resourced centres, reflecting the structural inequalities highlighted by Mhlanga & Moloi (2020). Hence, the lack of digital devices and internet connectivity restricted the integration of technology-based learning introduced during lockdown. As Tadesse and Muluye (2021) stated, digital inequality widened educational gaps, particularly in early learning contexts where both teachers and families lacked technological resources. Similarly, while technology integration was beneficial for some, unequal access reinforced educational disparities. In the post-COVID19 ECD context, it is

evident from the teacher's responses that they have adopted flexible, play-based, learner centred, and experiential approaches to re-engage children after prolonged school closures. Dewey's theory helps the study to examine the methods implemented in restoring children's learning by focusing on assessing whether post-COVID19 teaching strategies supported meaningful learning, rather than rushed content delivery, which is essential after a period of disrupted schooling (UNESCO,2020; UNICEF, 2021).

The inclusion of social-emotional strategies shows that teachers recognised the interdependence of emotional readiness and academic performance (Kim, 2020). The strategies offered innovative solutions, but they also highlighted deep inequalities in access and capacity. Teachers' emphasis on social-emotional development demonstrated a strong awareness that effective teaching strategies must support both cognitive and emotional domains in early childhood education.

4.3.4. Challenges in teaching and learning post Covid19 hard lockdown.

Covid19 outbreak and school closure or hard lockdown disrupted teaching and learning on a global scale, and early childhood development (ECD) centres were no exception. As learners returned to classrooms, teachers were confronted with numerous challenges that affected both instructional practices and children's learning outcomes, as well as challenges ranging from addressing children's developmental setbacks to navigating curriculum coverage, learner engagement, and parental involvement. The findings from this study highlighted challenges expressed by participants regarding their post lockdown teaching and experiences. The following themes emerged from the responses.

- Time loss and curriculum coverage
- Learning Loss and Regression
- Socio-Emotional and Behavioural Challenges
- Physical Development Setbacks
- Limited Parental Support and Inequality
- Resource Constraints

4.3.4.1. Time loss and curriculum coverage

Teachers' perceptions on time loss and curriculum coverage findings highlighted the challenge of compressed teaching time against the need to complete the prescribed curriculum. Teachers found themselves rushing through content, leaving limited space for reinforcement and play-based exploration.

Teachers responded as follows:

ST2 indicated the method applied on learning loss due to the hard lockdown.

"*Apart from focusing on essential skills in languages, numeracy, literacy and emotional development first than trying to cover the whole ATP, I have increased structured learning time by extending school hours since most of the parents fetch their children two hours late after the school. I use this time to play structured games and songs embedded with academic concepts, with them that will revise the content learned. I have noticed that games and songs make rapid learning less stressful for children. Then in the morning I will focus on delivering the critical curriculum content while children are most attentive".*

ST3 shared the approach employed on the learning loss post lockdown.

"*I have prioritised the core learning outcomes where I have focused on essential skills in language, literacy, and numeracy development rather than trying to cover every original activity. I have also integrated learning areas to address multiple outcomes at once by including counting, vocabulary building, and cultural themes in my storytelling activity*. *I have organised structured play to address their cognitive and emotional delays to help children adjust back to the learning environment and address their post lockdown anxieties* ".

ST4 shared the strategies used on the learning loss post lockdown.

"*My strategy to cover the lost curriculum content was to prioritise the core learning outcomes by focusing on reading and writing in languages, counting and literacy development. I have revisited the key concepts more frequently but in shorter space to help children to catch up quickly. I have broken tasks into smaller steps, where I help them in the beginning and gradually encourage them to work alone. I dedicated my time to help children adjust back to the group learning environment, since emotional readiness improved learning efficiency".*

JT4 emphasised the play-based teaching and learning.

"*Instead, I have strengthened the play-based teaching and learning because with the curriculum structured games you can cover a lot within a space of time. It helped me to remind them what we learned prior hard lockdown and integrate with the new lesson*".

4.3.4.2. Learning loss and regression

The teachers' perceptions on learning loss and regression findings have reported significant learning loss, with children forgetting skills and knowledge gained before the lockdown. Many struggled with foundational literacy, numeracy, and language development, requiring educators to reteach content.

Teachers responded as follows:

ST1 stated challenges experienced by learner for not remembering work done before lockdown.

"Some learners before hard lockdown were counting up to thirty, but post hard lockdown they struggled to reach fifteen in their counting"

JT1 mentioned that children forgot what they learned prior Covid19.

"…learners forgot everything they learned prior the hard lockdown, and when they return to school, we must start afresh. We had limited time to interact with our learners. Hence, I am saying time lost created a huge content gap because we could not finish the ATP".

JT3 shared similar sentiments as **JT1** about learners forgetting work done prior Covid19

"Many *children forgot previously acquired concepts in literacy, numeracy, and problem-solving. When they came back, we had to start from the basics again. They could no longer write their names or count to ten like before lockdown".*

4.3.4.3. Socio-Emotional and Behavioural Challenges

The perceptions of teachers on emotional and behavioural challenges findings indicated that learners returned to ECD centres with anxiety, reduced social interaction skills, and behavioural issues. Teachers observed difficulties with sharing, conflict resolution, and concentration during lessons.

Teachers responded as follows:

ST3 indicated that children who were shy prior lockdown became worse.

"*I have noted that children who were shy before the lockdown often found it harder to reintegrate into group activities. They also lacked guided activities that develop movement patterns and physical confidence".*

JT2 stated that children showed a decline in social and emotional skills

"…*they showed a notable regression in social behaviour, such as difficulty sharing, cooperating, and managing emotions. Most of the children were shy and withdrawn. They have forgotten how to play together and solve small conflicts".*

4.3.4.4. Physical Development Setbacks

The findings noted weakened fine and gross motor skills among teachers due to a lack of hands-on activities, such as drawing, threading, and outdoor play, during lockdown. This hindered classroom participation in tasks that required motor coordination.

Teachers responded as follows:

ST2 emphasised the social and emotional setbacks.

"*This can cause social and emotional setbacks, because the limited peer interaction during lockdown has reduced opportunities to develop cooperation, empathy, and conflict resolution skills. This can lead some children to display heightened anxiety, withdrawal, or difficulty adjusting to group learning environments*".

JT4 observed setbacks in fine motor coordination

"*I also observed setbacks in fine motor coordination, including in cutting, drawing, and holding writing tools. Most learners had weak finger control and struggled to cut or colour for long periods. They hadn't practiced these skills for months*".

4.3.4.5. Limited Parental Support and Inequality

Teachers' perceptions of limited parental support and findings of inequality emphasized the uneven levels of parental involvement during the lockdown. While some children benefited from engaged parents, many did not, creating gaps in readiness upon return.

Teachers responded as follows:

ST4 indicated that learners who were engaged in learning activities during lockdown adjusted easily after the lockdown.

"…*children who were engaged during the remote learning adjusted faster post-lockdown. They adapted more quickly to classroom routines and caught up on missed content quickly. While children who were less engaged, it needed me to reteach basic concepts before introducing new ones, delaying curriculum progress* ".

Junior teachers responded as follows:

JT2 highlighted differences between learners who received parental support and those who did not.

"*The revision exercise helped me to see children whose parents engaged them in learning at home as they adjusted better, than those, who stayed home without any learning stimulation during lockdown showed more regression".*

4.3.4.6. Resource Constraints

The perceptions of teachers on resource constraints finding showed that ECD centres faced resource shortages, particularly in rural and township settings, inadequate sanitation, and insufficient space to maintain safety protocols.

Teachers responded as follows:

ST1 stated that they relied on their experiences to keep lessons going.

"*There were no resources provided. Having taught for a long time in the foundation phase as an ECD practitioner, I improvised to make my lesson meaningful what to cover lessons that I should have taught before hard lockdown*.*".*

ST2 stressed that they were not support with resources.

"No resources were provided to us, since our ECD centre is financially struggling like other centres. the centre lacks learning materials to support accelerated curriculum delivery. Worse when it comes to digital learning resources and internet access costs were a barrier, my ECD manager always complain with lack of funds".

JT4 indicated the challenges experienced due to the shortage of teaching and learning materials.

"*Post lockdown we struggled with the shortage of teaching aids, learning materials and play resources. We are operating on limited budgets and could not replenish materials lost and damaged during the closure. We didn't have enough crayons, books or puzzles. Most of our materials were old, and the centre couldn't afford new ones after lockdown ".*

4.3.4.7. Discussion on the findings

The findings confirm global patterns of learning disruption caused by COVID-19 school closures (UNICEF, 2021). In South Africa, Spaull and van der Berg (2020) emphasize that the foundation phase was the most severely affected, with learning gaps widening in literacy and numeracy. The time loss and curriculum pressure align with DBE (2020), which acknowledged that the loss of instructional time compromised effective curriculum coverage. Teachers' accounts reveal a tension between catch-up efforts and maintaining developmentally appropriate practices in ECD. Socio-emotional and behavioural challenges are consistent with Naude (2020), who highlights that emotional trauma impairs children's ability to re-engage with learning. Similarly, physical development setbacks reinforce research showing that children need continuous opportunities for movement and play (Pellegrini, 2021).

Inequalities in parental support and access to resources mirror Mhlanga and Moloi's (2020) findings on the digital divide and the uneven home learning environment during the pandemic. These disparities exacerbated the challenges teachers faced in reintegrating learners, as children who were engaged by their parents in learning at home during the lockdown adjusted better than those who were not. Parental involvement mitigated learning loss by maintaining minimal academic and emotional continuity during school closures (UNESCO, 2021). Overall, the challenges underscore the systemic vulnerabilities of the ECD sector, including underfunding, reliance on parental involvement, and inadequate preparedness for crises. In conclusion, teaching and learning were severely disrupted after the lockdown, with children regressing in cognitive, socio-emotional, and physical domains. Time loss and curriculum pressure posed significant barriers to effective teaching, forcing teachers to adapt strategies under constrained conditions. Socio-emotional and behavioural challenges emerged as equally critical as academic ones, requiring teachers to balance cognitive recovery with psychosocial

support. Resource inequalities between ECD centres deepened learning disparities, leaving teachers in under-resourced areas particularly disadvantaged. While teachers demonstrated resilience and creativity, the challenges highlighted systemic weaknesses in early childhood education that need urgent policy attention.

4.3.5. Key role of government or ECDC management post COVID-19 hard lockdown.

Given the setbacks in children's learning outcomes and challenges faced by teachers, the role of government and ECD management became crucial in the post-lockdown period. Since the recovery of early childhood education after the hard lockdown could not rely solely on teachers.

The perceptions of teachers on the role of the government and ECD management findings emerged the following sub-themes:

- Government Relief and Limited Support
- Lack of Training and Professional Development
- Inequalities Across Centres
- Management's Role in Adaptation
- Emotional and Professional Support

4.3.5.1. Government Relief and Limited Support

The perception of teachers regarding government relief and limited support indicated that teachers acknowledged the government's provision of relief funds, PPE distribution, and streamlined Annual Teaching Plans (ATPs). However, participants consistently noted that no comprehensive recovery plan was offered to guide teaching in ECD centres.

Teachers responded as follows:

ST3 indicated that the centre had been promised the relief funds.

"*No resources were provided to me as far as I remember. My ECD management complained about the delays of the Government relief funds for ECD centres that they want to use to buy resource materials. She promised to provide resource materials when they received the relief funds, but up to today, nothing has been provided to me. I develop materials on my own or rely on colleagues from other ECD centres".*

JT1 stated the kind of support provided by the government to their centre.

"*The support we got from the government was the ECD Employment Stimulus Relief Fund to save my job. The government provided PPE (masks, sanitizer, thermometers) in our centre, which indirectly supported reopening. But this did not address curriculum coverage needs. The Department of Basic Education provided recovery plans and prioritised learning outcomes for grade R, but training on catch-up teaching strategies was not provided".*

4.3.5.2. Lack of Training and Professional Development

Teachers' perceptions of the lack of training and professional development revealed that minimal training was conducted on implementing blended learning, psychosocial support, or curriculum recovery strategies, leaving teachers to rely on personal initiatives.

Teachers responded as follows:

ST1 stated that no formal training workshops were offered after reopening.

"*After we came back from the prolonged school closure, there was no workshop or training. We just had to figure things out on our own* ".

ST3 emphasized that the Department of Education or authorities should have provided workshops to improve the situation for teacher's post-lockdown.

"*They should have provided workshops on remedial teaching, social-emotional learning, trauma-informed education, and blended learning methods for teachers. And provide psychological and emotional support by bringing school-based counsellors and social workers to support children showing signs of anxiety and trauma issues* ".

JT3 indicated that the absence of digital skills training prevented teachers from using online tools.

"*…training on catch-up teaching strategies was not provided. I wanted to use online resources for children as I was advised by a colleague from a neighbouring centre, but I didn't know how to make lessons using technology.* "

4.3.5.3. Inequalities Across Centres

The teacher's perceptions on the inequalities across centres stated that the assistance from the government was experienced unevenly; better-resourced ECD centres coped more effectively than underfunded centres, especially in rural and township areas.

Teachers responded as follows:

ST2 stated that teachers in poorly resourced centres struggled to provide stimulating and engaging activities.

"*Children forgot so much during lockdown, and without enough materials, it was hard to help the learners catch up".*

ST4 highlighted the uneven distribution of post-lockdown support.

"*Some centres were given sanitizers and masks, but we got nothing. We had to buy our own or ask parents to contribute".*

JT1 emphasised the unequal access to teaching and learning materials

"*We didn't have enough learning materials after reopening. The children shared one box of crayons, while centres in privileged and advantaged communities had everything they needed".*

JT4 emphasized the digital divide across ECD centres.

"…*during lockdown, some centres used online platforms, but we didn't have phones or data to reach our learners".*

4.3.5.4. Management's Role in Adaptation

The perceptions of teachers regarding the management's role in adaptation emphasized that management played a crucial role at the centre level in adapting schedules, mobilizing limited resources, and supporting teachers. Some centres introduced rotational timetables, small-group teaching, and extra remedial sessions to address lost learning time.

Teachers responded as follows:

ST2 acknowledged management's efforts in restructuring daily routines to balance learning with safety protocols.

“Our centre adjusted the schedule so that children could learn in shorter sessions and have more outdoor play for distancing. We worked with small groups, which helped us identify struggling learners faster.”

ST3 indicated the importance of the adoption of rotational timetables and remedial classes post lockdown.

“*The management adopted rotational timetables. Management divided classes into two groups that attended on alternative days. It helped us with distancing, but it made planning harder. The centre introduced afternoon remedial classes for those who had fallen behind, and we saw improvement.”*

JT4 emphasised that management is perceived as instrumental in finding creative ways to use limited resources.

“*Our centre manager encouraged parents to bring recycled materials, and that helped us to continue with activities like art and construction play*”.

4.3.5.5. Emotional and Professional Support

The perceptions of teachers regarding emotional and professional support highlighted that management provided psychological support and encouragement, which helped staff cope with the heightened stress of teaching in the aftermath of the pandemic.

