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# Perspectives on breastfeeding management by South African speech-language therapists: A Qualitative Study

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**Research Dissertation**

Submitted in fulfilment of the requirements for the degree MA (Speech-Language Pathology)

**Department of Speech-Language Pathology and Audiology**

**Faculty of Humanities**

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## Declaration of originality

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**Declaration**

1. I understand what plagiarism is and am aware of the University's policy in this regard.
2. I declare that this dissertation is my own original work. Where other people's work has been used (either from a printed source, internet, or any other source), this has been properly acknowledged and references in accordance with departmental requirements.
3. I have not used work previously produced by another student or any other person to hand in as my own.
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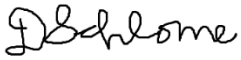
**Signature of student:** 

**Date:** December 2022

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## Abstract

| | |
|---|---|
| **Initials and surname:** | D. Schlome |
| **Supervisors:** | Dr E. Krüger; Mrs SB. Pillay |
| **Date:** | December 2022 |
| **Title:** | Perspectives on breastfeeding management by South African speech-language therapists: A Qualitative Study |

**Background:** Counselling, collaboration with mothers, and management of oro-pharyngeal dysphagia within the first few days of an infant's life, results in favourable breastfeeding outcomes. Little is known about speech-language therapists' perspectives and experience of breastfeeding management in lower- and middle-income settings. **Research aim:** The aim of the study was to describe speech-language therapists' perspectives of their breastfeeding management. **Method:** A descriptive, phenomenological, qualitative research design was used, and data were analysed thematically. Twelve experienced South African speech-language therapists participated in structured online interviews, which were transcribed and coded using ATLAS.ti software. **Results:** Three themes were identified: i) Approach to breastfeeding management; ii) exposure, skills, and knowledge towards breastfeeding management; and iii) perspectives and attitudes towards breastfeeding management. Participants showed understanding of their scope and roles in breastfeeding management in accordance with well-known literature. Their approach appeared to be shaped by their perspectives and positive attitudes towards breastfeeding, as well as exposure, skills, and knowledge about this phenomenon. A need for breastfeeding training was identified, at university, as well as for continuous professional development. **Conclusion:** Findings are based on a small sample of experienced clinicians but are likely to be valuable for speech-language pathology clinical educators and professional bodies. University training programs are called to re-evaluate curricula, to increase exposure to breastfeeding management.
**Key words:** Breastfeeding management, perspectives, speech-language therapists, lower- and middle-income countries, qualitative research, structured interview schedule, phenomenology.

## List of tables

## List of abbreviations

| | |
|---|---|
| **ASHA** | American Speech-Language-Hearing Association |
| **BFHI** | Baby-Friendly Hospital Initiative |
| **EBF** | Exclusive breastfeeding |
| **EBP** | Evidence-based practice |
| **IBCLC** | International Board-Certified Lactation Consultant |
| **LMIC** | Low- and middle-income countries |
| **NICU** | Neonatal intensive care unit |
| **OPD** | Oropharyngeal dysphagia |
| **PBE** | Practice-based evidence |
| **SACLC** | South African Certified Lactation Consultant |
| **SASLHA** | South African Speech-Language-Hearing Association |
| **SLT** | Speech-language therapist |
| **UNICEF** | United Nations International Children’s Emergency Fund |
| **WHO** | World Health Organization |

# Chapter 1: Introduction

**Chapter aim and outline**

The aim of this chapter is to provide background information and insight into breastfeeding management by speech-language therapists (SLT), through a review of recent literature, validating and justifying the relevance of the current study. The importance and benefits of exclusive breastfeeding (EBF) is discussed in accordance with the Baby Friendly Hospital Initiative (BFHI), as well as the role of SLTs and the breastfeeding team. The problem statement and rationale for the study is provided, along with clarification of terms used throughout the dissertation. Chapter 1 concludes in a chapter outline for the dissertation.

## 1.1. Introduction

Sufficient nutrition in infancy and early childhood is a prerequisite for appropriate development, allowing infants and young children to thrive (Motee & Jeewon, 2014). Globally, research has proven EBF to be the best source of nutrition for infants and can be defined as a form of preventative medicine (Jama et al., 2020; Moukarzel et al., 2020). Various health benefits are associated with EBF. Infants benefit from EBF both physiologically and cognitively, over, and above obtaining adequate nutrition (Jama et al., 2020; United Nations Children's Fund [UNICEF], 2017). These benefits include improved infant hydration, ameliorating the risk of mortality due to diarrhoea, lowered risk of otitis media, necrotising enterocolitis, respiratory tract infections and chronic diseases, such as obesity and diabetes (Brahm & Valdés, 2017). Mothers who practice EBF benefit physiologically and emotionally in terms of reduced stress and anxiety, birth-spacing, weight-loss after pregnancy, uterus contraction and lowered risk of certain cancers (Gyamfi et al., 2021).

Furthermore, breastfeeding is said to enhance the bond and interaction between mothers and infants, forming the basis of language development (Owens, 2016), and serving as a protective factor in preventing developmental delays, affecting motor, social and behavioural skills, cognition, and communication, including speech and language (Dee et al., 2007). Infants receiving EBF therefore show more favourable

language-related development, particularly with regards to social interaction, cognition, and communication abilities (Choi et al., 2018). Many infants in South Africa, particularly those who are born preterm and at a low birthweight, may have difficulties with breastfeeding, requiring additional support for families who practice breastfeeding (Eksteen et al., 2020). Therefore, when difficulties with swallowing and feeding in neonates or infants arise, it is apparent that the SLT has a specific role to play (Arvedson et al., 2020; UNICEF, 2017).

Due to the health benefits associated with breastfeeding for both infants and their mothers, health care professionals such as SLTs, should be equipped with the necessary skills and training opportunities to ensure that EBF is supported and endorsed in health care facilities and beyond. SLTs have the potential to influence breastfeeding maintenance and prevent early breastfeeding cessation. This is due to SLTs' in-depth knowledge of swallowing and feeding, and the effects of OPD on growth and development (Arvedson et al., 2020). For this reason, research about SLTs' experiences and perspectives on breastfeeding management is warranted (Campbell et al., 2022).

SLTs are central to the provision of swallowing and feeding intervention to neonates and play an important role in prevention of swallowing and feeding difficulties, especially in the first 36 months of life. SLTs should receive knowledge and training regarding typical infant swallowing and feeding, and the identification of difficulties in these areas, otherwise known as the assessment and management of oropharyngeal dysphagia [OPD] (American Speech-Language-Hearing Association [ASHA], 2016). SLTs tend to be exposed to various difficulties experienced by the breastfeeding dyad. These may include difficulties with latching, milk transfer and uncoordinated sucking, swallowing, and breathing patterns in infants, in addition to medical conditions associated with feeding difficulties, such as ankyloglossia, cleft-lip and/palate, hypoxic-ischaemic encephalopathy and a multitude of genetic conditions (Mahurin-Smith & Genna, 2018).

Intervention by SLTs for swallowing and feeding difficulties should occur in combination with informational counselling in terms of dysphagia management for high-risk neonates and their families (South African Speech-Language-Hearing Association [SASLHA], 2018). It is imperative that SLTs follow both evidence-based practice

(EBP) and apply practice-based evidence (PBE) to ensure that families with breastfeeding difficulties, are successfully and holistically supported in terms of the physiology of breastfeeding, swallowing, and the counselling thereof (Mahurin-Smith & Genna, 2018). Integration of SLTs' clinical expertise with client values and recent empirical evidence, results in SLTs rendering evidence-based services (Brink et al., 2018). However, due to the evolving nature of breastfeeding management, many gaps are evident in research in the South African context. PBE is a complementary approach to EBP, in which SLTs can engage, generate evidence of a high standard, from daily therapeutic settings, and encourage individualised services, that are highly applicable to the patient being assessed or treated (Lemoncello & Ness, 2013).

Breastfeeding intervention and support services may be provided by health care professionals who form part of interdisciplinary infant feeding teams, including SLTs, nurses, community health nurses, International Board-Certified Lactation Consultants (IBCLCs) and paediatricians, to ensure that feeding decisions are made according to holistic consideration of the infant (Krüger et al., 2019). SLTs possess extensive knowledge and skills regarding infant swallowing and feeding, and the difficulties thereof, such as OPD, and should therefore be a core member on a breastfeeding team (ASHA, 2016). IBCLCs may assist in resolving issues regarding lactation; however, various difficulties may require the skill-set and experience of SLTs (Blake, 2014), particularly when medical complications are involved, such as, but not limited to, low birthweight, preterm birth, cerebral palsy, respiratory disorders, cleft-lip and/or palate, and gastro-oesophageal disorders (Greenlee, 2013). SLTs often collaborate with lactation consultants to provide families with information regarding EBF and the benefits thereof (Greenlee, 2013), as well as assist in transitioning from tube feeding to oral feeding; and from the hospital to the infant's home environment (Ermarth et al., 2020).

In South Africa, graduates of the health care professions may complete the South African Certified Lactation Consultant (SACLC) course, which is a postgraduate course, specifically focusing on training graduates to provide breastfeeding-related support services, to compensate for the minimal exposure health care professionals receive in terms of breastfeeding training and assistance. The SACLC course is accredited by the University of the Witwatersrand and provides in-depth insight into breastfeeding from both theoretical and practical standpoints, after which candidates

are formally examined (SACLC, 2022). The interprofessional collaboration between SLTs and IBCLCs/SACLCs equates to the ideal combination of skills, resulting in holistic care of families encountering breastfeeding difficulties (Hotel et al., 2019). This interdisciplinary teamwork, especially within the first few days of an infant's life, ensures safe, efficient swallowing and feeding, ultimately resulting in optimal nutrition for infants to thrive (National Department of Health, 2012; Ritzko, 2020).

Counselling, collaboration with families, and SLTs' management of OPD within the first few days of an infant's life, results in favourable breastfeeding outcomes, indicating the importance of appropriate training regarding breastfeeding management for SLTs (Medeiros et al., 2017). Adequately prepared SLTs may be able to manage cases in which breastfeeding issues arise, which becomes more prevalent as the frequency of families who practice breastfeeding increases (Blake, 2014). A study evaluating SLTs' protocols when assessing breastfeeding, revealed limited use of validated and standardised protocols, which may directly impact breastfeeding management (Oliveira et al., 2019). An unpublished survey study conducted in South Africa, showed that the majority of SLTs included in the sample felt that the SLT's role-description was still unclear when working in breastfeeding teams, and that further research was required (Eksteen et al., 2020).

As a result of the benefits associated with EBF for both infants and mothers, the BFHI was conceptualised by the World Health Organization (WHO) and UNICEF, to support and encourage mothers to practice EBF, as well as provide health care professionals and institutions with policies and protocols to support EBF (Grummer-Strawn, 2017). The goal of this initiative is to improve maternal care services, allowing mothers to provide their infants with a positive and healthy foundation to life, through breastfeeding (Marais et al., 2010). According to UNICEF, EBF is said to provide many health and developmental benefits to both infants and their mothers (UNICEF, 2017). South Africa's National Department of Health aims to implement the BFHI in hospitals across South Africa, acting as a facilitator in enhancing infant health, growth, and development, in addition to improving developmental outcomes later in life (National Department of Health, 2012). The WHO recommends that all infants receive EBF, including those exposed to HIV; with HIV-positive mothers who are on/taking antiretrovirals, preventing mother-to-child-transmission while breastfeeding, which has been endorsed in South Africa (National Department of Health,

2012). Health care professionals, including SLTs, still have an important role to play in advocating for EBF in infants, due to the associated benefits and reduced mortality rate associated with EBF (National Department of Health, 2012). According to statistics from UNICEF (2021), South Africa's adherence to EBF for six months is significantly less than that of the global adherence. Health care professionals therefore need to be positioned and equipped to advocate for EBF so as to prevent early cessation.