Teachers responded as follows:

ST2 commended management for securing masks, sanitizers, and cleaning materials.

“The management made sure we had everything we needed, from sanitizers to smaller class arrangements, and was unable to provide sufficient resources, citing limited budgets and inconsistent payment of fees”.

JT4 appreciated the management’s emotional support in reducing post-lockdown stress.

“The management gave emotional support and an open-door approach, which helped us to reduce post-lockdown stress and anxiety. Our centre manager would constantly check on our well-being and organize meetings to talk about our challenges “.

4.3.5.6. Discussion on the findings

The findings demonstrated teachers' perceptions on the role of government and ECD management, which expressed that while government interventions provided immediate relief, they fell short of delivering systemic recovery strategies. This aligns with Spaull and van der Berg (2020), who argue that South Africa's education recovery post lockdown lacked comprehensive planning, leaving teachers to bridge learning gaps on their own. The limited professional development offered contradicts UNESCO's (2021) recommendations, which stress that teacher capacity building is essential in times of crisis to ensure continuity of learning. Inequalities in resource distribution reflect Mhlanga and Moloi's (2020) findings on the digital and infrastructural divide, where wealthier centres managed safety protocols and catch-up teaching more effectively than their low-income counterparts.

At the same time, the findings emphasise the importance of ECD management as a mediator. By adapting teaching strategies, providing emotional support, and fostering collaboration, centre managers demonstrated resilience and leadership. Centres with weak management faced greater difficulties in implementing COVID-19 safety measures, supporting teachers professionally, and restoring learning momentum. This supports Naude (2020), who emphasised that effective management in early childhood settings is critical for maintaining stability during crises. Whereas Moyo (2022) states that strengthening leadership development within the ECD sector is vital for resilience and long-term recovery. While the government efforts were necessary but insufficient, management within centres became the frontline enabler of continuity and adaptation. In conclusion, the government support was partial and short-term, focusing mainly on relief measures such as funds, PPE, and ATP adjustments rather than a structured recovery framework for ECD centres. Teachers were left without sufficient training or pedagogical guidance, limiting their ability to address post-lockdown learning challenges effectively. Inequalities between urban and rural or township ECD centres were exacerbated, as resource distribution was inconsistent. Meanwhile, ECD management played a key role in sustaining teaching and learning by adapting centre operations, mobilizing resources, and offering psychosocial support. Future crisis response must involve systemic planning, equitable resource allocation, and structured teacher training to strengthen resilience in ECD.

4.3.6. Factors on safety measures in the learning environment post-COVID-19 hard lockdown.

Following the reopening of ECD centres after Covid19 hard lockdown, ensuring the safety of learners and staff became a central concern. Participants reflected on the safety measures that were implemented in the learning environment, highlighting both their effectiveness and the challenges associated with maintaining them. Their responses shed light on how safety protocols shaped the learning environment and influenced teaching and learning practices.

Senior teachers responded to the following question:

What are teachers' perceptions of safety measures in the learning environment post-COVID-19 hard lockdown?

The following themes emerged from the responses:

- Implementation of Health Protocols.
- Social Distancing Challenges

4.3.6.1. Implementation of Health Protocols.

The perceptions of teachers regarding the implementation of health protocols highlighted that safety protocols, such as mask-wearing, frequent hand washing, and sanitizing, were implemented; however, compliance among young children was inconsistent.

Teachers responded as follows:

ST1 mentioned compliance with basic health protocol.

"*Every morning, we screened children at the gate, took temperatures, and sanitized hands before entering the classroom. We encouraged regular hand washing, daily cleaning of learning materials, door handles, tables, and chairs. Lastly, the weekly deep cleaning of the classroom".*

ST3 "…*regular hand-washing routines for children and staff, daily cleaning of toys and learning materials, and the proper spacing of desks and activity areas to avoid overcrowding. Lastly, we kept windows and doors open, when possible, to improve air circulation".*

JT4 indicated that while mask-wearing was essential for health, it became a communication barrier.

“We enforce mark-wearing even though it becomes a barrier for effective communication and learning because children couldn’t see our facial expressions, which made teaching sounds and emotions difficult. Though, we urged parents to keep sick children or children with symptoms at home. but some parents sent children who were coughing to school despite the rules”.

4.3.6.2. Social Distancing Challenges

Teachers’ perceptions of social distancing emphasised that maintaining social distancing was highlighted as one of the most difficult measures to enforce due to young children’s natural tendency to interact closely during play and learning.

Teachers responded as follows:

ST1 indicated that ECD children sought close interaction with peers.

“*It was impossible to keep them apart; they love to play and hug each other, because at their stage, children often sought close interaction with peers”.*

ST3 states that maintaining social distancing in the ECD centre was challenging.

“*To maintain social distancing was the most challenging rule to enforce. At their developmental stage, it was challenging to maintain a 1-2 metre distance in ECD environments, as play and learning are naturally interactive and tactile. Children often forgot the rules during group activities, free play, or transitions between spaces”.*

JT4 stated that learners with symptoms of illness should wear masks or stay at home.

“Learners with symptoms of the flu stay at home or wear a mask. They wash their hands before and after eating. Wash their hands after using the toilet. We even observe them to monitor and enforce complaints. We struggled with the young ones, when playing, they take off masks and do not consider the following distance when playing. That’s why I always demonstrate by making sure that when entering the class, I sanitise, and when coughing, I use my elbow to cover my mouth. I created a COVID-19 precaution song that we sing every day in the morning.”

4.3.6.7. Discussions of the findings

The findings reflect the complexity of enforcing safety measures in ECD settings. Research indicates that while young children benefit from consistent routines, rigid health protocols can

conflict with the play-based and interactive nature of early learning (Naude, 2020). The difficulty of enforcing social distancing aligns with UNESCO (2021), which reported that ECD centres globally faced challenges in reconciling child-centred pedagogy with Covid19 restrictions. Resources and Infrastructural shortages mirror South African realities highlighted by Spaull and van der Berg (2020), who argue that under-resourced schools were disproportionately burdened by the requirements of reopening safely. Mhlanga and Moloi (2020) similarly note that inequalities widened as rural and township ECD centres struggled to meet sanitation standards.

The psychological impact on children resonates with UNICEF (2021), which warns that restrictive safety measures, while essential, may also undermine children's sense of security and social belonging if not balanced with emotional support. Overall, the findings suggest that safety measures were necessary but unevenly implemented, shaped by infrastructural realities, resource availability, and the developmental needs of young children. In conclusion, safety measures implemented after the COVID-19 hard lockdown were partially effective but faced significant challenges in ECD contexts. Social distancing was impractical in early childhood settings. Resource shortages and infrastructural gaps undermined consistent compliance, particularly in low-income ECD centres, while teachers and staff demonstrated resilience by adapting routines; insufficient systemic support limited sustainability. Safety measures impacted not only physical health but also the psychological well-being and learning engagement of children.

4.3.7. Integration of technology in teaching pre- and post-hard lockdown.

The COVID-19 hard lockdown accelerated the use of technology in education, even within early childhood development contexts were face-to-face, play-based learning traditionally dominated. Participants reflected on their experiences with technology integration before and after the lockdown, highlighting both the opportunities and challenges that shaped their teaching practices. They shared how the pandemic altered their approach to technology use, contrasting their pre-lockdown practices with the realities of post-lockdown teaching. Participants' findings were responding to the following question:

"What are the perceptions of teachers in the teaching and learning in pre and post COVID-19?" which led to the rise of the following themes:

- Limited Use of Technology Pre-Lockdown
- Increased Adoption During and After Lockdown
- Barriers to Effective Integration
- Technology as a Supplement, not a Replacement
- Potential for a Parental Engagement

4.3.7.1. Limited Use of Technology Pre-Lockdown

The perceptions of teachers on the limited use of technology, as reported in findings prior to the COVID-19 lockdown, indicated that technology use in ECD centres was minimal. Most learning was facilitated through traditional play-based and hands-on methods, with technology, such as projectors, tablets, and educational apps, used occasionally.

Teachers responded as follows:

ST2 stated that prior to the lockdown, technology gadgets were rarely used.

"*The use of technology was minimal, and I used gadgets such as a laptop for short educational videos, playing audio stories, or showing picture slides; everything was done manually".*

JT1 emphasised that they were not trained to use technology before the lockdown.

"I only used my phone for communication, not for teaching. We are still using the black cards, chalkboard, pasting cards on the wall, we are still using the same traditional way of teaching applied prior Covid19".

JT4 stated that they never used technology prior lockdown.

"Pre-lockdown, we never used technology a lot, even meetings with parents were physical, and we relied on concrete materials, singing, and storytelling. There was no need for technology ".

4.3.7.2. Increased Adoption During and After Lockdown

The perceptions of teachers on increased adoption during and after lockdown, findings stated that the lockdown highlighted the importance of technology for continuity of learning. Some teachers adapted by using WhatsApp groups, recorded video lessons, and digital worksheets to stay connected with parents and learners.

Teachers responded as follows:

ST1 outlined that platforms such as WhatsApp were used to communicate with parents and share learning materials.

"*The use of technology, especially WhatsApp, has made my work easy. I used WhatsApp to send videos and activities for parents to do with children."*

ST3 stated that the lockdown necessitated an improvement in their digital literacy.

"*Technology became the primary link between teachers, children, and parents. We have shifted to sending learning packs, video lessons, voice notes, and WhatsApp activities to parents. I didn't know to use Zoom before, but the lockdown forced me to learn. The pandemic has helped us to develop new digital skills".*

JT4 indicated that post-lockdown technology made parents part of the team.

"Pre-lockdown, we never used technology a lot, even meetings with parents were physical, and we relied on concrete materials, singing, and storytelling. There was no need for technology. Post-lockdown technology usage has improved; parents' meetings are conducted through conference calls, and there is minimal physical contact with parents. Activities and feedback are shared with parents via WhatsApp. Parents could access educational content and communicate more frequently with teachers, helping to bridge the gap between home and school learning, which means parents became part of our teaching team ".

4.3.7.3. Barriers to Effective Integration

Teachers' perceptions of the barriers to effective integration findings indicated that educators identified significant barriers such as the digital divide (limited access to devices, data, or internet), low parental digital literacy, and a lack of training for teachers on how to effectively integrate technology into ECD teaching.

Teachers responded as follows:

ST4 stated that teachers faced several challenges, including limited resources, lack of training, and unequal access to devices.

"*I have learned that some teachers and parents don't have smartphones or internet, so we had to balance between using technology and hands-on activities".*

JT4 indicated that there are disparities in technology between well-funded centres and under-resourced centres.

"I have learned that some centres have smartboards and tablets, while others have nothing. Some parents didn't know how to help children with online tasks, so the learning stopped at home".

4.3.7.4. Technology as a Supplement, not a Replacement

The teacher's perceptions of technology as a supplement, not a replacement, highlighted that, post-lockdown, in Early Childhood Development (ECD), teachers were compelled to explore digital tools for remote learning. Teachers noted technology was best used as a supportive instrument, for example, showing videos, playing educational songs, or using apps for numeracy and literacy reinforcement. However, in the post-lockdown period, many ECD teachers have expressed that technology should serve as a supplement rather than a replacement for traditional play-based and face-to-face teaching and learning methods.

Teachers responded as follows:

ST2 emphasized that young children learn best through social interaction, play, and physical exploration, which technology cannot replace.

"*We must not forget that the best way for children in the Early Childhood Development stage is to touch, move, and play. Screens cannot replace that kind of learning".*

ST4 stated that technology is viewed as an enrichment tool that enhances learning experiences, particularly for visual and auditory support.

"*Technology helps us to make lessons more interesting, but it should only support what we already teach in class".*

JT2 advocated for a balanced integration approach, where digital tools complement storytelling, sensory play, and social learning.

“Lockdown helped me to be technologically active in my teaching; I started to combine both songs from the internet and practical activities like drawing and building with blocks for my children “.

4.3.7.5. Potential for Parental Engagement

The perceptions of teachers regarding the potential for parental engagement revealed that some teachers observed technology, particularly platforms like WhatsApp, improving communication with parents and encouraging greater involvement in children’s learning. During lockdowns, learning continuity relied heavily on parental involvement in home-based learning, and post-lockdown Early Childhood Development teachers began recognizing the increased potential for sustained parental engagement as a positive outcome of the crisis. This transformed traditional schooling and repositioned parents as central figures in children’s early learning.

Teachers responded as follows:

ST4 indicated that the lockdown made parents more aware of their role in supporting children’s education.

“*I have learned parents realised that learning does not only happen at school, but they also became more involved in daily activities during and post lockdown”.*

ST2 mentioned that new channels of communication, such as WhatsApp groups, phone calls, and digital updates, continued even after reopening.

“*I have noted that we started using WhatsApp to send activities during lockdown, and now we still use it to update parents”.*

JT1 indicated that the socioeconomic disparities and parental work commitments limit consistent involvement.

“I have learned that not all parents are active in their children’s education. Some are too busy or lack knowledge of what to do. These disadvantages children in their academic performance”.

4.3.7.6. Discussion on findings

The findings suggested that the perceptions of teachers were that the pandemic accelerated the integration of technology in early learning, but challenges of access, training, and suitability persisted. Before the lockdown, technology played only a minor role in South African ECD, consistent with Naude (2020), who emphasises that early learning relied primarily on interactive, physical engagement. However, the lockdown forced teachers to experiment with digital platforms, aligning with UNESCO (2021), which noted a global surge in the use of remote learning tools. The digital divide was a major barrier, echoing Mhlanga and Moloi (2020), who argues that inequality in access to devices and internet connectivity deepened educational disparities during Covid19. Teachers limited digital skills also reflect a broader lack of professional development in ICT integration in early childhood education (Kim, 2021). Van Wyk and Lemmer (2020) also noted that parental engagement is often shaped by socioeconomic background, education level, and access to resources that create imbalance support to children's learning.

Post lockdown, teachers expressed that technology could enhance but not replace play-based pedagogy, which is developmentally essential for young children. This aligns with UNICEF (2021), which cautions that while technology can enrich learning, it must remain age-appropriate and balanced with hands on experiences. This also aligns with Donohue and Schomburg (2017), who assert that digital tool can enhance creativity, storytelling, and engagement when integrated thoughtfully alongside hands-on activities.

In conclusion, technology use prior to lockdown was minimal, highlighting a lack of preparedness for remote or blended learning in ECD. The pandemic accelerated technology adoption, but barriers such as the digital divide, training gaps among teachers, and low parental capacity hindered its effectiveness. Technology also enhanced parental-teacher communication, suggesting its long-term potential beyond crisis contexts. Effective integration of technology in ECD requires systemic investment in infrastructure, professional development, and parental support to ensure equitable access and use.