### 1.2. Problem statement and rationale

As SLTs remain central to the breastfeeding team, it is important for clinicians to understand their scope of practice and their specific role within the team (Arvedson et al., 2020). SLTs require a specific skill-set to be equipped to support families who experience difficulties with breastfeeding (Blake, 2014).

Research investigating SLTs' current perspectives of breastfeeding management and subsequent training needs of SLTs working within this field in South Africa is therefore important, to ensure that clinicians are well-equipped to provide evidence-based intervention to families. SLTs could advocate for breastfeeding in all contexts within low- and middle-income countries (LMICs), like South Africa. SLTs who are well-prepared to address needs of families with breastfeeding difficulties, may assist in offering infants access to sufficient nutrition and reap the benefits associated with EBF while mothers' physiological and emotional well-being is enhanced (Jama et al., 2020; Brahm & Valdés, 2017; Del Ciampo & Del Ciampo, 2018). Additionally, SLTs who provide these services may contribute to reducing the cumulative effects of risks in LMICs, such as poverty, HIV and other prevalent conditions like hypoxic-ischaemic encephalopathy (Krüger et al., 2017). Qualitative studies are necessary to compliment quantitative data, especially when examining perspectives of a population regarding a complex topic like EBF (Brink et al., 2018). This will be of value as training needs of SLTs regarding breastfeeding management can be evaluated and addressed, in response to the identified gaps in research. The following research question was posed: What are the perspectives and experiences of SLTs in South Africa, regarding breastfeeding management?

## 1.3. Clarification of terms used in this dissertation

- **Human milk:**
  *Human milk* refers to a liquid substance, produced by the mammary glands, that is tailored to containing nutrients, vitamins and minerals that are required for infant nutrition and development (Lawrence, 2022).

- **Breastfeeding:**
  The term *breastfeeding*, used in this dissertation, pertains to the practice of providing human milk to neonates and infants, directly from the breast or through other apparatus, including cups, syringes and feeding tubes.

- **Exclusive breastfeeding (EBF):**
  EBF involves mothers providing infants with human milk only, for the first six months of life, without incorporating other liquids, except for medication, vitamins, or minerals (Gebremedhin et al., 2021).

## 1.4. Outline of chapters presented in the dissertation

The dissertation includes four chapters. A brief outline of each chapter is provided below:

- **Chapter 1:** Background information and an introduction to the dissertation topic, problem statement, rationale and clarification of terms used throughout the dissertation.

- **Chapter 2:** An extensive review of the method used in the research study, including the study aim, research design, ethical considerations, study setting, population and sampling, participants, material and apparatus, data collection, data analysis and trustworthiness.

- **Chapter 3:** This chapter includes the research article that has been submitted to the *Journal of Human Lactation* for review on 2 December 2022. Due to the manuscript guidelines outlined by the journal, the formatting of this chapter differs to that of the other chapters within the dissertation.

- **Chapter 4:** Summary of findings, research contributions and implications for theoretical and clinical practice, recommendations for impending research, and conclusion.

# Chapter 2: Method

**Chapter aim and outline**

This chapter intends to comprehensively describe the aim of the study and the research design. Ethical considerations are addressed and an outline of ethical principles adhered to is provided. Additionally, the study setting is defined, with a description of the study population, sampling method and sampling size. Participant selection criteria, as well as selection procedures are outlined. The chapter also provides a description of participants included in the sample, as well as the material and apparatus used to collect the data. An explanation of the pilot study and data collection procedures is also provided. The chapter concludes with a description of the data analysis and aspects of trustworthiness.

## 2.1. Study aim

The aim of this study was to describe a sample of South African SLTs' perspectives and experiences regarding breastfeeding management.

## 2.2. Research design

A descriptive, qualitative research design was used, allowing the researcher to gain a detailed understanding of SLTs' perspectives regarding the management of breastfeeding in South Africa (Brink et al., 2018). Perspectives seem to be shaped by both experiences and meaning within the context of the phenomenon under investigation (Daher et al., 2017). Using phenomenology, the researcher was able to qualitatively analyse breastfeeding management, as experienced by SLTs daily, in every-day life (Rietmeijer & Veen, 2022), through the understanding of the correlation between SLTs and their understanding of breastfeeding management (Daher et al., 2017). This assisted the researcher in comprehending the way in which SLTs manage breastfeeding-related cases within South Africa. Semi-structured interviews, using a self-compiled interview schedule were conducted to facilitate the building of rapport between the researcher and participants, allowing participants to feel comfortable, and encouraging them to provide comprehensive answers to the questions that were asked (Brown & Danaher, 2019).

## 2.3. Ethical considerations

Health science research places great emphasis on ethical considerations (Brink et al., 2018). This is primarily due to the involvement of human subjects during the process of data collection (World Medical Association, 2013). It was therefore important for the researcher to adhere to ethical principles throughout the study, which included the following:

- ***Informed consent and voluntary participation:*** Once ethical clearance was obtained from the University of Pretoria Faculty of Humanities Research Ethics Committee – HUM002/1221 (Appendix A), participants were recruited from social media platforms, such as Facebook, in which the researcher asked for volunteers to participate. The researcher ensured that information regarding the study was made available to prospective participants in the form of an information leaflet together with an informed consent document (Appendix B). The researcher encouraged prospective participants to review the information leaflet and if they agreed to participate, sign, and return the informed consent document prior to the online interview. Participation in the study was voluntary and participants were reassured that if desired, they could withdraw at any time (Arifin, 2018). At the start of the online interview, verbal consent was also obtained.

- ***Confidentiality:*** Due to the recent implementation of the Protection of the Personal Information Act, which places confidentiality as paramount, the researcher ensured that information provided by participants remained confidential (Meiring, 2021). This was reinforced by ensuring that recordings of interviews were safely stored on a password protected drive, to which only the researcher had access (Arifin, 2018). This information was then transferred to the University of Pretoria repository, to be stored for 15 years, and later, deleted from the drive. Additionally, each participant was assigned a code that was used throughout the research study, from recording of data to reporting of results (Brink et al., 2018). Furthermore, prospective participants were not contacted directly, but rather recruited via social media platforms, including professional Facebook groups. They then contacted the researcher directly if they were interested in participating in the study.

- ***Beneficence and non-maleficence:*** The nature of the current research study did not pose any risks to potential participants. The researcher ensured that the interviews with participants did not exceed 45 minutes, taking into consideration the value of participants' time, as well as data costs. In addition, participants could withdraw at any time during the research study without repercussions (Brink et al., 2018). This study was beneficial in obtaining an extensive understanding of the experiences of a sample of SLTs regarding breastfeeding in South Africa, as participants had the opportunity to add their experiences and perspectives to broaden the current knowledge base.

- ***Reporting of findings:*** Once data were collected and analysed, the researcher was responsible for compiling the research report (Brink et al., 2018). The report should not contain plagiarism and not be bias towards the research aim (Chandere et al., 2021). Plagiarism was prevented by accurately acknowledging sources, which enhanced the quality of the research report, denoted the scope of information, as well as provided necessary credit to the authors referenced (Santini, 2018).

## 2.4. Study setting

Data were collected from 12 qualified SLTs across South Africa, by conducting semi-structured interviews via an online platform, Microsoft Teams. Data collection took place from March-May 2022. The interviews were recorded and subsequently transcribed by the researcher (Brink et al., 2018).

## 2.5. Study population and sampling

### 2.5.1 Sampling strategy and study population

Maximum variation sampling, a purposive sampling method, was utilised to recruit study participants, which allowed the researcher to select SLTs who are frequently exposed to breastfeeding management in South Africa, with varied perspectives in terms of work setting (e.g., public, private), work context (e.g., clinic, hospital, academia), number of years of experience and place of study (Pope & Mays, 2020).

### 2.5.2 Sample size

A sample of 12 qualified SLTs was recruited, which according to recent literature, is an appropriate number for a study employing qualitative interviews (Grove & Gray, 2018). In addition, this was advantageous in terms of cost and time, and allowed the researcher to explore breastfeeding management of SLTs comprehensively, resulting in data saturation (Haradhan, 2018).

## 2.6. Participants

### 2.6.1 Participant selection criteria

SLTs who were eligible to participate in the online interviews were required to meet the following inclusion criteria:

- Qualified SLTs, registered with the Health Professions Council of South Africa.
- SLTs who rendered services to families and infants with breastfeeding difficulties, in a clinical setting, either private or public health care, in South Africa.
- Worked in the field of OPD and breastfeeding for at least five years to ensure adequate experience related to breastfeeding challenges of mothers and their infants (Brink et al., 2018).
- Required access to an electronic device, with Wi-Fi or data connectivity, adequate camera, and microphone functionality, as well as connectivity to access a videoconferencing platform to partake in the interview.

The above-mentioned criteria were outlined to ensure that SLTs who took part in the study were exposed to breastfeeding management in a clinical setting in the relevant context, ensuring accurate and valid findings. Due to the recruited sample having been exposed to breastfeeding management, these SLTs could best provide feedback required in this study (Brink et al., 2018).

### 2.6.2 Procedure for participant selection

Twelve qualified SLTs were included in this study. It was ensured that participants recruited differed in terms of work setting (e.g., public, private), work context (e.g., clinic, hospital, academia), number of years of experience and place of study, through maximum variation sampling, to ensure that the sample was representative

(Pope & Mays, 2020). The participant description is outlined in Table 1. A letter (Appendix C) was sent requesting permission from allied health social media groups (Facebook), to post a social media flyer (Appendix D) with the intention of recruiting participants. The social media flyer requested prospective participants to contact the researcher by following a link to indicate their interest. Subsequently, the researcher contacted interested, prospective participants, to confirm whether they met the inclusion criteria of the study, and to ensure that variation was apparent in terms of work setting, context, number of years of experience, and place of study, across prospective participants. Upon confirmation of meeting the inclusion criteria, informed consent was requested, and prospective participants were then given an opportunity to volunteer to be part of this study, involving a 45-minute online interview, that took place at a time most suitable for the participant.

**Table 1**

Table 1 provides an overview of the description of participants included in the study. This table provides information regarding participants' number of years of experience, the university from which they obtained their undergraduate degrees, their highest level of qualification and their current work contexts.

*Description of participants (n = 12)*

| Characteristic | Category | N = 12 |
|---|---|---|
| Number of years of experience | < 5 years | 1 |
| | 6-10 years | 6 |
| | > 10 years | 5 |
| University from which undergraduate degree was obtained | Sefako Makgatho Health Sciences University | 0 |
| | Stellenbosch University | 1 |
| | University of Cape Town | 1 |
| | University of KwaZulu Natal | 1 |
| | University of Pretoria | 5 |
| | University of the Witwatersrand | 4 |
| Highest level of qualification | Undergraduate degree | 6 |
| | Masters degree | 4 |
| | Doctor of Philosophy (PhD) | 2 |
| *Current work context | Private hospital | 5 |
| | Private practice | 5 |
| | Academic/tertiary hospital | 3 |
| | University | 3 |
| | District/regional hospital | 1 |
| | Home visits | 1 |
| | School | 1 |
| | Community health care clinic | 0 |

**Participants worked in more than one context.*

The majority of the participants (*n* = 6) had six to 10 years of experience and completed their undergraduate degrees at the University of Pretoria. Additionally, six participants had a postgraduate degree. Participants worked in a variety of settings, with the majority of participants practicing in more than one setting.

### 2.7. Material and apparatus

A self-compiled, semi-structured interview schedule (Appendix E) was used to collect data regarding South African SLTs' clinical management of breastfeeding, during online interviews. The interview schedule, as outlined in Table 2, consisted of eight closed-ended questions, and sixteen open-ended questions, to gain a detailed understanding of the participants' experiences with the phenomenon under investigation (Brown & Danaher, 2019). Due to the nature of semi-structured interviews, probing questions were included in some of the interviews, to inquire further into the experiences of SLTs regarding breastfeeding management in South Africa (Brink et al., 2018). The interview schedule was compiled based on previous studies conducted locally (Eksteen et al., 2020) and internationally (Blake, 2014).

**Table 2**

Table 2 provides a detailed description of question types used in the interview schedule and provides insight into sections A and B. Justification of questions and references used to compile the interview schedule are also included.

*Description of question types used in interview schedule and justification thereof*

| Section | Type of questions | Justification | References used to compile the section |
|---|---|---|---|
| **Section A:**<br>Demographic information | This section included closed-ended questions. The questions covered allowed the researcher to gain an understanding of the demographic profile of each participant, including number of years of experience, work context, main interest within speech-language therapy, as well as the institution from which they obtained their undergraduate qualifications and additional feeding training. | This information was of value to the researcher in forming an idea of the participants included in the research sample (Brink et al., 2018). | Brink et al. (2018)<br>Eksteen et al. (2020) |
| **Section B:**<br>Clinical experience with breastfeeding management | This section included open-ended questions that assisted the researcher in obtaining a detailed understanding of the participants' clinical experiences as SLTs involved in breastfeeding management with mothers and infants, as well as their views, experiences, and opinions regarding this area of practice.<br>An example of a question included in this section is "as a speech-language therapist, what do you perceive as your role regarding the managing of cases involving breastfeeding difficulties"? | Obtaining descriptive explanations of participants' experiences allowed the researcher to analyse the data qualitatively, using thematic analysis, resulting in data saturation and the drawing of conclusions (Adhabi & Anozie, 2017).<br>Based on the question provided as an example, the researcher gained an in-depth understanding of participants' perceived role regarding their involvement in managing cases with breastfeeding difficulties. | Adhabi & Anozie (2017)<br>Blake (2014)<br>Eksteen et al. (2020) |

## 2.8. Pilot study

A pilot study was conducted by distributing the compiled interview schedule to two qualified SLTs (*n* = 2) who met the inclusion criteria, within the Department of

Speech-Language Pathology and Audiology at the University of Pretoria, South Africa. The goal of the pilot study was to ensure that questions were easy to understand and clearly phrased, to allow the researcher to obtain accurate data. The two participants included in the pilot study were required to read through the interview schedule and provide feedback in terms of the order of the questions, as well as question phrasing. Once feedback was obtained, minor changes were made, including providing options to answer demographic questions in alphabetical order, removing a question related to the age of the participant and including an option indicating that the participant had not taken part in additional training. A few questions were rephrased, allowing for better flow of the interview (Brink et al., 2018).

### 2.9. Data collection procedures

Data collection began subsequent to ethical clearance being granted by the Faculty of Humanities Research Ethics Committee (HUM002/1221). Respondents were contacted via email, or where indicated, telephonically, to confirm their meeting of the inclusion criteria. If so, they were provided with an information leaflet and informed consent document (Appendix B), giving insight into the aim and rationale of the study, as well as requesting their voluntary participation. Once informed consent documents were signed and returned, the researcher scheduled online interviews with participants, at a time convenient for them.

The online, semi-structured interviews took place via a video-conferencing platform – Microsoft Teams – which was selected due to system encryption, allowing for the protection of participants' personal information (Levy, 2021). In light of the COVID-19 pandemic during the time of data-collection, an online interview was selected to ensure that both the participants and the researcher were not placed at risk of COVID-19 exposure during the data collection process (Jowett, 2020). Additionally, online interviews allowed the researcher to access participants with greater ease, regardless of their geographical location, without the added cost of travel (Gray et al., 2020). Online interviews, with webcam enabled, also allowed the researcher to observe non-verbal behaviours and build rapport with participants (De Villiers, 2021). The researcher was required to consider that online platforms require internet connection in the form of data or Wi-Fi, which is an additional cost to the participant

(Gray et al., 2020). To counteract these data costs, each participant was offered a data voucher to be used during the online interview.

Each interview began with the researcher providing a brief overview of the study to participants. Voluntary participation was highlighted and emphasised, ensuring that participants were aware that they could choose to withdraw their participation at any time, without consequence. Written and verbal consent was obtained regarding the recording of interviews. Following the completion of the interviews, the audio content was transcribed and data were stored on a password protected drive and were later analysed by the researcher.

### 2.10. Data analysis

Data were analysed qualitatively using thematic analysis. This allowed for identification of common themes that emerged across the data set (Brink et al., 2018). Thematic analysis assisted the researcher in obtaining an in-depth and detailed understanding of SLTs' perspectives and experiences with the management of breastfeeding in South Africa (Kiger & Varpio, 2020). This method was useful in determining common and contradictory themes that arose during the data collection process (Leedy & Omrod, 2014). During thematic analysis, the researcher followed the steps suggested by Braun and Clarke (2014), including familiarisation with the data, coding of the data, generation of themes, defining themes as inductive and naming themes, as well as writing a research report.

Interviews were transcribed and inductively coded, using ATLAS.ti software, allowing the researcher to outline common perspectives of participants, regarding breastfeeding management in South Africa. Inductive coding assisted in drawing inferences from specific experiences of SLTs included in the sample (Brink et al., 2018). Following transcription and coding, an inquiry audit took place, whereby a qualified SLT acted as a second rater, analysing a subset (20%) of the primary researcher's transcriptions (Brink et al., 2018). Agreement was reached regarding transcriptions, coding and themes that were included.

## 2.11. Trustworthiness

Considering trustworthiness, research rigour was maintained. This was established by ensuring validity, relevance, dependability, credibility, confirmability, and transferability, as outlined in Table 3. Additionally, the execution of a pilot study adds to trustworthiness of the research (Brink et al., 2018). Research rigour was further enhanced by including a second rater as well as the inclusion of direct quotes from participants in the reporting of the study.

**Table 3**

Table 3 provides an overview of trustworthiness elements adhered to during the study, as well as the maintenance thereof.

*Trustworthiness elements and maintenance during the study*

| Element of trustworthiness | Maintenance during study |
|---|---|
| Credibility | Maintained by ensuring dependability of data remaining consistent over time (Korstjens & Moser, 2018).<br><br>Accurate and truthful findings based on the participants' views regarding breastfeeding management in South Africa are presented. This was ensured by including a second rater, as well as through consultations with research supervisors. |
| Confirmability | An inquiry audit was completed by a qualified SLT, acting as a second rater, to rule out the possible influence of the researcher on the data set (Brink et al., 2018). |
| Transferability | Purposive sampling was used to ensure evidence of transferability (Korstjens & Moser, 2018). |

## Chapter 3: Research article

**Chapter aim and outline**

This chapter includes the research article pertaining to the study. The article was submitted to the *Journal of Human Lactation* (Appendix F) and is currently in review. Due to the manuscript guidelines outlined by the journal, the formatting of this chapter differs to that of the other chapters. Furthermore, as this is an American journal, American grammar and spelling is adhered to.

# Perspectives on breastfeeding management by South African speech-language pathologists: A Qualitative Study

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# Perspectives on breastfeeding management by South African speech-language pathologists: A Qualitative Study


## Abstract

**Background:** Counseling, collaboration with mothers, and management of oropharyngeal dysphagia within the first few days of an infant's life, results in favorable breastfeeding outcomes. Little is known about speech-language pathologists' perspectives and experience of breastfeeding management in lower- and middle-income settings.

**Research aim:** The aim of the study was to determine speech-language pathologists' perspectives of their breastfeeding management.

**Method:** A descriptive, phenomenological, qualitative research design was used, and data were analyzed thematically. Twelve experienced South African speech-language pathologists participated in structured online interviews, which were transcribed and coded using ATLAS.ti software.

**Results:** Three themes were identified: i) Approach to breastfeeding management; ii) exposure, skills, and knowledge towards breastfeeding management; and iii) perspectives and attitudes towards breastfeeding management. Participants showed understanding of their scope and roles in breastfeeding management in accordance with well-known literature. Their approach appeared to be shaped by their perspectives and attitudes towards breastfeeding, as well as exposure, skills, and knowledge about this phenomenon. A need for breastfeeding training was identified, at university, as well as for continuous professional development.

**Conclusion:** Findings are based on a small sample of experienced clinicians but is likely to be valuable for speech-language pathology clinical educators and professional bodies. University training programs are called to reevaluate curricula, to increase exposure to breastfeeding management.

## Background

Exclusive breastfeeding (EBF) is shown to be the best nutrition for infants and is a form of preventative medicine (Moukarzel et al., 2020). Healthcare professionals, including speech-language pathologists (SLP), should be trained to ensure EBF is encouraged in healthcare facilities and beyond. SLPs have the potential to influence breastfeeding maintenance, preventing early breastfeeding cessation (Campbell et al., 2022).

Infants receiving EBF show favorable language-related development, particularly regarding social interaction, cognition, and communication (Choi et al., 2018). Breastfeeding enhances interactions between mothers and infants, forming the basis of language development (Owens, 2016), serving as a protective factor in preventing developmental delays (Dee et al., 2007). When feeding difficulties arise, SLPs intervene to promote safe, functional, and efficient feeding, to reduce aspiration and improve quality of life (American Speech-Language-Hearing Association [ASHA], 2021).

As SLPs are central to provision of swallowing and feeding intervention to neonates, accessing theoretical and clinical training of the highest standard is imperative. SLPs ensure that evidence-based practice (EBP) is followed and families with breastfeeding difficulties are holistically supported (Mahurin-Smith & Genna, 2018). Practice-based evidence (PBE), a complementary approach to EBP, assists in reducing discrepancies between research and clinical application, by acknowledging the importance of clinical decision making in practice (Crooke & Olswang, 2015). PBE could be valuable in SLPs' breastfeeding management, due to lack of established practice standards within this field (Lemoncello & Ness, 2013). SLPs should receive training regarding typical infant swallowing and feeding, and identification of difficulties, known as assessment and management of oropharyngeal dysphagia [OPD] (ASHA, 2016). The importance of early intervention for OPD during breastfeeding, a core role of SLPs, is apparent (Arvedson et al., 2020; United Nations Children's Fund [UNICEF], 2017).

Counseling, collaboration with parents, and OPD management within the first few days of life, results in favorable breastfeeding outcomes, indicating the importance of appropriate education regarding breastfeeding management for SLPs (Medeiros et al., 2017). Collaboration between SLPs and International Board-Certified Lactation Consultants (IBCLC) equates to the ideal combination of skills for holistic care (Hotel et al., 2019). This interdisciplinary teamwork ensures safe, efficient swallowing and feeding, resulting in optimal nutrition to thrive (Ritzko, 2020). SLPs can better manage cases in which breastfeeding issues arise,

which becomes increasingly prevalent as the frequency of families who breastfeed increases (Blake, 2014).

This is apparent in various studies within this field. A study evaluating SLPs' protocols when assessing breastfeeding revealed the scarcity of validated, standardized protocols used, impacting breastfeeding management (Oliveira et al., 2019). An unpublished survey study conducted in South Africa, revealed majority of the sample felt that SLPs' role-description was unclear in breastfeeding teams, and further research was required (Eksteen et al., 2020).