4.4. SUMMARY OF CHAPTER

This chapter presents and discusses the study's findings based on participants' responses. This chapter highlights not only the challenges experienced in the ECD sector during and after lockdown but also the strategies and adaptations that emerged in response. The findings revealed that Covid19 hard lockdown had a significant impact on children's learning outcomes, with compromised cognitive, social-emotional, and physical development skills. Teachers further highlighted challenges in teaching and learning, including reduced learner performance, resistance to school attendance, and emotional trauma. In response, participants described various strategies they employed to support children's recovery, including play-based remedial activities, strengthening social interaction, and promoting parental involvement. The chapter also outlined teachers' perceptions of the role of government and ECD management, noting limited support in the form of relief funds and streamlined ATPs, but an absence of structured recovery plans. In addition, the integration of technology was discussed, revealing a clear contrast between minimal use prior to lockdown and increased reliance afterward. The findings provided valuable insights into teachers' lived experiences and highlighted areas requiring further support.

The next chapter draws conclusions from these findings and presents recommendations for policy, practice, and future research.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter presents the summary of the findings, the conclusions drawn from the data, and the recommendations for practice, policy, and future research. The purpose of this study was to explore ECD teachers' perceptions and experiences of teaching and learning following the COVID-19 hard lockdown, with a focus on children's learning outcomes, curriculum coverage, safety measures, and adaptation strategies. Building on the themes discussed in Chapter Four, this chapter first provides a summary of the main findings that emerge from the participants' responses. This is followed by conclusions that interpret the significance of these findings in relation to the research questions and objectives. Finally, the chapter provides recommendations designed to support teachers, ECD management, and policymakers in addressing the identified challenges and strengthening early childhood education in the post-lockdown context.

5.2. Summary of the findings.

The development of the key findings, summarised below, was generated from the study's research questions.

5.2.1. The time loss and curriculum content coverage in post Covid19 hard lockdown.

The analysis of participants' responses revealed consistent concerns about time loss and curriculum content coverage during and after the COVID-19 hard lockdown.

Senior and Junior teachers highlighted that a significant portion of teaching time was lost due to prolonged school closures, rotational timetables, and reduced contact hours. Instructional pacing slowed down because teachers had to revisit concepts that learners had forgotten during lockdown. This perception aligns with Spaull and Van der Berg (2020), who found that school closures resulted in the loss of up to two-thirds of a school year's worth of learning time for South African learners. Activities such as literacy days, enrichment programmes, and assessment cycles were either suspended or delayed. The curriculum was not fully covered as many participants indicated. Although the DBE streamlined Annual Teaching Plans (ATPs), teachers reported that essential topics remained uncovered, particularly in literacy, numeracy,

and life skills. This finding agrees to the Department of Basic Education (DBE, 2021), which stated that teachers were advised to streamline the Annual Teaching Plan (ATP), but this led to the omission of essential developmental content, especially in ECD, where repetition and reinforcement are critical.

Teachers had to prioritise foundational skills at the expense of broader curriculum enrichment. Learners in under-resourced ECD centres were disproportionately affected, as limited resources and larger class sizes made curriculum recovery more difficult. Hence, this finding is consistent with Motala and Menon (2020), who highlighted that teachers experienced stress and burnout due to unrealistic expectations for curriculum recovery following the lockdown. Loss of instructional time and partial curriculum coverage contributed to learning gaps, especially in early literacy and numeracy. Social and emotional setbacks were also reported, as group learning and classroom routine were disrupted. Teachers felt pressured to progress learners, even when mastery of content was incomplete.

The COVID-19 hard lockdown caused severe instructional time loss that could not be fully recovered within a single academic year. The streamlined ATPs provided short relief and did not sufficiently address deeper learning gaps, particularly in early developmental skills. Teachers faced the dilemma of balancing curriculum coverage with learners' readiness, often opting to slow down and re-teach lost content. The absence of a comprehensive recovery plan for ECD left many centres without adequate guidance to systematically restore learning outcomes. This finding aligns with those of Spaull and Van der Berg (2020), who observed that early learning programs lacked formal recovery strategies compared to primary and secondary schools, despite being the most developmentally vulnerable phase. Eventually, the lockdown not only disrupted the school calendar but also widened pre-existing educational inequalities, particularly between well-resourced and disadvantaged ECD centres.

5.2.2. Improving the children's learning outcomes post-COVID-19 hard lockdown.

Improving ECD children's learning outcomes post-COVID-19, participants reported significant challenges in early literacy and numeracy due to prolonged absence from structured learning environments. Children struggled with concentration, memory, and problem-solving tasks, reflecting the loss of time and limited home learning support. Teachers observed reduced

sharing, collaboration, and conflict resolution skills among learners, and limited peer interaction during lockdown resulted in heightened separation anxiety, emotional withdrawal, and behavioural challenges upon return. The lack of hands-on practice at home delayed the development of fine motor skills, such as cutting, threading beads, and holding crayons, as well as the development of Gross motor skills, with teachers noting reduced coordination and stamina during outdoor play. Teachers consistently highlighted severe time loss, which hindered curriculum coverage despite DBE's streamlined Annual Teaching Plans (ATPs). In the post-lockdown period, educators adopted various strategies to restore learning outcomes, rebuild confidence, and close the developmental gaps caused by the disruption of learning. UNESCO (2021) stated that improving post-pandemic learning outcomes requires targeted remediation, psychosocial support, and adaptable teaching strategies that respond to learners' diverse needs.

Recovery efforts were fragmented without comprehensive national guidance for ECD. Teachers emphasised that ECD learners require face-to-face, play-based learning, which technology could only partially support. Remedial strategies were adopted by teachers, including more play-based activities, small-group interventions, peer learning, and structured routines, to rebuild skills. Naidoo and Maseko (2022) found that small group instruction allowed ECD teachers to identify individual learning gaps more effectively and provide targeted remediation. Whereas Engelbrecht, Nel, and Tlale (2021) argued that differentiated and individualised support is essential to bridge post-pandemic learning gaps, especially in the early learning context.

Therefore, the COVID-19 hard lockdown has caused a significant disruption in ECD learning outcomes, affecting cognitive, social-emotional, and physical domains. Curriculum content coverage was severely compromised, with teachers struggling to balance recovery and progression. Teachers demonstrated resilience through adapted strategies, but the absence of structured national recovery plans for ECD limited their effectiveness. Digital learning was insufficient to support early learners, highlighting the importance of interactive, hands-on, and social learning experiences. Recovery remains an unequal process, with under-resourced ECD centres and vulnerable children disproportionately affected.

5.2.3. Understanding the effectiveness of the teaching strategies applied in the post-COVID-19 hard lockdown.

The effectiveness of teaching strategies in the post-COVID-19 period highlights the resilience and creativity of ECD teachers. Teachers reported that structured play, such as storytelling, puzzles, music, drawing, and outdoor games, was highly effective in re-engaging learners who had lost concentration and interest in learning. Play-based learning helps rebuild cognitive skills, such as language and numeracy, as well as social-emotional skills, including turn-taking and sharing. This finding is consistent with Fleer (2020), who emphasizes that play is a fundamental vehicle for cognitive and emotional development in early childhood. Teachers found small group sessions effective in addressing uneven learning gaps. Learners who were shy, anxious, or academically behind benefited from focused attention, which improved their participation and confidence. Teachers emphasised that techniques such as role play, guided discussions about feelings, and teacher-learner bonding activities proved effective in addressing post-lockdown trauma, separation anxiety, and emotional withdrawal. These strategies supported learners' reintegration into group learning. According to Hoadley (2021), the post-lockdown period required adaptive teaching approaches that recognised the unequal effects of the pandemic on children's learning trajectories. Teachers echoed this, noting that individualised support not only enhanced academic recovery but also strengthened teacher-learner relationships, improving learners' motivation and emotional well-being.

The perceptions of teachers reported mixed effectiveness. While some parents supported home-based reinforcement, such as reading and drawing practice, others lacked time or resources, which affected continuity. ECD centres that initiated WhatsApp support groups saw improved outcomes. Although technology was used during lockdown, teachers agreed that it was less effective for younger children post-lockdown, who required hands-on, play-based activities. However, teachers noted that digital platforms were effective for parent communication and sharing learning resources. Teachers perceived that large class sizes, lack of resources, and absence of formal recovery guidelines limited the overall effectiveness of strategies. UNESCO (2021) notes that physical infrastructure remains a significant barrier to quality early education in low-resource settings, limiting both safety and compliance, as well as interactive learning. Hence, teachers relied heavily on improvisation, which worked in some cases but lacked consistency across centres.

From the findings, conclusions can be drawn that teaching strategies were partially effective in mitigating learning challenges, with play-based, small-group, and emotionally supportive strategies emerging as the most impactful. Teachers' perceptions reflected that strategies focusing on holistic development, such as cognitive, physical, and emotional aspects, were more successful than those focused solely on academics. Whereas effectiveness depended on contextual factors such as class size, teacher capacity, parental involvement, and availability of resources. The absence of a nationally coordinated recovery plan resulted in significant variations in effectiveness across ECD centres. Technology integration was supportive but not central, reinforcing the primacy of face-to-face, hands-on approaches in ECD.

5.2.4. Factors on safety measures in the learning environment post-COVID-19 hard lockdown.

The perceptions of teachers regarding safety measures in the ECD learning environment after the COVID-19 hard lockdown were essential but challenging to implement effectively. Participants reported that young learners initially struggled with compliance, including wearing masks, maintaining physical distancing, and regular sanitization. Over time, with repetition, modelling, and encouragement, most children adapted, although consistent supervision remained necessary. This finding aligns with DBE (2021), which reported strong compliance with hygiene practices across many registered ECD centres.

Learners were more compliant with hand washing and sanitising than with mask-wearing and distancing, due to developmental limitations in self-regulation. Safety measures depended heavily on the availability of sanitizers, masks, cleaning materials, and thermometers. Some centres received government or donor support, while others had to rely on parent contributions, leading to inequalities in safety implementation. Safety protocols, especially distancing and mask-wearing, limited group play and peer interaction, which are crucial for social and emotional development in early childhood. This finding reflects Naidoo and Mthethwa (2021), who found that enforcing distancing in early childhood settings conflicted with the social and emotional nature of play-based learning. Learners expressed fear, confusion, and anxiety at times due to constant emphasis on health risks. While some support was provided through relief funds and basic safety guidelines, teachers reported a lack of detailed recovery and safety

implementation plans. The responsibility to design and sustain safety measures largely fell on teachers and school management.

The following conclusions were drawn from the findings of the teacher's perceptions on safety measures in the ECD learning environment post Covid19 hard lockdown.

Safety measures were partially effective, with hand hygiene practices proving more manageable than distancing and mask wearing for young children. Implementation was uneven across centres, influenced by the availability of resources, management support, and parental cooperation. Teachers played a central role in maintaining compliance but faced additional workload that affected instructional time. While necessary for health protection, safety protocols had unintended negative effects on children's social development and emotional well-being. The lack of a coordinated government recovery and safety strategy left ECD centres to improvise, resulting in inconsistencies in safety standards.

5.2.5. Integration of technology in teaching pre- and post-hard lockdown

The COVID-19 pandemic has transformed technology from a peripheral tool into a central component of ECD teaching. Prior to COVID-19, teachers reported that technology use in ECD classrooms was minimal and mostly restricted to basic tools, such as radios, televisions, or the occasional use of projectors. Many centres relied heavily on traditional play-based and face-to-face learning methods, with technology seen as supplementary rather than essential. This aligns with Naidoo and Reddy (2022), who observed that the pandemic acted as a catalyst for integrating technology in early education, improving learner engagement when combined with play-based approaches. With the closure of schools, teachers and parents were forced to adopt digital platforms such as WhatsApp groups, Zoom, and recorded videos, to maintain some level of learning. Teachers highlighted challenges of inadequate training, high data costs, and poor connectivity, particularly in rural and under-resourced areas. Mpungose (2021) noted that socio-economic inequalities created a "digital divide disadvantaging ECD centres in under-resourced communities, whereas Mhlanga and Moloi (2020) emphasize that the pandemic exposed the digital divide in education, with ECD teachers among the least prepared for technology-based teaching due to a lack of structured training. Parents' involvement became critical, but varying levels of digital literacy and commitment influenced children's participation.

After returning to physical classrooms, technology continued to play a greater role than before the lockdown, although it remained uneven. Teachers reported using technology for digital communication with parents to share updates, homework, and learning activities, as well as accessing online teaching resources for lesson planning and professional development. However, limited infrastructure, lack of sustainable training, and unequal access meant not all children benefited equally. Some teachers became more open and confident in using digital tools because of exposure during lockdown. Many emphasised the need for ongoing support and structured training for effective integration. Technology has enhanced children's engagement, visual learning, and parent-teacher collaboration, where it has been successfully applied. As Epstein (2018) states, digital communication enhances family engagement and promotes a collaborative approach to children's learning and development. Whereas over-reliance on digital activities sometimes reduces opportunities for hands-on play, physical development, and social interaction, which are central to ECD learning.

The conclusions drawn from the findings on the teachers' perceptions regarding the integration of technology in teaching pre and post lockdown in ECD centres, include the following:

Technology was not a core part of ECD teaching prior to the lockdown, but the COVID-19 crisis accelerated its adoption. Post-lockdown, while technology remained more integrated than before, it was applied inconsistently across centres and largely depended on resources, teacher readiness, and parental support. Teachers' digital skills and attitudes were central in shaping how technology was used, yet many lacked adequate training. Technology should be seen as a complementary tool, not a replacement for play-based, face-to-face interactions, which are essential in early childhood learning.

5.3. Reflection of the study's conceptual framework.

The conceptual framework for this study was developed to guide the exploration of teachers' perceptions of children's learning outcomes following the COVID-19 lockdown. Grounded in theories of child development and teaching-learning processes, the framework emphasised three interconnected domains: cognitive development, social–emotional development, and physical development. It also considered the broader contextual influences of curriculum

coverage, parental involvement, school support systems, and government policy during the pandemic.

Reflecting on the framework, considering the findings, it provided a useful lens for organizing and interpreting teachers' perceptions. Teachers consistently highlighted compromised outcomes in cognitive skills, such as literacy and numeracy, as well as social-emotional skills, including sharing, cooperation, and resilience, and physical development, including fine motor coordination. These findings aligned strongly with the developmental domains outlined in the framework, confirming its relevance to the research problem.

The framework also anticipated the role of external factors such as time loss, curriculum gaps, and parental engagement, which were echoed by participants as contributing to learning setbacks. The inclusion of system-level factors, such as the role of ECD management and government support, further helped explain why recovery was uneven across different centres. However, reflection also reveals that while the framework captured key developmental and contextual dimensions, it could be strengthened by integrating a resilience or recovery perspective. Many teachers not only described the challenges they faced but also outlined the adaptive strategies they employed to support children's learning and well-being. This connotes that future conceptual models should not only frame children as vulnerable to setbacks but also highlight their potential for resilience when supported by effective teaching strategies and enabling environments.