Research investigating South African SLPs' breastfeeding management is important, to ensure clinicians are well-equipped to provide evidence-based intervention. SLPs should advocate for breastfeeding in lower-middle-income countries (LMICs), which may ameliorate cumulative effect of risks, including poverty, human immunodeficiency virus (HIV), and other conditions like hypoxic-ischemic encephalopathy (Krüger et al., 2017). Infants will be offered sufficient nutrition and may reap benefits associated with EBF while mothers' physiological and emotional well-being is likely enhanced (Brahm & Valdés, 2017). SLPs' training needs can be evaluated and addressed, in response to identified caveats in research. The aim of the study was to determine speech-language pathologists' perspectives of their breastfeeding management.

## Method

### Design

A descriptive, qualitative research design was used. Phenomenology allowed the researcher to gain a detailed understanding of a sample of SLPs' experiences and needs regarding breastfeeding management in South Africa (Brink et al., 2018). Data were collected through semi-structured, online interviews, with 12 qualified SLPs across South Africa. Institutional ethical approval was obtained (protocol number: HUM002/1221).

### Setting and relevant contexts

Exclusive, on-demand breastfeeding, from birth, is encouraged in Baby-Friendly Hospital Initiative (BFHI)-accredited hospitals in South Africa, which should be practiced for six months, up to or beyond two years of age (Gebremedhin et al., 2021). South Africa, an upper-middle income country, with low-income settings, encourages EBF for all infants, even if mothers are HIV-positive (National Department of Health, 2012). Various resources providing information regarding breastfeeding for South African parents and healthcare practitioners are available, including the Infant and Young Child Feeding Policy (Department of Health South Africa, 2007), Early Communication Intervention Guidelines (South African Speech-

Language-Hearing Association [SASLHA], 2018) and Clinical Practice Guidelines (Health Professions Council of South Africa [HPCSA], 2018) and regulations about the scope of profession for SLPs (HPCSA, 2017).

### Sample

Twelve SLPs were recruited for this study. All participants were required to render services to breastfeeding dyads experiencing difficulties, in private, government-funded, or public healthcare, in South Africa, for at least five years. Maximum variation sampling, a purposive method, was utilized, allowing selection of SLPs frequently exposed to breastfeeding management, with varied work settings (e.g., government-funded or private), work contexts (e.g., clinic, hospital, academia), years of experience, and places of study (Pope & Mays, 2020). Participants were recruited using an infographic, circulated on professional social media groups, and through the researchers' network base. Prospective participants were contacted to confirm inclusion criteria before the online interview. The sample size is in line with other qualitative studies of a similar nature, rendering valuable findings; however, results may not be generalizable.

### Data collection

Prior to the online interviews, written consent was requested from each participant, and they received a data voucher to compensate for usage. Data were collected by the first author, a qualified SLP, through semi-structured interviews via Microsoft Teams, lasting 30-45 minutes. A self-compiled interview schedule (supplemental material) based on previous studies guided discussions (Blake, 2014; Eksteen et al., 2020). Ethical principles of voluntary participation and Protection of Personal Information Act were adhered to, ensuring confidentiality.

### Data analysis

Data were analyzed qualitatively, using thematic analysis, allowing for identification of themes (Brink et al., 2018). Interviews were transcribed manually, assisting researchers in coding extracts. Thematic analysis provided a method for in-depth understanding of common perspectives from a sample of South African SLPs regarding breastfeeding management (Kiger & Varpio, 2020). Steps were followed, including familiarization with data, inductive coding, generation of themes, defining themes, naming themes (Table 1), and compiling a research report (Braun & Clarke, 2014).

### Trustworthiness

Research rigor was maintained by considering trustworthiness (Adler, 2022). Credibility was established by ensuring dependability of data remaining consistent over time (Korstjens & Moser, 2018). Credibility was considered by presenting accurate findings based on participants' experience of breastfeeding management (Adler, 2022). An additional qualified SLP, acting as a second rater, performed an inquiry audit, analyzing a subset (20%) of the primary researcher's transcriptions (Brink et al., 2018), checking for agreement regarding themes that emerged (Table 1). The completed inquiry audit reinforced confirmability and avoided possible influence of the researcher on the data. Through the application of purposive sampling, transferability is evident (Korstjens & Moser, 2018). From a qualitative perspective, transparency was prioritized throughout the study, by clearly defining research techniques and theoretically-related aspects about the phenomenon, to reinforce trustworthiness (Adler, 2022).

**Table 1**

*Three Identified Themes and Descriptions*

| Theme | Description |
|---|---|
| Approach to breastfeeding management | Participants identified their perceived roles and specific practices involved. |
| Exposure, skills, and knowledge towards breastfeeding management | Participants explained clinical experience with breastfeeding management, including various difficulties that they encounter and recommendations for improving clinical competence. |
| Perspectives and attitudes towards breastfeeding management | Participants reviewed their level of confidence in managing breastfeeding, as well as the interplay between the roles of SLPs and lactation support providers. |

## Results

### Characteristics of the sample

The 12 qualified SLPs had varying years of experience, ranging from five to more than 10 years, with half the participants ($n$ = 6) having six to 10 years of experience. Participants obtained undergraduate qualifications from several universities across South Africa, with half

the participants having a postgraduate degree. Some participants completed (*n* = 2) or are completing (*n* = 2) additional training, including the South African Certified Lactation Consultant course, BFHI training (*n* = 7), neuro-developmental therapy training (*n* = 3), Sequential-Oral-Sensory Approach to Feeding (*n* = 1) and additional breastfeeding-related seminars (*n* = 9). Participants work across various contexts, with some working in multiple contexts, including regional hospitals (*n* = 1), academic hospitals (*n* = 3), private hospitals (*n* = 5), private practices (*n* = 6), universities (*n* = 3), and schools (*n* = 1). Findings will be discussed according to themes that were identified.

**Theme 1: Approach to breastfeeding management**

Perspectives on assessment

Participants indicated various assessment areas, assessment tools, and treatment areas that they perceive to be part of their role in breastfeeding management. All participants indicated they perform a bedside swallow evaluation, including a comprehensive case history, assessment of feeding-specific areas, an oral motor assessment, to exclude structural abnormalities, like tongue-ties, lip-ties or cleft lip and/or palate (CL/P), in addition to assessing the functionality of muscles, cranial nerves, and reflexes involved in breastfeeding. Practitioners with clinical exposure to tongue- and lip-ties use the Assessment Tool for Lingual Frenulum Function (Hazelbaker, 2017) and the Kotlow Tongue-Tie Classification System (Kotlow, 1999).

A baseline evaluation is obtained through clinical assessment of non-nutritive sucking (NNS). Participants stated that further assessment of oral feeding is important to evaluate access to human milk regarding latching, sucking, feeding endurance, and swallow physiology. During this stage of the assessment, participants focus on hyo-laryngeal elevation and excursion, through swallow palpation; observation of swallowing phases and signs of aspiration; and infants' ability to coordinate sucking, swallowing, and breathing, adding to the quality and length of feeds. Furthermore, participants explained that infants' vitals are monitored, stress signs noted, level of alertness and interaction with mothers is observed.

Eight SLPs reported that their evaluation protocol involves self-developed checklists, setting-specific assessments, and qualitative interviewing and observation, while few SLPs use standardized assessments, including the Neonatal Feeding Assessment Scale (Viviers et al., 2016), the Preterm Infant Breastfeeding Behavior Scale (Nyqvist et al., 1996), and the Neonatal Eating Outcome Assessment (Pineda et al., 2016). Only one SLP mentioned recommending a modified barium swallow if patients experience signs of OPD.

Perspectives on treatment considerations and collaboration

Following assessment, SLPs shared that they have a role in treating various breastfeeding aspects. This includes teamwork through collaboration with other professionals, ensuring holistic case management of breastfeeding dyads, especially when complex conditions are involved. These include genetic and cardiac disorders, respiratory diseases, structural anomalies, colic, and the effect of medication on the breastfeeding dyad. An additional, yet crucial collaboration, involves SLPs and breastfeeding mothers, to ensure that education and informational counseling occurs effectively. Many SLPs reported that "managing mothers' expectations of breastfeeding" is important in achieving realistic therapeutic outcomes, contributing to maternal well-being. Participants expressed that positive maternal well-being lends itself to an optimal environment fostering development of successful bonding between parents and infants. SLPs may collaborate with psychologists, ensuring reduced parental stress, enhancing breastfeeding capacity and efficiency. One participant explained that group therapy with mothers in the neonatal intensive care unit (NICU) provided support and reduced maternal stress from breastfeeding. Participants reported that collaboration with mothers may provide opportunities to highlight the importance of Kangaroo Care and identification of infant stress cues during feeding. Clinicians in the sample felt that maternal ability to read stress cues assists in infant state regulation and mothers' ability to identify the optimal state – quiet-alert – for feeding. Two SLPs train mothers in monitoring infant feeding success by encouraging recording of the time their infant spent on the breast at each feed, promoting maternal autonomy. Mothers may also be counseled by SLPs regarding paced feeding and feeding methods, if infants are not yet able to gain sufficient nutrition directly from the breast.

Five participants expressed that determining infants' ideal feeding method is an important aspect of their role if breastfeeding is not immediately indicated. This includes transitioning from tube to oral feeding, or using syringes, or cups, based on the integrity of suck-swallow-breathe (SSB) coordination. Participants reported they are involved in supplementation of feeding methods, collaborating with dieticians, ensuring infants receive optimal nutrition for weight gain and development.

From the sample's perspective, SLPs fulfill roles in providing somatic-oral stimulation, supplying tactile and proprioceptive input to infants in preparation for feeding. SLPs may collaborate with occupational and physical therapists to assist in infant positioning, prior to feeding. Specific areas that SLPs perceive to be their role include facilitation of an appropriate latch, ensuring a labial seal, and monitoring feeding endurance for successful milk extraction. Where appropriate, participants are involved in providing adaptive methods, like nipple shields.

Participants explained they perceive the SLP's role in breastfeeding to involve medically-complex infants, or infants with abnormal oral features, namely CL/P, high palatal arches and tongue- and/or lip-ties. One SLP with clinical exposure to these anomalies expressed that her role includes "identification of these structural anomalies, and precise intervention, pre- and post-operatively, for the medically-complex infant population." Collaboration was essential with other professionals including maxillofacial and plastic surgeons, otorhinolaryngologists, pediatricians, neonatologists, pediatric cardiologists, pediatric dentists, geneticists, nurses and occasionally, chiropractors.

In certain instances, participants may work with lactation support providers, or if trained as lactation support providers themselves, may incorporate lactation support principles into SLP breastfeeding intervention. These include educating mothers about hand expression massage and discussing breastfeeding logistics when mothers return to work.

**Theme 2: Exposure, skills, and knowledge**

The second theme was exposure, skills, and knowledge. Participants reported that knowledge obtained from their SLP university training emphasized support of neonates' swallowing and feeding when managing pediatric dysphagia. Anatomy and physiology of swallowing and pathophysiology of aspiration appeared to be the focus of participants' university training. Clinicians in the sample expressed that university training equipped them with knowledge and skills to "manage common difficulties experienced by mothers and infants during breastfeeding." These difficulties include the management of medically-complex cases in which infants exhibit signs of OPD, due to medical conditions like hypoxic-ischemic encephalopathy, traumatic brain injury, neonatal jaundice, Trisomy 21, cerebral palsy, epilepsy, CL/P, tongue- and/or lip-ties, laryngomalacia, Pierre Robin Sequence, low birth weight and preterm birth, respiratory conditions, gastro-esophageal reflux disease, allergies, and intolerances. However, one SLP in the sample felt that in-depth training at an undergraduate level is required to emphasize practical aspects of breastfeeding management: "As far as I remember, I could be wrong, but based on my memory, I don't think that we had any lectures on breastfeeding and if we did then maybe it was just mentioned on the side."

Other difficulties SLPs were exposed to, can be divided into two groups: difficulties experienced by mothers and difficulties experienced by infants. Participants explained that clients encounter breast-related difficulties, involving pain, bleeding nipples, mastitis, flat/inverted nipples, plugged ducts, and engorgement. Occasionally, the let-down reflex is delayed, or milk supply is poor, and difficult labor and birth were seen as contributing to breastfeeding difficulties, as reflected in the following: "traumatic birth experiences, mothers suffer from

stress and anxiety related to breastfeeding, leading to postnatal depression." Common difficulties encountered by participants involve infant positioning, latching, and refusal of the breast. Participants also experienced the following challenges with infants: poor alertness, inadequate labial seal, poor SSB coordination, immature sucking reflex, poor endurance, poor milk extraction, and ultimately poor weight gain.

Although many participants felt fairly competent in managing breastfeeding clinically, they could not rely on undergraduate training alone, as "more theoretical knowledge, more clinical exposure during undergraduate training and Continuing Professional Development (CPD) courses with the practical component" are necessary to improve competence in breastfeeding management. Independent research, training videos, and joining breastfeeding social media groups, appeared to foster competence in breastfeeding management amongst the sample.

Perspectives on university training and recommendations for improving clinical competence

Many SLPs expressed a need for improved breastfeeding management training, theoretically and practically, emphasized by their own attendance of breastfeeding-related courses and hands-on experience following graduation. It was suggested that newly qualified SLPs attend CPD courses related to breastfeeding management, "with a practical component, so you get to practice the skills," thereby enhancing existing skills. Participants felt that familiarity and increased exposure to the NICU, and experience with pediatric inpatients may assist in making clinicians comfortable with providing breastfeeding-related services. Some participants expressed that competence was enhanced by observing colleagues and engaging in clinical case discussions, following observations in the NICU and pediatric wards. Participants felt that developing a mentoring-system between newly qualified SLPs and experienced clinicians, may improve clinical skills of less experienced professionals. This was reiterated by the following: "The moment you are mentored and shown how to do it, it becomes more of a practical thing." Some participants showed a lack of knowledge regarding the role, and scope of practice of lactation support providers, to which they alluded further training is required, to "learn more about the lactation consultant's scope."

**Theme 3: Perspectives and attitudes towards breastfeeding management**

The third theme was participants' perspectives and attitudes towards breastfeeding management. Overall, SLPs in the sample portrayed a positive attitude towards breastfeeding management. One participant mentioned they "find breastfeeding management extremely interesting" and it is evident from responses that breastfeeding management can be "a bit more [clinically] challenging," which this sample appeared to enjoy.

SLPs in the sample, who are trained as lactation support providers, offered insight into the perceived role of lactation support providers during breastfeeding management and the interplay with the SLP's role. According to participants, lactation support providers can problem solve difficulties experienced by breastfeeding dyads, not solely related to medical conditions affecting the oral or pharyngeal swallowing phases in infants. These include problems with the breastfeeding method, hormonal difficulties related to milk supply, expression, colostrum, and engorgement. Lactation support providers may guide mothers about long-term breastfeeding plans and provide counseling. In contrast to SLPs, participants felt that lactation support providers do not deliver intervention for pathological infant feeding, including difficulties related to structural anomalies like tongue ties and CL/P, that may affect breastfeeding efficiency.

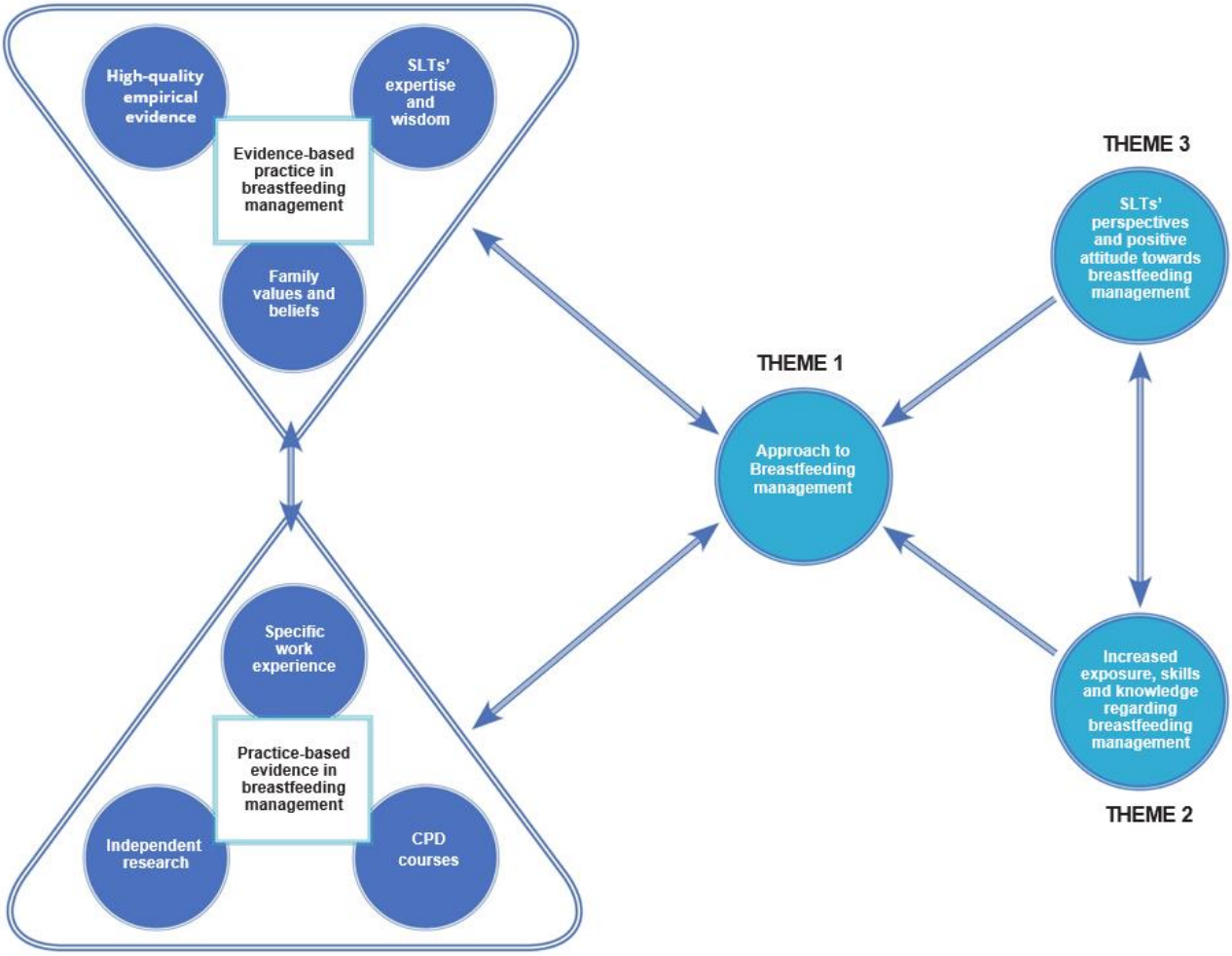
SLPs reported feeling less competent about certain areas of breastfeeding management, exacerbated by diverse cultural and linguistic landscapes in their work contexts and limited exposure to cultural diversity during their studies. Many difficulties encountered involve "breast-related issues," problems with milk supply, and infants who refuse the breast, portraying aversive behavior. Participants also did not feel competent with difficulties solely affecting mothers or affecting infants who do not have medical risk factors, like, infants born full term at a normal birth weight. The interplay between SLPs' and lactation support providers' roles and the associated complementary functions is therefore apparent.

## Discussion

The phenomenological nature of this research allowed SLPs in the sample to provide views of their own breastfeeding management experiences. Participants were aware of their role as SLPs; however, appeared to lack confidence in managing breastfeeding-related cases due to limited exposure and unclear practice guidelines when dealing with breastfeeding difficulties. Findings agree with research of a similar nature, suggesting that SLP graduates are not always comfortable providing intervention to breastfeeding dyads, without additional training (Mahurin-Smith, 2018). The release of the 2nd edition of the Core Curriculum for Interdisciplinary Lactation Care (Chamberlain et al., 2022), will assist clinicians with foundational knowledge regarding breastfeeding management, positively enhancing confidence for service provision. Cultural and linguistic diversity of breastfeeding dyads also appeared to negatively influence SLPs' level of confidence regarding breastfeeding management, due to the perceived lack of multicultural exposure at university, impacting on effective service provision. A visual representation of themes that developed and relationships between themes is provided (Figure 1).

**Figure 1**

*Developing Evidence: Related Themes of Breastfeeding Management Practices*




Due to the purposive nature of this research, SLPs in the sample were often exposed to breastfeeding management. Participants thus possessed extensive skills and knowledge on breastfeeding management, which may have been influenced by their perspectives and positive attitudes (Figure 1). These aspects inform SLPs' approach to breastfeeding management, further enhanced by the application of EBP and PBE.

EBP is applied by incorporating SLPs' expertise and wisdom, high-quality empirical evidence, values, and beliefs of breastfeeding dyads (Grove & Gray, 2018). To complement EBP, PBE in breastfeeding management includes specific work experience, independent research and breastfeeding-related CPD courses, thus improving SLPs' ability to provide effective services to diverse breastfeeding dyads (Lemoncello & Ness, 2013).

Assessment of breastfeeding dyads was the starting point for management. As indicated by well-known literature regarding swallowing and feeding management, the sample of SLPs

commence with a clinical bedside swallow evaluation, including an oral motor examination, to identify functional and structural deficits affecting breastfeeding (Arvedson et al., 2020). Assessment allows clinicians to hypothesize the possibility of patients presenting with OPD. NNS was also a commonly assessed area. Although NNS does not predict successful nutritive feeding, it provides a broad indication of sucking strength, sucking bursts, tongue cupping and integrity of the labial seal – prerequisites to oral feeding readiness (Pineda et al., 2019).

South African SLPs have limited human and material resources in working environments, explaining limited use of formal assessments. Clinicians in this sample were resourceful and used self-compiled checklists and setting-specific assessment protocols. The exception was the Neonatal Feeding Assessment Scale (Viviers et al., 2016), specifically developed for South Africa and similar contexts. The use of informal assessment procedures concurs with previous research, in which a sample of South African SLPs commented on the lack of breastfeeding management resources (Eksteen et al., 2020). The use of informal assessments and checklists appear to be common practice for SLPs working with pediatric dysphagia in LMICs (Oliveira et al., 2019). Instrumental assessment remains the gold-standard for diagnosing OPD and aspiration (Lo Re et al., 2019), but only one participant alluded to using objective measures.

Participants appear to have an interest in interprofessional collaboration, ensuring holistic treatment of breastfeeding dyads with complex medical needs. This practice is commensurate with breastfeeding management research, highlighting collaboration as a determining factor of breastfeeding success (Hotel et al., 2019).