In conclusion, the conceptual framework played a crucial role in shaping the study and interpreting its results. It successfully captured the multidimensional nature of children's learning outcomes and the influences of teaching, parental, and systemic factors. At the same time, reflection shows that extending the framework to include resilience and innovation in teaching would offer an even richer understanding of how teachers perceive and respond to crises in early childhood education.

5.4. Limitations of the study.

The study provides valuable insights into teachers' perceptions of children's learning outcomes in ECD centres following the COVID-19 hard lockdown; several limitations should be acknowledged. The study was conducted on a relatively small sample size and scope, a group

of eight teachers from four selected ECD centres. As a result, the findings may not fully represent the experiences of all teachers across different provinces, socio-economic contexts, or school types. The study relied on teachers' accounts, which are subjective and shaped by their personal experiences, teaching contexts, and interpretations. The absence of direct input from learners or parents means the findings reflect only one perspective on children's learning outcomes.

The challenges and strategies reported were influenced by the centres involved, including resource availability, parental involvement, and management support. This context-specific nature limits the generalisability of the findings to other settings with different resources or policy frameworks. Data was collected during the immediate post-lockdown period, when the effects of disruption were most visible. Over time, children's learning outcomes and teachers' strategies may have evolved, meaning the study reflects a snapshot rather than long-term patterns. The qualitative approach provided depth of understanding, but the study did not include a quantitative assessment of children's learning outcomes. This limited the ability to measure the exact extent of learning loss or progress across cognitive, social-emotional, and physical domains.

5.5. Recommendations

Based on the findings and conclusions of this study, which explored teachers' perceptions of children's learning outcomes in ECD centres following the COVID-19 hard lockdown, it is evident that both challenges and opportunities emerged in the teaching and learning environment. The following recommendations outlined in this section are therefore aimed at addressing the challenges identified and strengthening the effectiveness of ECD provision in the post-lockdown context:

5.5.1. Time loss and curriculum content gaps in ECD post lockdown

The introduction of catch-up programs, such as after-school support, Saturday lessons, and holiday learning camps, focuses on foundational skills to recover instructional time lost. The extension of contact hours, where possible, is especially important in centres where parents delay collecting learners, without overburdening the children. The DBE and ECD management should design a multi-year recovery curriculum plan, particularly for early childhood education. Core developmental milestones (cognitive, motor, and socio-emotional skills) should be

prioritised before enrichment activities. Encourage flexible pacing, allowing teachers to adapt to learners' readiness levels. Teachers should be supported by providing professional development on remedial strategies, differentiated instruction, and accelerated learning approaches. To ensure that teachers receive adequate teaching and learning materials such as manipulatives, storybooks, and activity kits. The implementation of continuous diagnostic assessments to track progress and target learning support, and the use of formative assessments to ensure that learners grasp essential content before moving forward. ECD centres should strengthen parental involvement by providing training on home-based activities, such as reading, drawing, and play-based learning. The government should move beyond emergency ATP trimming and provide long-term recovery strategies tailored to ECD, allocating equitable funding and resources to under-resourced centres to prevent the widening of learning gaps. Lastly, the government should develop resilience plans for future disruptions, including blended learning models and digital resource access for ECD.

5.5.2. Teaching Strategies Applied Post Covid19 Lockdown in ECD Centres

Teachers should use remedial, play-based strategies to rebuild lost skills in literacy, numeracy, and motor development. Strengthening formative assessment practices to identify individual learning gaps and provide targeted interventions. They should integrate social-emotional learning activities into daily routines to help children regain confidence and resilience. ECD centres and management should provide an ongoing professional development for teachers on remedial teaching, trauma-informed care, and differentiated instruction, and ensure adequate teaching resources (manipulatives, art supplies, reading materials) to support catch-up learning. Establish structured support programs such as after-school enrichment, small-group tutoring, and weekend catch-up sessions. The Government and policymakers should develop a comprehensive, multi-year recovery plan for ECD, beyond trimmed ATPs, focusing on all developmental domains. Incorporate emergency preparedness frameworks (blended learning approaches, community-based learning hubs) for future crises. Lastly, strengthening parental engagement programmes, equipping caregivers with simple, home-based learning strategies.

5.5.3. Government and policymakers

Government and Policy Makers should develop a structured national recovery framework for ECD that goes beyond trimmed ATPs, with clear guidelines for remedial teaching, and provide

targeted funding and resources to ensure smaller class sizes and improved teacher-learner ratios. The government should institutionalise an ECD crisis preparedness plan to sustain learning during future disruptions, and encourage multi-sectoral collaboration with health, social services, and education to support holistic learner recovery.

5.5.4. Safety Measures in ECD Centres Post COVID-19 Lockdown

Teachers in ECD centres should continue embedding hygiene practices into daily routines through songs, games, and demonstrations to sustain compliance, and balance health protocols with opportunities for safe social interaction, such as structured small-group play. ECD centres should provide emotional support and reassurance to help reduce fear and anxiety associated with safety measures. ECD management should allocate resources specifically for health and safety materials to ensure sustainability and provide training and professional support for teachers on managing safety while maintaining learning quality. ECD management should also establish parent engagement programmes to strengthen cooperation in reinforcing safety practices at home and school. Government and policymakers should develop a comprehensive safety framework tailored for ECD, recognizing the developmental stage of young learners, and provide consistent funding and resource distribution to reduce inequalities in safety implementation. The government and Policymakers must integrate health, education, and social services to support children's holistic well-being in future crises and create monitoring and support structures to ensure compliance without overburdening teachers.

5.5.5. Integration of Technology in Teaching Pre and Post Lockdown

Teachers and ECD centres should incorporate blended learning models that balance digital activities with hands-on and play-based learning and strengthen teacher collaboration and peer learning on digital strategies through workshops and communities of practice. ECD management should provide infrastructure investment, such as projectors, tablets, and internet access in under-resourced centres, and organise continuous professional development on integrating technology effectively without undermining play-based learning. ECD management must develop policies to ensure equitable access, ensuring that children from disadvantaged backgrounds are not left behind. Government and policymakers should bridge the digital divide by subsidising data costs and ensuring internet connectivity in rural and township areas and establish national training frameworks to build teacher digital competence at the ECD level.

Policy makers must provide a guideline for child-centred technology integration, ensuring screen time is developmentally appropriate.

5.6. Suggestions for Future Research

Although this study provided meaningful insights into the perceptions of teachers regarding children's learning outcomes in ECD centres following the COVID-19 hard lockdown, several areas remain open for further investigation. The following suggestions for future research are proposed:

5.6.1. Inclusion of Multiple Stakeholder Perspectives on Children's Learning Outcomes Post Lockdown.

Future studies should incorporate the perspectives of parents, learners, and ECD managers to provide a more comprehensive understanding of the impact of the lockdown on early childhood learning outcomes.

5.6.2. Longitudinal Studies on Teacher's Perceptions of ECD

Since this study captured teacher perceptions in the immediate post-lockdown context, there is a need for long-term studies to track how children's cognitive, social-emotional, and physical skills recover over time.

5.6.3. Comparative Studies Across ECD Centres.

This study only focused in a small area (Umjindi Municipality), then, future studies could compare experiences of urban against rural centres, or well-resourced against under-resourced centres, to outline inequalities and identify context-specific strategies for improving learning outcomes.

5.6.4. Technology integration and innovation in ECD Curriculum

More studies are needed on the effectiveness of digital tools and blended learning approaches in ECD, especially in under-resourced contexts, to guide sustainable integration of technology in early childhood teaching.

5.6.5. Explore Mixed-Methods Approaches on ECD Studies

The combination of qualitative and quantitative methods would enrich future studies by capturing not only teachers' perceptions but also measurable data on children's performance and development.

5.6.6. Policy and Support System in ECD Centres

Future studies could examine how government policies, funding mechanisms, and professional development initiatives can be better structured to support teachers and learners in times of crises.

5.6.7. Child Resilience and Well-being in ECD Centres Post Lockdown

Future research on children's coping strategies, resilience, and emotional recovery would offer deeper insight into how young learners adapt after disruptions, and how teachers can build on their strengths.

5.7. Conclusions

Chapter 5 provided a synthesis of the study by presenting the summary of findings, conclusions, and recommendations. The findings highlighted that children's learning outcomes in ECD centres were negatively affected by the COVID-19 hard lockdown, with notable setbacks in cognitive, social-emotional, and physical development. Teachers reported challenges such as time loss, curriculum content gaps, reduced social interaction, and difficulties in implementing safety measures, while also acknowledging the limited support provided by government and ECD management. The conclusions drawn emphasised the central role of teachers in mitigating the effects of the lockdown, the importance of collaborative support systems, and the need for structured recovery plans tailored to early childhood development. Recommendations were offered at multiple levels —teachers, management, parents, and policymakers —to strengthen recovery effects, enhance curriculum delivery, and promote holistic child development in post-lockdown contexts. While the pandemic disrupted learning significantly, it also created opportunities for innovation, resilience, and reflection within the ECD sector.

5.8. Summary of Chapter

This chapter presents a summary of the findings, conclusions, and recommendations drawn from the study on teachers' perceptions of children's learning outcomes in ECD centres following the COVID-19 hard lockdown. The study revealed that children's development was significantly affected across the cognitive, social-emotional, and physical domains, largely due to disruptions in teaching, time loss, and limited curriculum coverage. Teachers also outlined challenges related to reduced social interaction, safety compliance, integrating technology, and insufficient government support for recovery.

Despite these setbacks, the study also brought to light the resilience of teachers, who employed various strategies to support learners' adjustment and recovery in the post-lockdown environment. It was further noted that while government support in the form of relief funds and streamlined ATP was useful, the lack of a comprehensive recovery plan placed additional responsibility on teachers and ECD centres.

The conclusions drawn from the study emphasize that improving learning outcomes post-COVID-19 requires a holistic, collaborative approach involving teachers, ECD management, parents, and government. The recommendations offered aim to strengthen the support system, improve curriculum recovery, enhance teacher capacity, and ensure child-centred, developmentally appropriate practices.

Overall, the study contributes to understanding the profound impact of COVID-19 on early childhood education while offering practical and policy-oriented directions for recovery. It also highlights the importance of preparing the ECD sector for resilience in the face of future disruptions, ensuring that children's right to quality education and holistic development is always safeguarded.

REFERENCE LIST

Aderinoye, R. & Rogers, A. (2005). Urban Literacies: The Intervention of the Literacy Shop Approach in Bodija Market, Ibadan, Nigeria. In: A. Rogers (Ed.). Urban literacy: Communication, identity and learning in development context, pp.253-77. Hamburg, Germany: UNESCO Institute for Education.

Abdalla, M.M., Oliveira, L.G.L., Azevedo, C.E.F. & Gonzalez, R.K. (2018). Quality in qualitative organizational research: Types of triangulations as a methodological alternative. *Administração: Ensino e Pesquisa,* 19(1), 66-98.

Ahmadi, H., Nilashi, M., Shahmoradi, L. & Ibrahim, O. 2017. Hospital Information System adoption: Expert perspectives on an adoption framework for Malaysian public hospitals. Computers in Human Behavior, 67, 161-189.

Alderson, P. & Morrow, V. 2020. *The ethics of research with children and young people: A practical handbook*. Sage.

Anney, V.N., 2014. *Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria.* Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 5(2): 272-281

Akesjo, H. & Persson, S. 2019. The schoolirization of the preschool class: Policy discourses and educational restructuring in Sweden. Nordic Journal of Studies in Educational Policy, 5(2) (2019)

Al-Atabi, A.J. & Al-Noori, B.S.M. 2020. E-Learning in Teaching. https://www.researchgate.net/publication/341684491_E-Learning_in_Teaching.

Alharbi, M.O. and Alzahrani, M.M., 2020. The importance of learning through play in early childhood education: Reflection on the Bold Beginnings Report. *International Journal of the Whole Child*, *5*(2), pp.9-17.

AMERICAN SCHOOL OF PARIS. 2021. What is Early Childhood Education. https://www.asparis.org/blog/details/~board/academics/post/what-is-early-childhood-education-1596020598964

Atkins, L., Francis, J., Islam, R., O'Connor, D., Patey, A., Ivers, N., Foy, R., Duncan, E.M., Colquhoun, H., Grimshaw, J.M. & Lawton, R. 2017. A guide to using the theoretical domains framework of behaviour change to investigate implementation problems. *Implementation Science,* 12(1), 1-18.

Atmore, E. 2019. ‘An interpretive analysis of the early childhood development policy trajectory in post-apartheid South Africa’, Dissertation, University of Stellenbosch.

Australian Government Department of Education (AGDE). 2022. *Belonging, Being & Becoming The Early Years Learning Framework for Australia (V2.0)*. 2022. Australian Government Department of Education for the Ministerial Council.

Awad, E., Dsouza, S., Kim, R., Schulz, J., Henrich, J., Shariff, A., Bonnefon, J.F. & Rahwan, I. 2018. The moral machine experiment. Nature. 563(7729), 59-64.

Azevedo, J.P., Hasan, A., Goldemberg, D., Geven, K., & Iqbal, S, A. (2021). Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates. The World Bank Research Observer, 36(1), 1-40. https://www.worldbank.org/en/topic/education/publication/simulating-potential-impacts-of-covid-19-school-closures-learning-outcomes-a-set-of-global-estimates

Bayat, A. & Madyibi, S. 2023. Impact of COVID-19 on South Africa’s Early Childhood Education and the Sustainable Development Goals. University of the Western Cape. Western Cape. South Africa.https://www.researchgate.net/publication/366988276_impact_of_COVID-19_on_South_Africa’s_Early_Childhood_Education_and_the_Sustainable_Development_Goals

Becker, J.D., Washington, J., Naff, D., Woodard, A. and Rhodes, J.A., 2020. Digital equity in the time of COVID-19: the access issue.

Bengtsson, M. 2016. How to plan and perform a qualitative study using content analysis. NursingPlusOpen, 2, 8-14.

Beyers, R. 2020. Professional discretion of educators in preventing negligence. Unpublished MED dissertation. Pretoria: University of Pretoria

Bhandari, P. 2023. Questionnaire Design/ Methods, Question Types & Examples. Scribbr. Retrieved February 18, 2023. From

https://www.scribbr.com/methology/questionnaire/

Bhandari, P. 2023. What is Qualitative Research? Methods & Examples. Scribbr. https://www.scribbr.com/methodology/qualitative-research/

Bhandari, P. 2023.Data Collection / Definition, Methods & Examples.

https://www.scribbr.com>data-collection/

Bhandari, P. 2025. What is a Research Design| Types, Guide & Examples. Scribbr. https://www.scribbr.com/methodology/research-design/

Bhat, A., 2023. 21 Questionnaire Templates: Examples and Samples. https://www.questionpro.com/blog/questionnaire-templates-and-examples/#:~:text=Unstructured%20Questionnaire%3A%20An20unstructured%20questionnaires,questions%20are20more%open%2Dended.

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. 2016. *Member checking A tool to enhance trustworthiness or merely a nod to validation? Qualitative Health Research*, 26(13), 1802-1811.

Braun, V. & Clarke, V. 2006. Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3(2), 77-101.

Broley, K.K. 2014. Early Childhood Standards of Quality for Prekindergartern

Borkowski, A., Correa, J.S., Bundy, D.A., Burbano, C., Hayashi, C., Lloyd-Evans, E., Neitzel, J., Reuge, N. & UNICEF Office of Research – Innocenti. 2021. COVID-19: Missing More Than a Classroom. The impact of school closures on children's nutrition. https://ideas.repec.org/p/ucf/inwopa1176.html

Britto, P. 2015. "Why Early Childhood Development is the Foundation for Sustainable Development". UNICEF. https://blogs.unicef.org/blog/author/piabritto.

Calzon, B., 2023. Your Modern Business Guide to Data Analysis Methods and Techniques. https://www.datapine.com/blog/data-analysis-methods-and-techniques/

Campbell, C. and Howitt, C. eds., 2024. *Science in early childhood*. Cambridge University Press.

Chan, M.K., Sharkey, J.D., Lawrie, S.I., Arch, D.A. and Nylund-Gibson, K., 2021. Elementary school teacher well-being and supportive measures amid COVID-19: An exploratory study. *School Psychology*, *36*(6), p.533.

Chang, W.H., 2020. A review of vaccine effects on women in light of the COVID-19 pandemic. *Taiwanese Journal of Obstetrics and Gynecology*, *59*(6), pp.812-820.

Care for Kids. 2020. *What outcomes to expect from early childhood education*. https://www.careforkids.co.nz/child-care-articles/article/282/what-outcomes-to-expect-fro-earlychildhood-education

Chomunorwa, S.,Mashonganyika, E.S. & Marevesa, A. 2023. *Digital transformation and post-Covid-19 education in South Africa: a review of literature*. SACJ vol.35 n.1 Grahamstown Jun.2023. http://dx.doi.org/10.18489/sacj.v35i1.1101

Cleave, P. 2023. Structured or Semi-Structured Questionnaire? https://wwww.smartsurvey.co.uk/blog/structured-or-semi-structured-questionnaire#:~:text+The%20structured%20questionnaire%is%20a,a%20set%20of%20predefined%20answers.

Cleland, J.A. 2017. The qualitative orientation in medical education research. Korean Journal of Medical Education. PMC PubMed Central. Http://abdn.elsevierpure.com.

Crawford International. 2023. 10 REASONS WHY Early Childhood Development Is Important. https://www.crawfordinternational.co.za/10-reasons-why-early-childhood-development-is-important

Creswell, J.W. 1997. Qualitative inquiry and research design: choosing among five traditions. Thousand Oaks: Sage.

Creswell, J.W., & Poth, C.N. 2018. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches (4th ed)*. Sage.

Creswell, J.W. 2002. *Educational research: planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River*, NJ: Pearson Education.

Creswell, J.W. 2018.*Research Design: Qualitative, Quantitative and Mixed Methods. 4h ed*. Thousand Oaks, CA: SAGE Publications.

Creswell, J.W. & Poth, C.N. 2025. *Qualitative Inquiry and Research Design: Choosing among five approaches*. Sage publications.

Copland, S. 2018. *What are Early Learning Outcomes? Cognitive development is an important outcome in preschool and childcare centres*.

http://www.himama.com/blog/what-are-early-learning-outcomes/#:~:text=Early%20learning%20outcomes%20are%20the,birth20to%205%20years%20old.

Crouch, L.A, Merseth King, K., Olefir, A., Saeki, H. & Savrimootoo, T. 2020. Taking pre-primary programs to scale in developing countries: multi-source evidence to improve primary school completion rates. Int.J. Early Child., 52 (2) (2020), pp.159-174.

Coronavirus disease (COVID-19)-WHO-WORLD HEALTH ORGANISATION website, https://www.who.int>health-topic

Darling-Hammond, L., Schachner, A. and Edgerton, A.K., 2020. Restarting and Reinventing School: Learning in the Time of COVID and Beyond. *Learning Policy Institute*.

Davis, J. 2023. The Success of Education Technology Post Covid. https://www.avixa.org>articles

Derrida, J. 1982. Margins of philosophy, translated by Bass, A. Chicago: University of Chicago Press.

Denham, S.A. 2006. Social-emotional competence as support for school readiness. *Early Education and Development*, 17(1), 57- 89.

Denzin, N.K. & Lincoln, Y.S. 1998. (Eds). Collecting and interpreting qualitative materials.

Denzin, N.K. & Lincoln, Y.S. (2018). The SAGE Handbook of Qualitative Research (5th ed.). SAGE Publications.

Dermatol, A.B., 2016.*Sampling: how to select participants in my research study*? National Institutes of Health (gov). ANAIS BRASILEIROS DE DERMATOLOGIA (ABD). PMC. www.ncbi.nlm.nih.gov

Department of Basic Education (DBE). 2014.Policy on Screening, Identification, Assessment and Support. https://www.education.gov.za/LinkClick.aspx?

Department of Basic Education (DBE) Draft. 2020. SCHOOL RECOVERY PLAN FOR POST COVID 19 LOCKDOWN. Pretoria. REPUBLIC OF SOUTH AFRICA.

Department of Education (2020), Coronavirus (COVID-19): implementing protective measures in education and childcare settings, GOV.UK website, https://www.gov.uk/government/publications/coronavirus-covid-19-implementing-protective-measures-in-education-and-childcare-settings/coronavirus-covid-19-implementing-protecisetive-measures-in-education-and-childcare-settings

Department of Basic Education (DBE) 2020. Covid-19 Recovery Plan for the Basic Education Sector. Pretoria: Government Printer.

Department of Basic Education, 2021. *Annual Teaching Plan (ATP) Adjustments Guidelines*. Pretoria: DBE.

Department of Basic Education (DBE). 2021. *Annual Teaching Plans (ATPs) Recovery Framework for Schools Post-Covid19*. Pretoria. DBE.

Dewey, J. 1938. *Experience and education.* New York, NY. Macmillan.

Djs research. 2023. Qualitative Research Design. https://www.djsresearch.co.uk/glossary/item/Qualitative-Research- Design#: ~:text=A%20qualitative%20research%20design%20is, format%20as%opposed%2…

Donohue, C. & Schomburg, R. 2017. *Technology and interactive media in early childhood programs: Tools for teaching and learning. Young Children*, 72(1), 72-78.

Dube, P. 2022. Rebuilding the basic education system post-COVID-

https://newshorn.co.za/rebuilding-the-basic-education-system-post-covid/..

Devereux, S., Hochfeld, T., Karriem, A., Mensah, C., Morahanye, M., Msimango, T., Mukubonda, A., Naicker, S., Nkomo, G., Sanders, D. & Sanous, M. 2018. *School Feeding in South Africa: What we know, what we don't know, what we need to know, what we need to do*. Food Security SA Working Paper Series No.004. Pretoria: DST- NRF Centre of Excellence in Food Security.

Eadie, P., Levickis, P., Murray, L., Page, J., Elek, C. and Church, A., 2021. Early childhood educators' wellbeing during the COVID-19 pandemic. *Early Childhood Education Journal*, *49*(5), pp.903-913.

Ebrahim, H., Killian, B., & Rule, P. 2022. *Recovering ECD post-COVID-19 in South Africa: Lessons on inequalities and resilience. South African Journal of Childhood Education,* 12(1), 1-10.

Elliott, R. 2020. Probability and Non-probability Samples. GeoPoll.

https://www.geopoll.com>blog

Fabian, K., 2021. *Assessment information utilisation from learning stories in New Zealand early childhood centres* (Doctoral dissertation, The University of Waikato).

Engelbrecht, P., Nel, M., & Tlale, D. 2021. *Inclusive education responses to the Covid-19 crisis in South Africa. Perspectives in Education*, 39(1), 140-154.

Enosh, G. & Ben-Ari, A. 2016. *Reflexivity: The creation of liminal spaces-Researchers, participants, and research encounters. Qualitative Health Research,* 26(4), 578-584.

Epstein, J.L. 2018. *School, family, and community partnerships: Preparing educators and improving schools.* Routledge.

Feijóo, C., Fernández, J., Arenal, A., Armuña, C. and Ramos, S., 2021. Educational technologies in China. *Pre-and post-pandemic lessons (No. JRC124648). Jt Res Centre (Seville site)*.

Finnbogadottir, H., CrangSvalenius, E.C. & Persons, E.K. 2003. Expectant first-time father's experiences of pregnancy. Midwifery, 19(2): 96-105. Retrieved:11 November 2004 from http://0-www.sciencedirect.com.innopac.up.ac.za/science

Fleer, M. 2020. *Digital play and learning in early childhood education. Early Child Development and Care*, 190(6), 827-839.

Fleer, M. 2021. *Play in the Early Years: Key to School Readiness*. Cambridge University Press.

Fleetwood, D. (2023), QuestionPro. Sample: Definition, Types, Formula & Examples, https://www.questionpro.com>blog

Gaynor, T.S. & Wilson, M.E. 2020. Social vulnerability and equity: The disproportionate impact of Covid-19. Public Administration Review, 80(5): 832-838. https://doi.org/10.111/puar.13264

Gjelaj, M., Buza, K., Shatri, K. & Zabeli, N. 2020. 'Digital technologies in early childhood: Attitudes and practices of parents and teachers in Kosovo', international Journal of instruction 13(1), 165-184. https://doi.org/10.29333/iji.2020.13111a.

GLAM Wiki Conference, 2022. Early childhood education. https://en.m.wikipedia.org/wiki/Early_childhood_education

Glamazdina, Y., 2022. Data Collection: Methods, Definition, Types, and Tools. https://brocoders.com/blog/data-collection-methods-definition-types-and-tools/

Glazer, J. "Kindergarten and Early Education: Issues and Problems. "Childhood Education 62(1985): 13-18

Grady, M. 2022. How has teaching changed during the COVID-19 pandemic? University at Buffalo. The State University at Buffalo.

Gustafsson, M. & Nunga, C. .2020. How is the COVID-19 pandemic affecting education al quality in South Africa? Evidence to date and future risks. Department of Basic Education. University of Stellenbosch.

Gustafsson, M. & Deliwe, C.N.,2020. How is the COVID-19pandemic affecting educational quality in South Africa? Evidence to date and future risks. Department of Economics University of Stellenbosch. South Africa. www.ekon.sun.ac.za/wpapers.

Haller, T.& Novita, S. 2021.Parent's perceptions of School Support During COVID-19: what Satisfies Parents? University of Oxford: United Kingdom.

Hamari, J., Koivisto, J. and Sarsa, H., 2014, January. Does gamification work? a literature review of empirical studies on gamification. In *2014 47th Hawaii international conference on system sciences* (pp. 3025-3034).

Hammond, L. and Moore, W.M., 2018. Teachers taking up explicit instruction: The impact of a professional development and directive instructional coaching model. *Australian Journal of Teacher Education (Online)*, *43*(7), pp.110-133.

Hancock, D.R. & Algozzine, B. (2017). *Doing case study research: A practical guide for beginning researchers.* Teachers College Press.

Hart, C.S. 2019. Education, inequality and social justice: A critical analysis applying the Sen-Bourdieu analytical framework. Special Issue: Capital and Capability: Re-imagining Social Justice in and through Education,17(5): 582-598. https://doi:101177/1478210318809758

Henderson, D., Woodcock, H., Mehta, J., Khan, N., Shivji, V., Richardson, C., Aya, H., Ziser, S., Pollar, G. & Burns, A. 2020. "Keep calm and carry on learning: using Microsoft teams to deliver a medical education programme during the COVID-19 pandemic", *Future Healthcare Journal*, Vol. 7 No. 3, pp. e67-e70, Doi: 10.7861/fhj.2020-0071.

Henry, D.L., 2024. *Public High School Traditional Teachers' COVID-19 Experiences as Online Instructors: A Qualitative Narrative Study* (Doctoral dissertation, University of Phoenix).

Hennink, M., Hutter, I. & Bailey, A. 2020. *Qualitative Research Methods*. SAGE Publications.

Hoadley, U. 2021. *Curriculum recovery and pedagogical strategies in post-COVID education. South African Journal of Education*, 41, S1-S2.

Hoadley, U. 2020. Schools in the Time of COVID-19: Impacts of the Pandemic on Curriculum. Research on Social-Economic Policy (RESEP), University of Cape Town, South Africa.

Hoffmann, M., Gustafsson, L. & Di Tommaso, A. 2020. Exploring stroke survivors' experiences and understandings of occupational therapy. *Scandinavian Journal of Occupational Therapy*, 1-10.

Holstein, J.A. & Gubriun, J.F.2003. Active interviewing (67-80). In Gubriun, J.F. & Holstein, J.A (Eds), Postmodern interviewing Thousand Oaks: Sage.

Indeed Editorial Team,2023. What is an educator? (With definition, skills and duties) https://uk.indeed.com/career-advice/finding-a-job/educator

Indeed Editorial Team, 2022. What Is Data Presentation? (Definition, Types and How To). https://in.indeed.com/career-advice/career-development/data-presentation again?

Islam, M., 2025. *Understanding How the COVID-19 Lockdown Practice Adaptations Were Experienced by Counselling Psychologists in the United Kingdom: An Interpretative Phenomenological Analysis* (Doctoral dissertation, University of East London).

Ivanova, B., 2024. Understanding Adolescent Development, Peer Relationships, and Institutional Strategies in the Youth Justice System.

Jahreie, J. 2023. Early childhood education and care teachers' perceptions of school readiness: A research review. Denmark. https://doi.org/10.1016/j.tate.2023.104353.

Jennings, P.A., Doyle, S., Oh, Y., Rasheed, D., Frank, J.L. and Brown, J.L., 2019. Long-term impacts of the CARE program on teachers' self-reported social and emotional competence and well-being. *Journal of school psychology*, *76*, pp.186-202.

Jeon, H.J., Diamond, L., McCartney, C. and Kwon, K.A., 2022. Early childhood special education teachers' job burnout and psychological stress. *Early education and development*, *33*(8), pp.1364-1382.

Jonsdottir, F., Dockett, S. & Einarsdottir, J. 2023. Transition from preschool to primary school for diverse groups of children in Iceland: A praxeological study. Education 3 – 13 (2023)

Journal of Early Childhood Care and Education-LECCE (Journal of Early Childhood and Education) 2(2) 2019 website, http://journal2.uad.ac.id/index.php/jecce

Jovancic, N., 2023. 5 Data Collection Methods for Obtaining Quantitative and Qualitative Data. https://www.leadquizzes.com/blog/data-collection-methods/#:~:text=Some%20of%the%20most%20common%20qualitative%20data%20collection%20techniques%20include,case%20studies%2C%20and20so20on.