Successful management of breastfeeding difficulties by participants depended on exposure, skills, and knowledge, both theoretically and practically. Additionally, participants' interest and opinion lead them to pursue further training in breastfeeding management, enhancing their confidence (Figure 1). Further research is required to identify the amount of exposure SLPs receive before graduating from university, and the impact of this preparation on their perceived ability to manage breastfeeding difficulties in future careers. Increasing SLPs' exposure to breastfeeding management, as early as during undergraduate training, may allow clinicians to focus on building skills and knowledge, regarding this phenomenon. This could positively enhance SLPs' approach to breastfeeding management, shaping perspectives and attitudes to foster confidence and competence when treating breastfeeding dyads. University training programs are called to reevaluate curricula, to become responsive to contextual needs of clinicians and clients. This is of critical importance in LMICs like South Africa, where qualified allied health care professionals, like SLPs, are scarce.

Participants exuded a positive attitude towards breastfeeding management and their role in breastfeeding teams. They do; however, feel that improved understanding of the lactation support provider's role would assist in efficacious treatment, allowing patients to reap benefits offered by the two professions. This finding correlates with previous research (Mahurin-Smith & Genna, 2018).

Although SLPs appear to be performing roles within breastfeeding teams in accordance with literature, a lack of interprofessional collaboration with lactation support providers results in SLPs having less confidence, working in isolation, or completing lactation courses to address knowledge needs. As this is not a possibility for all SLPs, improved opportunities for interprofessional collaboration and education remains critical in breastfeeding management. SLPs are key members in breastfeeding teams, with other specialists, to manage the complexity of breastfeeding difficulties. SLPs require a specific knowledge base and skill set, which may be addressed in CPD. Professional bodies, like SASLHA, are ideally situated as catalysts for learning opportunities and could transform SLPs' support of diverse families.

Breastfeeding holds specific value within society, as it is a renewable, environmentally-friendly resource (Kyunki, 2016). Breastfeeding is important in reducing financial implications on families, and government agencies globally (Siregar et al., 2018). Due to the associated health benefits, medical expenses for infants are reduced, and parents are absent less from the workplace (Sattari et al., 2019), as a result of their children being ill, strengthening the country's economy. Healthcare costs may be reduced, alleviating pressure from the overburdened healthcare system (Santacruz-Salas et al., 2019).

### Limitations

This study purposefully included participants interested in breastfeeding management and findings present a specialist population's perspective, which does not include all SLPs dealing with breastfeeding difficulties daily. The sample size may not indicate generalizable results.

### Conclusion

SLPs provided a rich description of their role in breastfeeding management. Increased exposure to breastfeeding management at university, and additional professional development opportunities, may enhance SLPs' skills, knowledge, and confidence in breastfeeding management. Increased opportunities for interprofessional collaborative practice between members of the breastfeeding team is warranted.

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# BREASTFEEDING MANAGEMENT BY SPEECH-LANGUAGE THERAPISTS IN SOUTH AFRICA: A QUALITATIVE STUDY

## INTERVIEW SCHEDULE (Supplementary Material)

## SECTION A: Demographic Information

1. **Number of years of experience:**
   - □ < 5 years
   - □ 0-5 years
   - □ 6-10 years
   - □ > 10 years

2. **Undergraduate qualification obtained from:**
   - □ Sefako Makgato Health Sciences University
   - □ Stellenbosch University
   - □ University of Cape Town
   - □ University of KwaZulu Natal
   - □ University of Pretoria
   - □ University of the Witwatersrand

3. **Highest level of qualification:**
   - □ Undergraduate degree
   - □ Masters degree
   - □ Doctor of Philosophy (PhD)

4. **Additional training:**
   - □ South African Certified Lactation Consultant (SACLC)
   - □ International Board-Certified Lactation Consultant (IBCLC)
   - □ Baby Friendly Hospital Initiative
   - □ Neuro-developmental Therapy (NDT) training courses (basic and/or advanced)
   - □ Additional breastfeeding-related CPD events/seminars
   - □ No additional training
   - □ Other:

     _____

5. **Main interest in the field of speech-language therapy:**
   - □ Paediatric swallowing and feeding and dysphagia management
   - □ Breastfeeding management
   - □ Adult swallowing and feeding and dysphagia management
   - □ Paediatric speech, language and fluency disorders
   - □ Adult neurogenic speech and language disorders

**6. Current work context:**

- ☐ District/regional hospital
- ☐ Tertiary/academic hospital
- ☐ Community health care clinic
- ☐ Private hospital
- ☐ Home visits
- ☐ Schools
- ☐ Private practice
- ☐ University
- ☐ Unemployed

## SECTION B: Clinical Experience with Breastfeeding Management

The questions below will be used to gain information regarding qualified speech-language therapists' experiences about breastfeeding management in South Africa.

1. Can you please comment on how frequently you encounter patients with breastfeeding difficulties in your paediatric work context?
   (***Probes***: Daily, weekly, monthly)

2. As a speech-language therapist, do you consider breastfeeding management to be an important role and what do you perceive this role includes regarding the management of cases involving breastfeeding difficulties?
   (***Probe***: If so, why?)

3. Can you please tell me about what kind of breastfeeding difficulties you commonly encounter?
   (***Probes***: Latch, suck, positioning, weight gain, complex medical issues)

4. How competent do you feel about assessing infants and their mothers who have breastfeeding difficulty?

5. What do you base this competence on?
   (***Probe***: Training or experience?)

6. Can you tell me where you learnt most about breastfeeding management?
   (***Probe***: Undergraduate degree? Which courses or trainings have you completed? ***Follow-up***: which of these trainings would you recommend to new graduates?)

7. Can you please comment on what exposure you had to breastfeeding management on an undergraduate level at university?

8. Can you comment on the tools and procedures you make use of when conducting breastfeeding assessments?

9. Can you elaborate on the areas of swallowing and feeding that you would focus on in terms of management?
   (***Probes:*** Assessment areas? Treatment areas?)

10. Which areas of intervention do you feel the most competent in treating?
    Probe: Why?

11. Can you please comment on any aspects in breastfeeding that you do not feel confident to treat?

12. Can you elaborate on the collaboration that you are currently involved in when treating infants and families requiring breastfeeding support?
    (***Probe***: Which professionals have you collaborated with previously?)

13. Can you explain what you perceive to be the difference between the speech-language therapist and the lactation consultant in breastfeeding management?

14. Do you think it is important for speech-language therapists working in breastfeeding management to complete training as lactation consultants?

15. Do you have any recommendations regarding improving clinical competence of speech-language therapists regarding breastfeeding management?

# Chapter 4: Clinical implications of findings and conclusion

**Chapter aim and outline**

This chapter contains a succinct discussion of the central findings of this study and discusses clinical and theoretical implications for various stakeholders involved in breastfeeding. Recommendations for future research are provided and the strengths and limitations of this study are presented. This chapter ends with the overall conclusion of the research study.

## 4.1. Summary of main findings from this study

Three themes were identified, namely, approach to breastfeeding management; exposure, skills, and knowledge towards breastfeeding management; and perspectives and attitudes towards breastfeeding management.

It is evident that SLTs are aware of their role within breastfeeding teams. SLTs' approach to breastfeeding management seemed to be informed by their perspectives and positive attitudes, as well as exposure, skills, and knowledge regarding breastfeeding management. Personal interest in the phenomenon encouraged independent research and completion of additional breastfeeding-relating training, which when associated with specific work experience, implied the application of PBE (Lemoncello & Ness, 2013). Complementary to this notion, SLTs consider high-quality, empirical research, family values and beliefs, and apply clinical expertise during the management of breastfeeding dyads, ensuring adherence to EBP (Grove & Gray, 2018).

## 4.2. Clinical and theoretical implications

UNICEF's Strategy for Health 2016-2030 emphasises that the overall vision is to encourage children to reach their full potential in health and well-being, by reducing child deaths from preventable causes (UNICEF, 2016). Various goals, approaches and actions will be instrumental in working towards obtaining this vision. One important action involves the strengthening of service delivery amongst health care providers, to which the current study, contributes. By empowering SLTs with theoretical and clinical knowledge regarding breastfeeding management, services rendered will be more efficacious and of a higher quality, which may contribute to the overall

health care system being strengthened and enhanced, and possibly address inequalities in health care in LMICs, such as South Africa. This study therefore promotes the goal of reducing preventable maternal and infant deaths (UNICEF, 2016).

Due to the in-depth training and detailed knowledge that SLTs possess regarding paediatric swallowing and feeding, this study further emphasises the unique role that SLTs play within breastfeeding teams. SLTs included in the sample, use an appropriate framework for assessment, often compiled from their own resources, with minimal reliance on instrumental measures, which may be due to lack of resources within participants' work contexts. Treatment of breastfeeding dyads appears to be comprehensive and commensurate with literature, regarding the role of the SLT (Blake, 2014; Greenlee, 2013; Medeiros et al., 2017). This results in infants and families receiving suitable assistance from SLTs to support breastfeeding and ameliorate associated difficulties. Although SLTs seem to be aware of their role, improved interprofessional collaboration with nurses, allied health care professionals such as occupational therapists and physiotherapists, as well as SACLCs will likely enhance the efficacy of service provision to breastfeeding dyads, as SLTs will have access to these breastfeeding team members, allowing for holistic remediation of difficulties experienced. Thus, mothers and infants will reap the benefits of EBF (Chamberlain et al., 2022). According to PBE, SLTs' lack of access to SACLCs, results in some SLTs completing the SACLC course themselves, to assist in providing more holistic and efficacious services to breastfeeding dyads; however, this is not feasible for all SLTs working with this population. Improved interprofessional collaboration with nursing staff, other health care practitioners forming part of breastfeeding teams, and access to SACLCs will allow for improved parental access to breastfeeding support. Additionally, appropriate provision of informational counselling by SLTs and other team members can occur, which may enhance parental adherence to breastfeeding, due to their improved understanding of accurate execution. This will likely be instrumental in preventing early breastfeeding cessation, thus capitalising on the associated benefits of breastfeeding and human milk for both mothers, infants, and society at large (Del Ciampo & Del Ciampo, 2018).

As a result of improved SLT understanding of the breastfeeding phenomenon and associated difficulties, more mothers could be provided the opportunity to access

breastfeeding-related services from SLTs. This should increase the number of infants who are breastfed, as well as the duration for which they are breastfed, thus encouraging EBF for six months (UNICEF, 2017). As indicated by the sample of SLTs in this study, earlier exposure and training regarding breastfeeding management will likely allow for improved service provision at grassroots level, by student SLTs, enhancing breastfeeding efficiency and parental and infant health. Infants will benefit medically and developmentally from EBF, promoting appropriate growth and enhancing the bond and interaction between mothers and infants, from which speech and language develops (Owens, 2016).

South Africa being considered a LMIC, typically struggles with lack of material and human resources (Malelelo-ndou et al., 2016). Human milk and improved breastfeeding practices, are of value in this context, as it can be considered a renewable resource (Kyunki, 2016). It is evident that this resource is prioritised and endorsed in health care facilities in South Africa, as according to UNICEF statistics, early initiation of breastfeeding in this context is significantly adhered to as compared to the global rate of early breastfeeding initiation (UNICEF, 2021). Additionally, human milk does not require packaging, or the use of water and electricity to heat the human milk to the appropriate temperature for infants. This reduces harm on the environment, climate change, and spares resources for other functions needed within society (Smith, 2019). The environmentally friendly and renewable nature of human milk is of particular importance in South Africa, as resources are already limited in this context (Malelelo-ndou et al., 2016). Furthermore, due to the health benefits of breastfeeding for both mothers and infants, adherence to breastfeeding may result in less health care costs, alleviating pressure from the already overburdened health care system in South Africa, and other LMICs globally, due to the prevalence of multiple high-risk populations and infants in these contexts (Santacruz-Salas et al., 2019). Therefore, it is vitally important for SLTs and other health care professionals to be accurately trained in breastfeeding management, to appropriately serve these high-risk populations, due to breastfeeding being considered a protective factor (Moukarzel et al., 2020).

This study revealed that SLTs included in the sample showed that they are aware of their specific role in breastfeeding teams. They also indicated that although aware-

ness of SLTs' role within breastfeeding teams is displayed, their approach to breastfeeding management, involving assessment and treatment, is dependent on increased exposure, skills, and knowledge to the phenomenon, which further enhances their perspectives and attitudes towards breastfeeding management. Across the sample, most SLTs were somewhat exposed to breastfeeding management at an undergraduate level, either theoretically, practically, or both. The sample indicated that increased clinical exposure would have positively influenced their level of competence and confidence when treating breastfeeding dyads. It appears that these SLTs would benefit from greater exposure to breastfeeding management from both a theoretical and practical standpoint, allowing for greater application of EBP and PBE when working with breastfeeding dyads. This finding is in line with findings from a previous South African study, indicating and reiterating that there is a need for increased exposure to breastfeeding management at a university level, in addition to exposure through Continuing Professional Development (CPD) events post-university (Eksteen et al., 2020). Currently, all SLT undergraduate training programmes in South Africa require students to be trained in paediatric dysphagia and neonatal intervention (Health Professions Council of South Africa, 2016). This training is directed by guidelines provided by SASLHA for early communication intervention, which includes the role of the SLT in the neonatal intensive care unit (NICU) (SASLHA, 2018). In order to build upon this knowledge and improve clinical skills, universities and training institutions should consider adapting the curriculum to include breastfeeding management training in greater detail, earlier on, to improve service provision within South Africa for inexperienced clinicians entering the profession as community service therapists. Increased, hands-on clinical exposure to breastfeeding dyads within the NICU and paediatric wards, whereby student clinicians provide breastfeeding support to parents under supervision, will allow for enriched application of skills to relevant contexts within South Africa. An adaptation in the curriculum may add to health promotion and prevention, enhancing infant growth and development. This is commensurate with findings from other, similar contexts, where limitations regarding breastfeeding teaching and learning are evident (Viaro et al., 2019). Potential solutions to participants' needs may not only be improved theoretical and clinical training of undergraduate students. The development of a mentor system, whereby recent graduates are guided by more experienced SLTs, from whom they can gain valuable skills regarding the clinical phenomenon, may also be of

value. This may also assist in advising less experienced clinicians about how to appropriately deal with the multicultural breastfeeding dyads within the South African context. Should these recommendations be applied and undergraduate curricula be adapted, student SLTs will gain greater knowledge and insight into breastfeeding management theoretically and practically. This could allow for enriched service provision to mothers and infants within various contexts in South Africa and shaping clinicians' clinical skills for the future.

### 4.3. Recommendations for future research

From this study, the researcher was able to gain valuable insight into the experiences of a small sample of SLTs regarding breastfeeding management in South Africa. This research serves as an initial step in understanding SLTs' perspectives regarding their role description in breastfeeding teams, and provides a gateway to further research regarding the breastfeeding phenomenon, and breastfeeding training amongst SLTs in South Africa. Considering implications for researchers, further research is recommended to elucidate the relationship between the degree of undergraduate training and SLTs' competence regarding breastfeeding management post-university. Research into assessment and treatment protocols used by SLTs in the South African context will be of value in possibly developing standardised assessment tools for breastfeeding in this setting. This would assist in providing clear practice guidelines for the management of breastfeeding dyads in LMICs by SLTs, showing implementation of EBP and PBE to improve clinical expertise, patients' access to SLT services, and thus prevent early breastfeeding cessation. Future large-scale studies, across South Africa possibly using surveys, or focus groups as data collection tools, could be of benefit in addressing the recommendations provided, as a better perspective of SLTs' needs would be obtained. This would allow for generalisable results. Additionally, investigation of recent graduates' perspectives regarding breastfeeding management could be valuable, as this study focused on an experienced and specialised population. It would also be beneficial for future research to focus on the development of SLT-specific breastfeeding training programmes and courses, to address the needs of participants, identified in this study. This may assist in serving SLTs with a special interest in breastfeeding management, who are unable to complete training as SACLCs. The recommendations provided may assist in

tailoring future training for SLTs and increasing breastfeeding management exposure, thereby prioritising patient care within clinical settings across South Africa.

### 4.4. Strengths

The qualitative nature of the study allowed for in-depth analysis of the lived experiences of SLTs regarding breastfeeding management in South Africa, as well as their opinions and feelings about this phenomenon. Qualitative research also allowed the researcher to be flexible in the research approach, to allow for extensive insight into breastfeeding management to be obtained (Rahman, 2016).

An additional strength of the study was the use of online interviews as a data collection method. This was cost- and time-effective, and allowed participants in various geographical locations to be included, resulting in a more representative sample of SLTs across South Africa (Thunberg & Arnell, 2021). This research is of value to the South African context and other LMICs, as improved understanding of the role of SLTs within breastfeeding teams, has the potential to improve the efficacy of SLT service provision, thus preventing early breastfeeding cessation, and contributing towards UNICEF's Strategy for Health 2016-2030.

### 4.5. Limitations

The purposive nature of the study resulted in the sample including SLTs with a special interest in breastfeeding management. The findings are therefore from the perspective of a specialist and experienced population, and excludes other SLTs, who do not have a special interest in this phenomenon, but who deal with breastfeeding management daily. Although the sample size of the study is commensurate with other qualitative studies, similar in nature, giving rise to valuable results, findings may not be generalisable because of only sampling 12 SLTs.

### 4.6. Conclusion

Intrinsic motivation appears to be prevalent in SLTs included in the sample, resulting in a positive and enthusiastic approach to their work, and encouraging them to engage in ongoing learning opportunities. It is therefore apparent as to why these clinicians understand their role within breastfeeding teams in such detail. However, this will not be the case for all SLTs working with breastfeeding dyads in South Africa, as

CPD, postgraduate studies and lactation learning opportunities are not always financially or logistically accessible. This necessitates universities to ensure that undergraduate curricula provide an appropriate foundation for the management of breastfeeding dyads by SLTs. Additionally, CPD opportunities in the form of webinars, lectures, courses, and workshops, should become more accessible to all SLTs working with breastfeeding dyads across South Africa. Staff in-service training should also be prioritised within all contexts that include SLTs managing breastfeeding dyads, to ensure on-going education.

This study provides a detailed understanding of SLTs' perspectives regarding breastfeeding management. SLTs' role in treating the breastfeeding dyad is understood; however, this is supported by the completion of additional breastfeeding-related training and professional development opportunities. Increased exposure to the breastfeeding phenomenon, and management of breastfeeding dyads at a university-level, will potentially positively influence SLTs' knowledge and skills, as well as foster competence and confidence. It is apparent that SLTs are not required to complete the SACLC course; however, collaboration with SACLCs and other team members will prevent solitary case management, ensuring holistic and best possible treatment (ASHA, 2016). Thus, service provision will likely be enriched (UNICEF, 2016), preventing early breastfeeding cessation, and allowing infants and mothers to reap the benefits associated with breastfeeding (Del Ciampo & Del Ciampo, 2018).

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## Appendices

## Appendix A: Ethical clearance letter: Faculty of Humanities Research Ethics Committee


Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha la Bomotho


18 February 2022

Dear Miss D Schlome

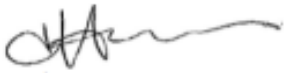
| | |
|---|---|
| Project Title: | Breastfeeding management experiences of a sample of speech-language therapists in South Africa: A qualitative Study |
| Researcher: | Miss D Schlome |
| Supervisor(s): | Dr E Krüger |
| Department: | Speech Language Pathology and Audiology |
| Reference number: | 17126330 (HUM002/1221) |
| Degree: | Masters |

I have pleasure in informing you that the above application was **approved** by the Research Ethics Committee on 18 February 2022. Data collection may therefore commence.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should the actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

We wish you success with the project.

Sincerely,



**Prof Karen Harris**
**Chair: Research Ethics Committee**
**Faculty of Humanities**
**UNIVERSITY OF PRETORIA**
**e-mail: tracey.andrew@up.ac.za**



Room 7-27, Humanities Building, University of Pretoria, Private Bag X20, Hatfield 0028, South Africa
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## Appendix B: Information leaflet and informed consent document

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Humanities 100. Since 1919

Department of Speech-Language Pathology and Audiology

**PARTICIPANT INFORMATION LEAFLET:**

**Study title**: Breastfeeding management experiences of a sample of speech-language therapists in South Africa: A Qualitative study

**Researcher:** Danica Schlome

**Supervisor:** Dr E Krüger & Mrs B Pillay

**Institution:** Department of Speech-Language Pathology & Audiology, University of Pretoria

**CONTACT DETAILS:**

**Telephone number:** 0832584647

**E-mail address:** u17126330@tuks.co.za

Dear Participant,

1) **INTRODUCTION**

I am a MA Speech-language Pathology student from the University of Pretoria and I am researching breastfeeding management experiences of speech-language therapists in South Africa.

I invite you to participate in this research study. This information document will help you to decide if you would like to participate. Before you agree to participate, you should fully understand what is involved. If you have any questions that this document does not fully explain, please do not hesitate to ask me, the researcher, Danica Schlome at u17126330@tuks.co.za.

2) **THE NATURE AND PURPOSE OF THIS STUDY**

The aim of this study is to describe speech-language therapists' experiences regarding breastfeeding management in South Africa. This study will provide a baseline for an improved understanding of the role description of the speech-language therapist in breastfeeding teams, which will be the initial step in adjusting current training and tailoring future education opportunities for speech-language therapists regarding breastfeeding management.

3) **EXPLANATION OF PROCEDURES AND WHAT WILL BE EXPECTED FROM PARTICIPANTS**

The research study will be conducted online via Microsoft Teams. You will be contacted to schedule an online interview. The interview will take approximately 45 minutes to complete. With your consent, the online interview will be video and audio recorded to be analysed later by the researcher.

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Email esedra.kruger@up.ac.za | www.up.ac.za/faculty-of-humanities

**4) POSSIBLE RISK AND DISCOMFORT INVOLVED**

This study does not present any risks. Limited discomfort in sharing personal experience may be experienced.

**5) POSSIBLE BENEFITS OF THIS STUDY**

Although you may not benefit directly from the study, the results of the study will enable the researcher to further understand the description of the role of the speech-language therapist in breastfeeding teams. This information may help guide tailoring of current and future training opportunities for speech-language therapists in South Africa.

**6) YOUR RIGHTS AS A PARTICIPANT**

Your participation in this research study is entirely voluntary. You may refuse to participate or stop at any time during the study without reason and your withdrawal will not negatively affect you in any way or any affiliation with the University of Pretoria. The information that you provide during the online interview will be stored on a password protected drive and will remain strictly confidential. Nobody but the researcher will have access to this information.

**7) ETHICS APPROVAL**

This proposed research study was submitted to the Faculty of Humanities Research Ethics Committee at the University of Pretoria, and written approval has been granted by this committee. The study has been structured in accordance with the Declaration of Helsinki (last update: October 2013), which deals with the recommendations guiding health care professionals in research involving humans. A copy of the Declaration may be obtained from the researcher should you wish to review it.

**8) COMPENSATION**

You will not be paid to take part in the research study. As data costs may be incurred during participation in the online interview, the researcher will provide you with a R40 data voucher on the day of the interview.