Kamal, T. & Illiyan, A., 2021. School teachers' perception and challenges towards online teaching during COVID-19 pandemic in India: an econometric analysis. *Department of Economics, Jamia Millia Islamia (Central University), New Delhi. India* https://www.emerald.com/insight/2414-6994.htm

Kanyane, C., (2020, October 22). Post-School Education and Training (PSET) and Basic Education: Implications of the COVID-19 pandemic on delivering career services [Paper presentation]. The 2nd Annual Career Development Stakeholders Conference, Career learning and managing for sustainable livelihoods, Benoni, South Africa.

Karin, K. 2023. "What is a Data Analysis? Methods, Process and Types Explained". https://www.simplilearn.com/data-analysis-methods-process-types-article# Go Top again?

Katsarou, E., Chatzipanagiotou, P. and Sougari, A.M., 2023. A Systematic Review on Teachers' Well-Being in the COVID-19 Era. *Education Sciences*, *13*(9), p.927.

Katz, L.G. Current Issues in Early Childhood Education. Champaign, IL: ERIC Clearinghouse on Early Childhood Education, 1987. (ED281 908).

Kiconco, E., 2023. *Effects of Covid 19 pandemic on higher education* (Doctoral dissertation, Kampala International University, College of Humanities and social Science).

Kim, J. 2021. Early childhood education in the digital era: Lessons from the Covid19 pandemic. *Early Childhood Education Journal, 49(6), 1085-1096.*

Kim, J. 2021. Learning loss and recovery after Covid-19 school closures. Journal of Education Policy, 36(8), 123-137.

Kimmons, R. (2022). Sampling: How should I choose a sample for my study? In R. Kimmons (Ed.), Education Research. EdTech Books. https://edtechbooks.org/education_research/sampling

Korstjens, I. & Moser, A. 2018. Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. European Journal of General Practice, Taylor & Francis. https://doi.org/10.1080/13814788.1017.1375092.

Kraft, M.A., Simon, N.S. and Lyon, M.A., 2021. Sustaining a sense of success: The protective role of teacher working conditions during the COVID-19 pandemic. *Journal of Research on Educational Effectiveness*, *14*(4), pp.727-769.

Kukano, C. 2020. *Teacher attrition in Zambian schools: An educational management analysis*. Doctoral dissertation university of South Africa.

Kumar, P., 2023. Data Analysis, Interpretation, and Presentation Techniques: A Guide to Making Sense of Your Research Data. https://hmhub.in/data-analysis-interpretation-and-presentation-techniques/#:~text=Data%20analysis%20involves%20processing%20and,to%20communicate%20the%20research%20findings.

Kwatubana, S. & Molaodi, V.T., 2021. Ensuring the Continuation of School Feeding Programmes during COVID-19 Pandemic: A Case of "New Normal" Management. North-West University. South Africa.

Larson, J. 2013. Handbook of Early Childhood Care and Education

University of Leeds, 2023. Research data management explained. What is research data. https://library.leeds.ac.uk/info/14062/research_data_management/61/research_datamanagement_explained#:~:text=Research%20data%20is%20any%20information,as%laboratory%20notebooks%20and%20diaries.

Lawless, C. 2023. What is eLearning? https://www.learnupon.com/blog/what-is-elearning/#:~:text=So%2C%20what%20is%20eLearning%3F,are%20connected%20to%20the%20internet

Lee, J., 2020, June, Mental health effects of school closures during COVID-19', The LANCET Child & Adolescent Health 4(6), 421. https://doi.org./10.1016/S2352-4642(20)30109-7

Leedy, P.D. & Ormrod, J.E.2001. Practical research: planning and design, 7th ed. Ohio: Merril Prentice Hall.

Leiblich, A. 1998. Narrative research: reading, analysis and interpretation. Thousand Oaks: Sage.

Letseka, M. (Ed.). 2016. Open distance learning (ODL) through the philosophy of Ubuntu. NOVA Science Publishers. https://novapublishers.com/shop/open-distance-learning-odl-through-the-philosophy-of-ubuntu/

Lewis, L. & Tietenberg, T.H. (2019). *Environmental economics and policy.* Routledge.

Mahaye, N. E., Dlomo, S.S. & Ajani, O.A. 2021. Impact of public protests on Education system: a case of 2021 political unrest in South Africa. University of Zululand. South Africa.

Marshall, C. and Rossman, G.B., 2014. *Designing qualitative research*. Sage publications.

Marston, H., Wilson, G., Morgan, D.J. and Gates, J., 2021. Beyond Digital: Planning for a Hybrid World. *Covid-19 Committee: 1st Report of Session 2019-21*, (HL 263).

Maree, J.G. 2022. Managing the Covid-19 pandemic in South African Schools: turning challenge into opportunity

Marriam, S.B. & Tisdell, E.J. 2016. Qualitative Research: A Guide to Design and Implementation (4th ed.). Jossey-Bass.

May, J., Witten, C., & Lake, L. 2020. South African Child Gauge 2020 (Food and nutrition security). University of Cape Town.

Maaicorp. 2021. *The Importance of Early Childhood Development in South Africa – How Moving, Sitting and Sleeping Affect a Child's Early Years*. https://www.masicorp.org/what-we-do/importance-of-early-childhood-development-in-south-africa-masicorp-blog/#:~:text=we%20need%20to%20provide%20children,behaviours%20from%20an%20early%age

Mbhele, A. 2018. *Exploring lecturers' strategies to decolonise English curriculum at a South Africa university*. Doctoral dissertation university of KwaZulu Natal.

McCombes, S. (2022). *Sampling Methods / Types, Techniques & Examples*. Scribbr. Retrieved March 20, 2023, from https://www.scribbr.com/methodology/samplemethods/

Merriam, S.B. & Grenier, R.S. 2019. *Qualitative research in practice: Examples for discussion and analysis*. John Wiley & Sons.

Mhlanga, D. & Moloi, T. (2020). Covid-19 and the digital divide in South Africa: Challenges for online learning. Journal of Asian and African Studies, 55(7), 1-14.

Mhlanga, D. & Moloi, T. (2020). Covid-19 and the digital divide: Implications for education in South Africa. *Journal of Asian and African Studies, 55(7), 1-14.*

Mhlanga, D. & Moloi, T. (2020). Covid-19 and the digital and infrastructural divide: Challenges for education in South Africa: Journal of Asian and African Studies, 55(7), 1-14.

Miller, T. 2018. '*Developing numeracy skills using interactive technology in a play-based learning environment'*, International Journal of STEM Education 5(39),1-11. https://doi.org/10.1186/s40594-018-0135-2.

Mofokeng, P.S., 2023. Effects of COVID-19 on learners' wellbeing in a rural high school district. *International Journal of studies in Psychology*, *3*(2), pp.11-17.

Moser, A. & Korstjens, I. 2018. Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis*. European Journal of General Practice*, 24(1), 9-18.

Motala, S. & Menon, K. 2020. *Covid-19 and schooling in South Africa: Who should be left behind? Southern African Review of Education*, 26(1), 80-97.

Motsa, N.D., 2021. *COVID-19: UNDERSTANDING AND RESPONDING TO THE EDUCATIONAL IMPLICATIONS FOR THE VULNERABLE CHILDREN OF ESWATINI*. University of KwaZulu-Natal, Durban, South Africa. https://dx.doi.org/10.18820/2519593Xpie.v39.i3.3

Moyo, M. 2022. *Leadership and management capacity in early childhood development centres in post–COVID recovery. Journal of Educational Leadership in Africa*, 3(2), 112-128.

Mpumalanga Department of Education. 2023. Learner *Performance Improvement Plan (LPIP). Inkamanga Building,* Government Boulevard, Riverside Park. Mbombela. Mpumalanga Province.

Mpungose, C.B. 2021. *Emergent transition from face-to-face to online learning in South Africa's universities during Covid-19 lockdown: Challenges and opportunities. International Journal of African Higher Education*, 8(1), 159-177.

Muhati-Nyakundi, L.I. 2022. Teacher's *perceptions of children access to toilets in urban ECDE institutions, and the psychosocial consequences, Glob Public Health*. 2022; 17(12):3785-3801. Dol:10.1080/17441692.2022.2059693.

Muhigana, C. 2022. *Reimagining the future of basic education post COVID-19.* UNICEF. Pretoria. South Africa. https://www.unicef.org/southafrica/press-release/reimagining-future-basic-educatio-post-covid-19

Murphy, K.M., Yoshikawa, H., & Wuermli, A.J. 2018. *Implementation research for early childhood development programming in humanitarian contexts. ECD implementation research-humanitarian settings. Annals of the New York Academy of Sciences*. 1419(1), 90-101. https://doi.org/10.1111/nvas.13691.

Munastiwi, E. 2020. Colorful Online Learning Problem of Early Childhood Education During the Covid-19 Pandemic*. Al-Ta'lim Journal, 27(3), 227-235*. http://doi.org/10.21009/jpud.142.04

Myende, P.E., Ncwane, S.H. & Bhengu, T.T. 2020. Leadership for learning at district level: Lessons from circuit managers working in deprived school contexts. *Educational Management Administration & Leadership,* 174

Naidoo, P., & Maseko, N. 2022. *Early childhood education in the wake of COVID-19: Teacher responses and recovery strategies. Journal of Early Childhood Research*, 20(3), 245-259.

Naidoo, L., & Reddy, P. 2022. *Post-pandemic integration of digital learning in South African ECD centres. South African Journal of Childhood Education*, 12(1), 1-9.

Naidoo, P., & Mthethwa, S. 2021. *COVID-19 and early childhood pedagogy: Challenges of enforcing health protocols. South African Journal of Early Childhood Education*, 11(1), 1-10.

Nair, N. 2021. More than 50 KZN schools 'torched, looted and damaged' in unrest. https://www.sowetanlive.co.za/news/south-africa/2021-07-19-more-than-50-kzn-schools-torched-looted-and-damaged-in-unrest/

Narea, M., Treviño, E., Caqueo-Urízar, A., Miranda, C. and Gutiérrez-Rioseco, J., 2022. Understanding the relationship between preschool teachers' well-being, interaction quality and students' well-being. *Child Indicators Research*, pp.1-19.

Naude, L. 2020. Early childhood development during crises: Balancing safety and learning. *South African Journal of Childhood Education, 10(2), 45-60.*

Naude, L. 2020. Holistic approaches in early childhood education: Lessons from the pandemic. *South African Journal of Early Childhood Development, 10(2), 45-58*.

Naude, L. 2020. Leadership and management in early childhood education during crises. *South African Journal of Childhood Education, 10(2), 45-60.*

Naude, L. 2020. Technology and play in early childhood education: Balancing innovation and developmental needs. *South African Journal of Childhood Education, 10(2), 1-12*

Nickerson, C. 2024. Interpretivism Paradigm & Research Philosophy. Simply Psychology.

Nowell, L.S., Norris, J.M., White, D.E.& Moules, N.J. 2017. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. International Journal of Qualitative Methods Volume 16: 1-13. SAGE.

Nkolopoulou, K., 2023. What Is Purposive Sampling? Definition & Examples. Scribbr. https://www.scribbr.com/methodology/purposive-sampling/...

Noble, H. & Smith, J., 2014. Qualitative data analysis: Evidence Based Nursing, University of Huddersfield. 17(1). pp.2-3. ISSN 1367-6539. http://eprints.hud.ac.uk/id/eprint/19667/

Noddings, N. 2018. *Philosophy of education*. Routledge.

Nørskov, S., Damholdt, M.F., Ulhøi, J.P., Jensen, M.B., Mathiasen, M.K., Ess, C.M. and Seibt, J., 2022. Employers' and applicants' fairness perceptions in job interviews: using a teleoperated robot as a fair proxy. *Technological Forecasting and Social Change*, *179*, p.121641.

Nwankwo, K.U., Nwani, E.U., & Chidi-Ikeji, D. 2022. *Early childhood education during the post-COVID19 pandemic. Faculty of Natural and Applied Sciences Journal of Mathematics and Science Education*, 3(3), 13-18.

OECD. 2021. *The State of School Education: One Year into the COVID Pandemic*. OECD Publishing.

OECD. 2021. Starting strong VI: Supporting meaningful interactions in early childhood education and care. Paris: OECD Publishing.

Oktavianingsih, E. & Arifiyanti, N. 2021. SCHOOL READINESS FOR EARLY CHILDHOOD IN FACE-TO-FACE LEARNING IN PANDEMICCOVID-19. Universitas Trunojoyo Madura. Indonesian Journal of Educational Assessment 4(1):30-37 https://www.researchgate.net/publication356746357_SCHOOL_READINESS_FOR_EARLY_CHILDHOOD_IN_FACE-TO-FACE_LEARNING_IN_PANDEMIC_COVID-19

Ofusori, L. 2021. Challenges of remote learning in South Africa's higher education sector. https://ddp.org.za/blog/2021/07/02/challenges-of-remote-learning-in-south-africas-higher-education-sector/

Ogegbo, A.A. & Aina, A. 2020. 'Early childhood development teachers' perceptions on the use of technology in teaching young children ', South African Journal of Childhood Education 10(1), a880. https://doi.org/10.4102/sajce.v10i1.880.

Ontario Ministry of Education. 2020. The kindergarten program. Ottawa ON: Queen's printer for Ontario. https://files.ontario.ca/books/edu the kindergarten program English aoda web.oct7.pdf

Otermans, P., Sharma, S. and Aditya, D. 2022. Challenges Faced by Students with Illiterate Parents: Insights from Teachers – An Interview Study Using Thematic Analysis. *Educational Quest: An Int. J. Edu. Appl. Soc. Sci., 13(02):95-110.*

Pappas, C. 2023. John Dewey's Theory: Reforming Education Through Experiential Learning. https://elearningindustry.com/john-deweys-theory-reforming-education-through-experiential-learning

Patten, T., Martens, W. & Fitch, R. 2018. Monte Carlo planning for active object classification. *Autonomous Robots*, 42(2), 391-421.

Pauwels, I. 2017. *Exploring visual methods, resources and technologies for researching the city and its neighbourhood & city-between digital and analogue perspectives*. University of Antwerp, visual & digital cultures.

Pellegrini, A. 2021. Physical play and motor development in early childhood: *Post-pandemic challenges. Early Child Development and Care*, 191 (5), 747-760.

Peterson, A., Dumont, H., Lafuente, M. & Law, N. 2018. 'Understanding innovative pedagogies: key themes to analyse new approaches to teaching and learning ', OECD Education Working Papers, vol.172. https: doi.org/10.1787/9f843a6e-en.

PETTIT early learning journey.2021. The Importance of Early Childhood Educators. https://www.petitjourney.com.au/the-importance-of-early-childhood-educators/#:~:text=Early%20Childhood%2C%20encourage,make%20meaning%20of%20the%20world.

Pedrosa, A.L., Bitencourt, L., Fróes, A.C.F., Cazumbá, M.L.B., Campos, R.G.B., De Brito, S.B.C.S. and Simões e Silva, A.C., 2020. Emotional, behavioral, and psychological impact of the COVID-19 pandemic. *Frontiers in psychology*, *11*, p.566212.

Phillips, M., Tsuda, E. and Wyant, J., 2023. Promoting motor skill development and social-emotional learning among preschoolers in physical education. *Journal of Physical Education, Recreation & Dance*, *94*(3), pp.29-34.

Pillay, I., 2021. The impact of inequality and COVID-19 on education and career planning for South African children of rural and low-socio-economic backgrounds. African Journal of Career Development, 3(1), a36. https://doi.org/10.4102/ajcd.v3i1.36

Pokhrel, S., & Chhetri, R. 2021. A literature review on the impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133-141.

Qadri, S.S., 2021. Data Collection Methods. Munich, GRIN Verlag. https://www.grin.com/document/1035005

Radesky, J., 2020, May 8, Supporting children's mental health during COVID-19 school closures, NEIJM Journal Watch, https://www.jwatch.org/na51491/2020/05/08/supporting-childrens-mental-health-during-covid-19-school.

Ryan, G. 2018. Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, 25(4), 41-49

Rolfe, S.A., 2020. *Rethinking attachment for early childhood practice: Promoting security, autonomy and resilience in young children*. Routledge.

SAHO, 2022. Barberton, 'The Gold Rush' Town of Mpumalanga. https://www.sahistory.org.za/place/Barberton-mpumalanga.

SAHRC Report. 2018. National Investigative Hearing into the Impact of Protest-Related Action on the Right to a Basic Education in South Africa. https://www.sahrc.org.za/home/21/files/WEBSITE%200impact%20of%20protest%20on%20edu. Pdf

Saint Xavier University. (n.d.) 2023. Bachelor of Science in Early Childhood Education. Retrieved from https://www.sxu.edu/academics/programs/early-childhood-education/index.html

Saldana, J. 2021. *The coding manual for qualitative researchers*. Sage

Saneka, N.E. and de Witt, M., 2019. Barriers and bridges between mother tongue and English as a second language in young children. *South African Journal of Childhood Education*, *9*(1), pp.1-8.

Sarstedt, M., Bengart, P., Shaltoni, A.M. & Lehmann, S. 2018. The use of sampling methods in advertising research: A gap between theory and practice. *International Journal of Advertising*, 37(4), 650-663.

Sauro, J. 2018. 4 Classes of Survey Questions. https://measuringu.com/survey-question-classes/again?

Selemani-Mbewe, C.M., 2023. *Developing a strategic pedagogy in primary teacher education for effective continuous assessment implementation in Malawi* (Doctoral dissertation, University of Pretoria).

Shikwambane, E., 2023. *The factors associated with the access to early childhood development (ECD) facilities in South Africa: Insight from the 2021 General Household Survey (GHS)* (Doctoral dissertation, University of the Western Cape).

Singer, L.M. and Alexander, P.A., 2017. Reading on paper and digitally: What the past decades of empirical research reveal. *Review of educational research*, *87*(6), pp.1007-1041.

Smith, B. & McGannon, K.R. 2018. Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology,* 11(1), 101-121

Smith, M.F., 2024. Nurturing the Nurturers: Understanding Support Systems for Early Childhood Educators in Alberta.

Smulowitz, S. 2020. The communication solution: Leading successful change in higher education. Rowman & Littlefield Publishers.

Sollerhed, A.C. 2022. Perceived insufficient pedagogical content knowledge in teaching movement and physical activity. Experiences from an action-oriented study among educators in early childhood education and care. Frontiers in sports and active living 4. Switzerland: 1050311. https://doi.org/10.3389/fspor.2022.1050311.

Sreekumar, D. 2023. What is research Methodology? Definition, Types, and Examples. https://pp-blog.paperpal.com/academic-writing-guides/what-is-research-methodology

Statistics South Africa,2022. How COVID-19 changed the way we learn. https://www.statssa.gov.za/?p=15197

Spaull, N. & van der Berg, S., 2020. *Counting the cost: COVID-19 school closures and education outcomes in South Africa.* RESEP, Stellenbosch University.

Spaull, N. & van der Berg, S., 2020. *Counting the cost: COVID-19 school closures in South Africa and its impact on children*. Johannesburg. SAJCE vol.10 n.1. www.scielo.org.za/scielo.php?script=sci_arttext&pid=s2223-76822020000100046

Spaull, N. & van der Berg, S., 2020. *Counting the cost: COVID-19 school closures in South Africa and their impact on children*. Stellenbosch University.

Spaull, N., & Pretorius, E. 2022. *Learning losses from COVID-19: Evidence from South Africa and recommendations for recovery. South African Journal of Education*, 42(S1), S1-S16.

Steyn, M. 2016. Early Childhood Education (ECE) in South Africa: Black student teachers' views on push and pull forces in their training. University of Pretoria. South Africa.

Strydom, H. 2002. Ethical aspects of research in the social sciences and human services professions (62-75). In De Vos, A. S. (Ed), Research at grass roots: for the social sciences and human services professions, 2nd ed. Pretoria: Van Schaik.

South African Government. 2020. Minister Angie Motshekga welcomes the announcement by President Cyril Ramaphosa regarding Cabinet decision on the school break during Coronavirus. https://www.gov.za

Taherdoost, H., 2022. Designing a Questionnaire for a research Paper: A Comprehensive Guide to Design and Develop an Effective Questionnaire. Asian Journal of Managerial Science. 10.51983/ajms-2022.11.1.3087.hal-03741836 https://hal.science>document

Tadesse, S. & Muluye, W. 2021. *The impact of COVID-19 pandemic on education: Implications for digital learning in developing countries. Education and Information Technologies*, 26(5), 763-780.

Teachmint. 2022. Learning Outcomes. https://blog.teachmint.com/what-are-learning-outcomes/

Thorne, S. 2016. *Interpretive description: Qualitative Research for applied practice*. Routledge

Timmons, K., Cooper, A., Braund, H. &Bozek, E. 2020. Examining the implementation and impact of the COVID 19 remote teaching initiative in Ontario early primary education contexts. https://static1squarespsce.com/static/5e7bd9fe0ebfc91090d87abc/t/5f4eb540f01a8727d196b418/1598994109562/summary+REPORT+pdf

The speech from the president- website, www.thepresidency.gov.za

THE WORLD BANK. 2021. Recovering Education in 2021: Education Response and Recovery During and After COVID-19. https://www.worldbank.org/en/topic/education/brief/mission-recovering-education-in-2021

THE WORLD BANK. 2022. Ghana: Online Education for Delivering Learning Outcomes during the COVID-19 School Closure. https://www.worldbank.org.en/resuits/2022/05/16/afw-ghana-online-education-for-delivering-learnin-outcomes-during-the-covid-19-school-closure

Thomas, M.S. and Rogers, C., 2020. Education, the science of learning, and the COVID-19 crisis. *Prospects*, *49*(1), pp.87-90.

Tracy, S.J. 2019. *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. John Wiley & Sons.

Tomlison, C.A. 2014. *The Differentiated Classroom: Responding to the Needs of All Learners*. ASCD.

Tsangaridou, N. 2017. Early childhood teachers' view about teaching physical education: challenges and recommendations. Physical Education and Sport Pedagogy. https://doi.org/10.1080/17408989.2016.11.92593.

Tuffour, A.D., Cobbinah, S.E., Benjamin, B. & Otibua, F. 2021. Impact of COVID-19 pandemic on education sector in Ghana: Learner challenges and mitigations. Research Journal in Comparative Education, 2(1). https://royalliteglobal.com/rjce/article/view/625

Tulin, M., Lancee, B. and Volker, B., 2018. Personality and social capital. *Social psychology quarterly*, *81*(4), pp.295-318.

Turner, D.P., 2020. Sampling Methods in Research Design. American Headache Society. John Wiley & Sons, Inc. https://headachejournal.onlinelibrary.wiley.com/doi/abs/10.1111/head.13707

UNESCO. 2020. *Education in a post-COVID world*. Paris: UNESCO

UNESCO. 2021. *Education in a post-Covid world: Nine ideas for public action*. Paris: UNESCO.

UNESCO, 2021. *Education: From disruption to recovery*. Paris: UNESCO

UNESCO (2020), COVID-19 educational disruption and response, UNESCO website, https://en.unesenco.org/covid19/educationresponse

UNESCO. 2021. *Recovering Learning: How Education Systems Can Emerge Stronger Post-COVID-19*. Paris: UNESCO.

UNESCO Institute for Statistics (2021) Monitor and improving learning outcomes in the 2030 Education agenda is a cross-national scale possible? https://uis.unesco.org>files

UNICEF. 2021. Building Resilient Education Systems Beyond the Pandemic. New York: UNICEF.

UNICEF (2022), LEARNING RECOVERY: POST-COVID19. A review of literature from East Asia and Pacific on strategies for tackling the learning crises. https://www.unicef.org/eap/

UNICEF. 2020. What will a return to school during the COVID-19 pandemic look like? https://www.unicef.org.turkiye/en/stories/what-will-return-school-during-covid-19-pandemic-look

UNICEF, 2021. Covid-19 and education*: The impact on children*. New York: UNICEF

UNICEF. 2021. *The role of digital learning in early childhood education post Covid-19*. New York: UNICEF

UNICEF. 2021. *COVID-19 and school closures: One year of education disruption*. UNICEF.

UNICEF. 2021. Reimagining early childhood education and care in a post-COVID world.

The University of Edinburgh. 2022. Literature review. Retrieved from https://www.ed.ac.uk/institute-academic-development/study-hub/learning-resources/litterature-review

United Nations Children's Fund (UNICEF), 2021. Learners in South Africa up to one school year behind where they should be. https://www.unicef.org/press-releases/learners-south-africa-one-school-year-behind-where-they-should-be

VALAMIS. 2023. LEARNING AND DEVELOPMENT: Learning Outcomes. https://www.valamis.com/hub/learning-outcomes

Van Laere, K., Sharmahd, N., Lazzari, A., Serapioni, M., Brajković, S., Engdahl, I., Heimgaertner, H., Lambert, L. and Hulpia, H., 2021. *Governing quality Early Childhood Education and Care in a global crisis: first lessons learned from the COVID-19 pandemic. Analytical report* (pp. 1-100). Publications Office of the European Union.

Veal, A.J. (2017). *Research methods for leisure and tourism.* Pearson UK.

Venter, L. 2022. A systems perspective on early childhood development education in South Africa. International Journal of Child Care and Education Policy 16, Article number: 7(2022)

Wantini, W., Suyatno, S., Dinni, S.M., & Yusmaliana, D. 2022. *Learning Model During Post Covid19 Pandemic to Improve Early Childhood Language Development*. Journal Obsesi, 6(6), 6187-6197.

Western Sydney University Library. 2017. Literature review purpose. Retrieved from http://westernsydney.edu.au/studysmart/home/assignment-help/writing

World Bank.2021. *COVID-19 and the early years*. Washington, DC: World Bank.

Xafis, V., 2020. 'What is Inconvenient for You is Lifesaving for Me': How Health Inequities are playing out during the COVID-19 Pandemic. *Asian Bioethics Review*, *12*(2), pp.223-234.

Xu, W. & Zammit, K. 2020. *The power of project-based learning: Helping students develop important life skills.* Rowman & Littlefie.

Xu, et al. 2024. *Towards high-level evidence: The evolution and contribution of knowledge in early childhood development in China. Journal of East China Normal University (Education Science Edition),* 42(11), 74-94.

Zee, M. and Koomen, H.M., 2016. Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational research*, *86*(4), pp.981-1015.

Zhang, Y., Chen, C., Zhu, S., Shu, C., Wang, D., Song, J., Song, Y., Zhen, W., Feng, Z., Wu, G. and Xu, J., 2020. Isolation of 2019-nCoV from a stool specimen of a laboratory-confirmed case of the coronavirus disease 2019 (COVID-19). *China CDC weekly*, *2*(8), p.123.

Zhao, Y. & Watterston, J. 2021. The changes we need: Education post COVID-19. Journal of Educational Change, 22(1),3-12. https://10.1007/S10833-021-09417-3/METRICS

ANNEXURE A: ETHICAL CLEARANCE

UNIVERSITY OF MPUMALANGA

Creating Opportunities

Dear Mr PS Mthobisi

Student number: 222479094

Protocol Reference Number: UMP/Mthobisi/222479094/EDU/MEd/2025/1

Project title: Perceptions of Teachers on Children's Learning Outcomes in Post-COVID-19 Hard lockdown: A Case of Early Childhood Centres in Umjindi Township.

Approval notification

Any alteration/s to the approved research protocol, i.e., questionnaires/interview schedule, informed consent forms, title of the project, location of the study, research approach and methods, must be reviewed and approved through the amendment /modification prior to its implementation. In case of further queries, please quote the above reference number.

PLEASE NOTE: Research data should be stored securely in the school/division for a period of 5 years. The ethical clearance certificate is only valid for a period of 3 years from date of issue. Thereafter, re-certification must be applied for on an annual basis.

Wishing you the best with your study.

Yours faithfully,

Prof EN Jansen van Vuuren

Chairperson (FREC)

Cc: Research Office Administrator

Cc: Faculty Research Committee chairperson: Prof H Israel

DECLARATION OF INVESTIGATOR/S

I/We fully understand the conditions under which I am/we are authorised to carry out the abovementioned research and guarantee to ensure compliance with these conditions. I agree to completion of a yearly progress report.

Signature: **Date:** 12/02/2025

ANNEXTURE A: Ethical clearance certificate

ANNEXURE B: Questionnaires

1. Location of the Early Childhood Development Centre (ECDC)

Township	
Town	

2. Age of the participant.

Between 18-35	
Between 36-65	

3. What is your gender?

Male	
Female	
Non-binary	
Prefer not to say	
Prefer to self-describe	

4. How long have you been a teacher in the institution?

0-5 years		11-15 years	
6-10 years		16 and more	

5. What are the most effective teaching methods applied in post Covid19 hard lockdown?

_____

_____

_____

_____

_____

_____

6. How did the content gaps and lost time affect the children's learning outcomes after Covid19 hard lockdown?

_____

_____

_____

_____

_____

7. What strategies were used to address the effects of content gap and lost time on the children's learning outcomes post Covid-19 hard lockdown?

_____

_____

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_____

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_____

8. What safety measures have you put in place to ensure conducive learning environments post COVID-19?

_____

_____

_____

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_____

ANNEXURE C: Interview schedule

NO.	TOPICS	DISCUSSIONS	TIME
1.	Introduction	Preliminaries	5 Minutes
2.	Research Question 1	- In your opinion, do you feel the COVID-19 lockdown affected your ability to deliver the curriculum? - In order to accommodate the time lost during the pandemic were there any changes made to the curriculum? if so, explain. - Upon reopening, how did you prioritize the curriculum content coverage? - What were the strategies you implemented to cover the lost curriculum content in a limited time frame? - How did the hard lockdown impact your assessment of learners' progress and performance? - Were you provided with sufficient resources to effectively cover the curriculum after the lockdown? - Are there any learning gaps you noticed among learners after the lockdown, and how did you address them? - Did you get any support provided by your institution or department of education to help cope with the curriculum coverage post lockdown? - In your opinion, what do you think could have been done differently to manage curriculum coverage post hard lockdown?	15 Minutes
3.	Research Question 2	• In your view, how has the lockdown affected the children's learning outcomes? - How did it affect the children's cognitive skills such as literacy and numeracy? - How did it affect learner's social-emotional skills and their physical development?	20 Minutes

		• Have you observed any differences in learning outcomes between children who were more engaged during remote learning and those who were less engaged? - What have you noticed in terms of the learning outcomes? • Is the assessment style for learner's activities the same between pre and post lockdown? - What type of assessment did you used? - How effective were the assessments used? • In your opinion, what do you think are the long-term effects of the hard lockdown on the children's learning outcomes? - Have you observed any behavioural changes? Explain. - Have you observed any academic performance changes? Explain. • What strategies did you use to mitigate the negative impacts of the lockdown on learning outcomes post COVID19? - What kind of teaching methods? - Were there directions from the DBE? explain - Did you have a parental involvement strategy? - The type of technology adopted. • What kind of teaching practices have you adopted to support children's learning outcomes post lockdown? - In classroom activities? - Are there any curriculum adjustments? - Is there any individualized support? • In your opinion, how effective are the adopted strategies you have used? Explain. - What are the success stories? - What are the opportunities for improvement? • What were the kind of engagement and involvement by your school and/or educational authorities during the	

		development of support and recovery programmes in post COVID19 lockdown? - Were you professional developed to handle the effects of post COVID-19 on curriculum? - Did you receive any emotional and psychological support? • In your opinion, what extra support or resources do you think would have been helpful to improve the learning outcomes post-lockdown? - What suggestions do you have for school administration on the way forward? - In view of your experiences, what recommendations can you make to ECD policymakers?	
4.	<u>Research Question 3</u>	• What were the primary challenges you noticed in learners returning to school post lockdown? - How did you adapt your teaching strategies to address the new challenges presented by the pandemic? - What kind of specific activities or programs you used to help children re-socialize with their peers? - What methods did you use to identify and remedy learning gaps that emerged during remote learning? - How did you align your curriculum to accommodate learners who were at different levels academically? - Were there any specific health and safety measures did you use in your classroom to ensure a safe and conducive learning environment? - How did you ensure that children continued to attain desired learning outcomes despite the disruptions caused by the lockdown? - What kind of professional development or support did you receive to help you navigate the post lockdown educational environment?	15 Minutes

		- What kind of specific assessment activities did you use to track and support learners to attain desired learning outcomes? - How did you address any behavioural challenges you have picked up that were exacerbated due to the lockdown and subsequent return to school? Share examples of strategies you used. - From your experience, what are the most important lessons you learned about early childhood education during the post lockdown period? - What are your strategies you have put in place to better prepare for any future disruptions in education?	
5.	Research Question 4	• In your view, how would you describe your overall feeling of safety in the school environment post hard lockdown? • What is your opinion, on the impact of the safety measures implemented post lockdown in the learning environment? • In your experience, how compliant were learners with the safety measures (e.g. wearing masks, maintaining social distance)? • How are safety policies enforced, and what consequences are there for non-compliance? • What were the impacts, if any, have this safety measures had on children learning experiences and outcomes? • What have you learned from the pandemic and lockdown experience that will influence future safety protocols in your class? • What do you think are the most important safety measures that should remain in place permanently?	15 Minutes
6.	Research Question 5	• How would you describe your teaching experience before and after the COVID19 lockdown?	

		• What were the teaching methods or tools that you used before the lockdown? • What is the new teaching and learning methods adopted post COVID19 lockdown? • How has the integration of technology in your teaching evolved from pre to post lockdown? • What challenges have you faced in engaging learners post lockdown? • In your opinion, were there any curriculum changes due to the lockdown? If so, what were they? • How do your pre lockdown classroom management strategies differ from the one you implemented post lockdown? • What type of professional development or training did you receive to prepare for post lockdown teaching? • Were you consulted or involved in the strategic development process for the curriculum recovery planning? If yes, explain and if no what were the repercussions? • What measures have you taken to maintain or improve teacher-learner relationship post lockdown? • What lessons have you learned from the lockdown experience that will influence your future teaching practice? • In your view, what were the positive aspects of the changes brought by the lockdown?	15 Minutes
7.	<u>Conclusion</u>	Closure	5 Minutes

ANNEXURE D: Consent forms

RESEARCH CONSENT FORM

Title of Study: Perceptions of Teachers on Children's Learning Outcomes in Post-Covid19 Hard lockdown: A Case of Early Childhood Centres in Umjindi Township.

I _____ agree to participate in the research conducted by Mthobisi Patrick Sithole (researcher) from the University of Mpumalanga, who has discussed the research project with me.

I hereby give my permission to the researcher to ask me questions and quote my responses in a scholarly research paper. I understand that his work is for academic purposes.

I also understand that I waive any claim for copyright to this material should the researcher ever publish it in a scholarly journal or in electronic format online. My participation is voluntary in this study, and I can withdraw from the study any time without penalties.

I understand that this researcher, hereby named Mthobisi Patrick Sithole, will maintain my anonymity with regard to my responses.

Signature _____ Date _____

Contacts of Researcher:

Mthobisi Patrick Sithole (mthobisipatrick4@gmail.com), 0835104456

ANNEXUR E: Letter of introduction to seek permission to conduct research.

The Principal / Manager
Umjindi ECDC
Barberton
1300
20 May 2024

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN EARLY CHILDHOOD DEVELOPMENTAL CENTRES (ECDC).

Dear Sir / Madam

My name is Mthobisi Patrick Sithole, and I am a student at the University of Mpumalanga in Umjindi Township. The research I wish to conduct for my master's dissertation involves "perceptions of teachers on children's learning outcomes in post-Covid19 hard lockdown: a case of early childhood centres in Umjindi township". This project will be conducted under the supervision of Dr. Linet Nyakundi (University of Mpumalanga, South Africa).

I am hereby seeking your consent to interview two teachers (novice and senior teachers) in your centre, as your organisation is amongst the four selected centres to conduct the research study. I have provided you with a copy of my dissertation proposal which includes copy of a consent form to be used in the research process, as well as a copy of the approval letter which I received from the University of Mpumalanga Research Ethics Committee.

If you require any further information, please do not hesitate to contact me on 0835104456 or mthobisipatrick4@gmail.com. Thank you for your time and consideration in this matter.

Yours sincerely,

Mr. Mthobisi Patrick Sithole
University of Mpumalanga

ANNEXURE F: Permissions to conduct research

CENTRE A: Permission letter

BANTFWABETFU DAY CARE CENTRE

Date: 01 July 2025 contact: 0846204454

To: Mr. Mthobisi Patrick Sithole
University of Mpumalanga
Student no. 222479094

RE: Permission to Conduct Research at Bantfwabetfu ECD centre.

Dear Mthobisi

This letter serves to confirm that permission has been granted for you to conduct research titled: "Perceptions of Teachers on Children's Learning Outcomes in Post-COVID-19 Hard lockdown: A Case of Early Childhood Centres in Umjindi Township" at Bantfwabetfu.

You are authorized to collect data from teachers as indicated in your research proposal. The research activities should be conducted in a manner that does not disrupt the daily routines and learning activities of the centre. Participant's rights, privacy, and confidentiality must be respected at all times, in accordance with ethical research standards.

Please ensure that the results of the study are shared with the centre upon completion, as they may contribute to the improvement of early childhood education practices.

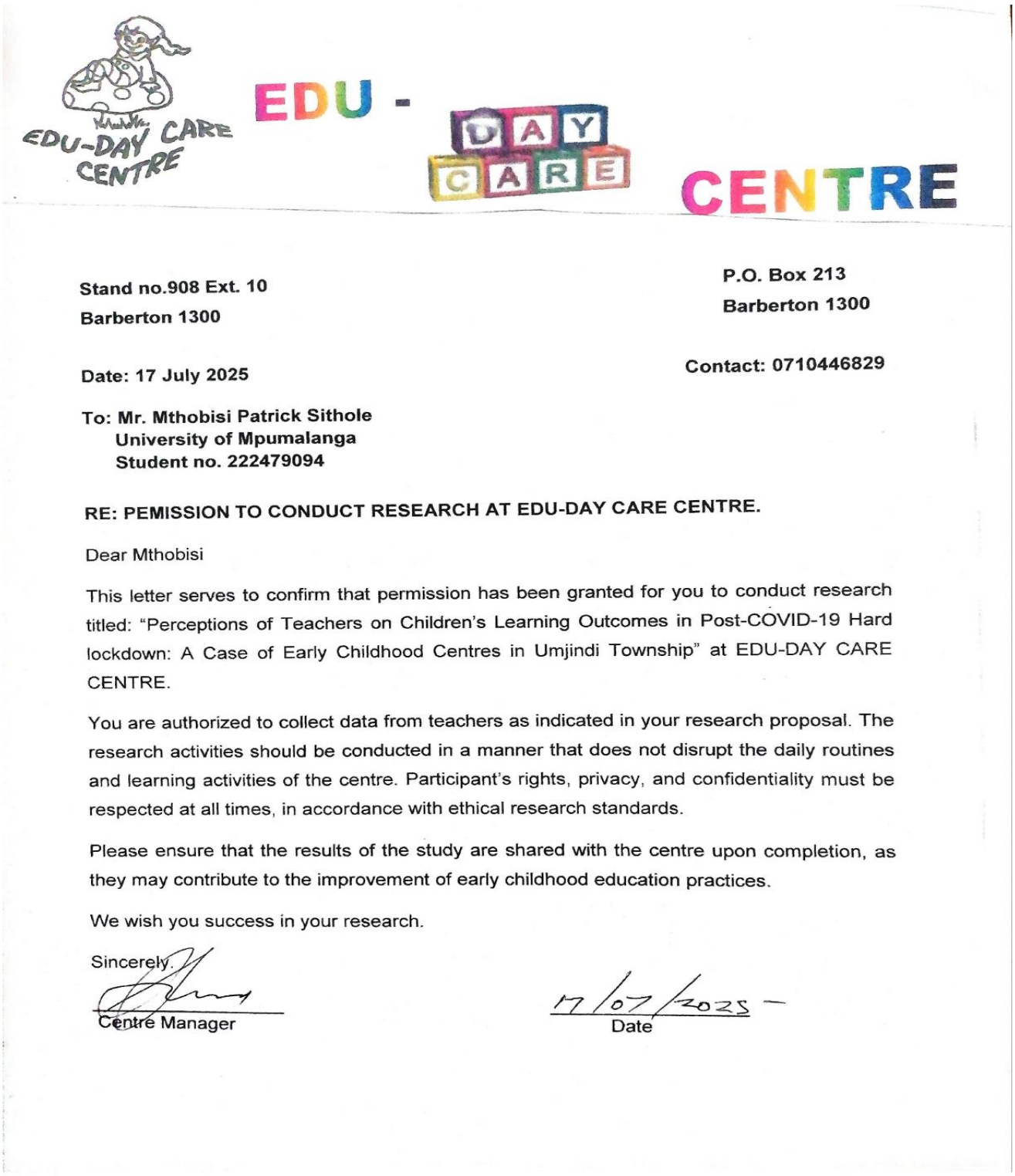
We wish you success in your research.

Sincerely.

GV NGOMANE 01/07/25

Centre Manager Date

CENTRE B: Permission letter



EDU-DAY CARE CENTRE

EDU - DAY CARE CENTRE

Stand no.908 Ext. 10
Barberton 1300

P.O. Box 213
Barberton 1300

Date: 17 July 2025

Contact: 0710446829

To: Mr. Mthobisi Patrick Sithole
University of Mpumalanga
Student no. 222479094

RE: PEMISSION TO CONDUCT RESEARCH AT EDU-DAY CARE CENTRE.

Dear Mthobisi

This letter serves to confirm that permission has been granted for you to conduct research titled: "Perceptions of Teachers on Children's Learning Outcomes in Post-COVID-19 Hard lockdown: A Case of Early Childhood Centres in Umjindi Township" at EDU-DAY CARE CENTRE.

You are authorized to collect data from teachers as indicated in your research proposal. The research activities should be conducted in a manner that does not disrupt the daily routines and learning activities of the centre. Participant's rights, privacy, and confidentiality must be respected at all times, in accordance with ethical research standards.

Please ensure that the results of the study are shared with the centre upon completion, as they may contribute to the improvement of early childhood education practices.

We wish you success in your research.

Sincerely.

Centre Manager

17/07/2025
Date

CENTRE C: Permission letter

Stand no.878 Ext. 13 **DAISY KINDERGARTEN** P .O. Box 213
Barberton 1300

EARLY CHILDHOOD CENTRE

Date: 03 August 2025 **Contact: 0710446829**

To: Mr. Mthobisi Patrick Sithole
University of Mpumalanga
Student no. 222479094

RE: PEMISSION TO CONDUCT RESEARCH AT DAISY KINDERGARTEN.

Dear Mthobisi Sithole

This letter serves to confirm that permission has been granted for you to conduct research titled: "Perceptions of Teachers on Children's Learning Outcomes in Post-COVID-19 Hard lockdown: A Case of Early Childhood Centres in Umjindi Township" at Daisy Kindergarten.

You are authorized to collect data from teachers as indicated in your research proposal. The research activities should be conducted in a manner that does not disrupt the daily routines and learning activities of the centre. Participant's rights, privacy, and confidentiality must be respected at all times, in accordance with ethical research standards.

Please ensure that the results of the study are shared with the centre upon completion, as they may contribute to the improvement of early childhood education practices.

We wish you success in your research.

Sincerely.

Centre Manager

03/08/2025
Date

CENTRE D: Permission letter

BUMBLE BEEZ ACADEMY

P.O.Box 11045
Barberton
1300

Stand No. 6194, Ext 12
Barberton
1300
Contact: 0815446429

Date: 09 July 2025

To: Mr. Mthobisi Patrick Sithole
University of Mpumalanga
Student no. 222479094

Subject: Permission to Conduct Research at Bumble Beez Academy.

Dear Mthobisi

This letter serves to confirm that permission has been granted for you to conduct research titled: "Perceptions of Teachers on Children's Learning Outcomes in Post-COVID-19 Hard lockdown: A Case of Early Childhood Centres in Umjindi Township" at Bumble Beez Academy.

You are authorized to collect data from teachers as indicated in your research proposal. The research activities should be conducted in a manner that does not disrupt the daily routines and learning activities of the centre. Participant's rights, privacy, and confidentiality must be respected at all times, in accordance with ethical research standards.

Please ensure that the results of the study are shared with the centre upon completion, as they may contribute to the improvement of early childhood education practices.

We wish you success in your research.

Sincerely.

Centre Manager

09/07/2025
Date