**9) DATA STORAGE**

Recordings of interviews will be safely stored on a password protected drive at the Department of Speech-Language Pathology and Audiology, to which only the researcher has access. This information will later be transferred to the repository and then deleted from the drive. Data will be stored for a minimum of 15 years. If you choose to withdraw your information will not be used in the study. Any hard copies of data will be stored in room 2-11 in the Communication Pathology building

Room 2-12, Communication Pathology Building
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**10) CONFIDENTIALITY**

All information will be kept strictly confidential. A code will be assigned to each participant during data collection, which will be used throughout the study. You will not be identifiable when the data is processed into a research report. Research reports and articles in scientific journals will not include any information that discloses your identity. The researcher intends to publish the findings in a Masters research report, as well as a scientific article.

**11) INFORMATION AND CONTACT PERSON**

If you have any further questions about the research study, please do not hesitate to contact me, Danica Schlome (u17126330@tuks.co.za) or the research supervisors, Dr E Krüger (esedra.kruger@up.ac.za) and Mrs B Pillay (bhavani.pillay@up.ac.za).

**Danica Schlome**
***MA Speech-language Pathology Student***

**Dr E Krüger**
***Supervisor***

**Mrs B Pillay**
***Co-Supervisor***

**Prof. J van der Linde**
**Head of Department Speech-Language Pathology and Audiology**

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**INFORMED CONSENT**

**Breastfeeding management experiences of a sample of speech-language therapists in South Africa: A Qualitative study**

- ☐ I confirm that the researcher requesting my consent for me to take part in this study has informed me about the nature and process, potential risks or discomfort, as well as the benefits of the study.
- ☐ I have read and understood the above written information about this study.
- ☐ I have had adequate time to ask questions and have no objections to participate willingly in this study.
- ☐ I am aware that the information obtained in this study, including personal details, will be confidentially processed, and presented in the reporting of results.
- ☐ I understand that I will not be penalised in any way should I wish to discontinue with this study and that withdrawal will not affect me.
- ☐ I have received a signed copy of this informed consent agreement.

I consent to the data obtained from this study to be used in future research endeavours:

| Yes | No |
|---|---|

| _____ | _____ | _____ |
|---|---|---|
| **Participant name (Please Print)** | **Participant signature** | **Date** |

DSchlome

**Miss D Schlome**
***Researcher***

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## Appendix C: Social media permission letters

UNIVERSITEIT VAN PRETORIA
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YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha la Bomotho

December 2021

To whom it may concern

**Breastfeeding management by speech-language therapists in South Africa: A Qualitative Study**

I am a MA Speech-language Pathology Student from the Department of Speech-Language Pathology and Audiology at the University of Pretoria. The aim of this study is to describe speech-language therapists' perspectives regarding breastfeeding management in South Africa. Data will be collected through online interviews via Microsoft Teams, which should last approximately 45 minutes.

I would like to ask permission to post an infographic on your Facebook group to advertise my study and to recruit participants. All data collected will remain strictly confidential and you will not be required to support me in any way. My study is currently awaiting ethical clearance from the UP

If you have any queries about this research study, please do not hesitate to contact me via email (u17126330@tuks.co.za).

Warm regards

Danica Schlome
**RESEARCHER**

Dr E Krüger
**RESEARCH SUPERVISOR**

Mrs B Pillay
**RESEARCH SUPERVISOR**

I Karyn Casey (full name) acknowledge that I am the administrator for the Facebook group South African Audiologists and Speech-Language Therapists (name of Facebook group) and I hereby give permission to Danica Schlome to post an infographic in this Facebook group for the purpose of a MA Speech-language Pathology study at the University of Pretoria.

| Karyn Casey | | ADMIN | 06/12/2021 |
|---|---|---|---|
| Full Name (print) | Signature | Designation | Date |

Official Stamp

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YUNIBESITHI YA PRETORIA

Faculty of Humanities
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If you have any queries about this research study, please do not hesitate to contact me via email (u17126330@tuks.co.za).

Warm regards

DSchlome

Danica Schlome
**RESEARCHER**

Krüger

Dr E Krüger
**RESEARCH SUPERVISOR**

BPillay

Mrs B Pillay
**RESEARCH SUPERVISOR**

I Alison Dent (full name) acknowledge that I am the administrator for the Facebook group Sashla (name of Facebook group) and I hereby give permission to Danica Schlome to post an infographic in this Facebook group for the purpose of a MA Speech-language Pathology study at the University of Pretoria.

| Alison Jane Dent | | Committee Chair | 6th dec 2021 |
|---|---|---|---|
| Full Name (print) | Signature | Designation | Date |

Official Stamp

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UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Humanities 100.
Since 1919

December 2021

To whom it may concern

**Breastfeeding management by speech-language therapists in South Africa: A Qualitative Study**

I am a MA Speech-language Pathology Student from the Department of Speech-Language Pathology and Audiology at the University of Pretoria. The aim of this study is to describe speech-language therapists' perspectives regarding breastfeeding management in South Africa. Data will be collected through online interviews via Microsoft Teams, which should last approximately 45 minutes.

I would like to ask permission to post an infographic on your Facebook group to advertise my study and to recruit participants. All data collected will remain strictly confidential and you will not be required to support me in any way. My study is currently awaiting ethical clearance from the UP

If you have any queries about this research study, please do not hesitate to contact me via email (u17126330@tuks.co.za).

Warm regards

Danica Schlome
**RESEARCHER**

Dr E Krüger
**RESEARCH SUPERVISOR**

Mrs B Pillay
**RESEARCH SUPERVISOR**

I, Salome Geertsema, (full name) acknowledge that I am the administrator for the Facebook group, Allied Health in South Africa!, and I hereby give permission to Danica Schlome to post an infographic in this Facebook group for the purpose of a MA Speech-language Pathology study at the University of Pretoria.

| Salome Geertsema | Signature | Administrator | 2021/12/03 |
|---|---|---|---|
| | | Designation | Date |

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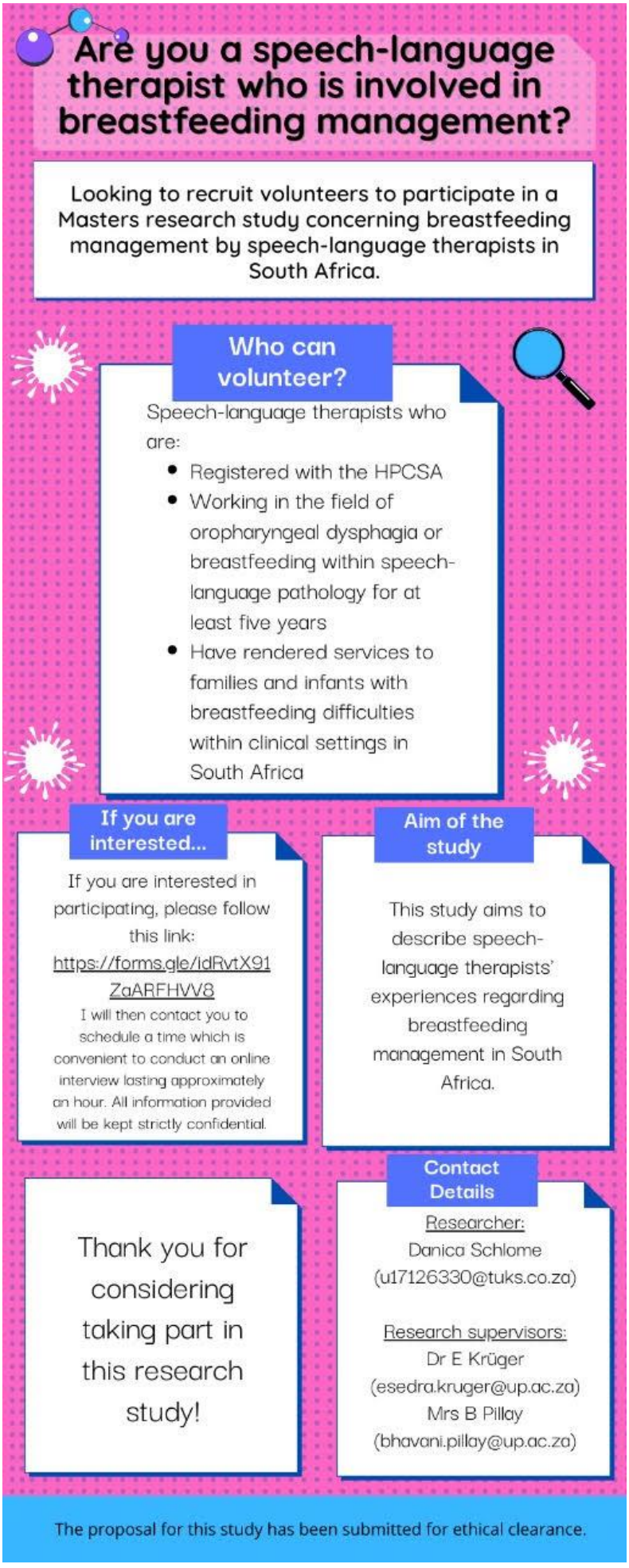
**Appendix D: Social media flyer**



## Appendix E: Interview schedule

**BREASTFEEDING MANAGEMENT BY SPEECH-LANGUAGE THERAPISTS IN SOUTH AFRICA: A QUALITATIVE STUDY**

**INTERVIEW SCHEDULE**

The aim of this research study is to describe SLTs' experiences regarding breastfeeding management in South Africa.

This semi-structured interview is being conducted as part of a research study at the University of Pretoria. The interview should take approximately 45 minutes. Participation is voluntary and participants may choose to discontinue at any time.

**SECTION A: Demographic Information**

1. **Number of years of experience:**
   - □ < 5 years
   - □ 0-5 years
   - □ 6-10 years
   - □ > 10 years

2. **Undergraduate qualification obtained from:**
   - □ Sefako Makgato Health Sciences University
   - □ Stellenbosch University
   - □ University of Cape Town
   - □ University of KwaZulu Natal
   - □ University of Pretoria
   - □ University of the Witwatersrand

3. **Highest level of qualification:**
   - □ Undergraduate degree
   - □ Masters degree
   - □ Doctor of Philosophy (PhD)

4. **Additional training:**
   - □ South African Certified Lactation Consultant (SACLC)
   - □ International Board-Certified Lactation Consultant (IBCLC)
   - □ Baby Friendly Hospital Initiative
   - □ Neuro-developmental Therapy (NDT) training courses (basic and/or advanced)
   - □ Additional breastfeeding-related CPD events/seminars
   - □ No additional training
   - □ Other: _____

5. **Main interest in the field of speech-language therapy:**
   - □ Paediatric swallowing and feeding and dysphagia management
   - □ Breastfeeding management
   - □ Adult swallowing and feeding and dysphagia management
   - □ Paediatric speech, language and fluency disorders
   - □ Adult neurogenic speech and language disorders

6. **Current work context:**
   - District/regional hospital
   - Tertiary/academic hospital
   - Community health care clinic
   - Private hospital
   - Home visits
   - Schools
   - Private practice
   - University
   - Unemployed

**SECTION B: Clinical Experience with Breastfeeding Management**

The questions below will be used to gain information regarding qualified speech-language therapists' experiences about breastfeeding management in South Africa.

1. Can you please comment on how frequently you encounter patients with breastfeeding difficulties in your paediatric work context?
   (***Probes***: Daily, weekly, monthly)

2. As a speech-language therapist, do you consider breastfeeding management to be an important role and what do you perceive this role includes regarding the management of cases involving breastfeeding difficulties?
   (***Probe***: If so, why?)

3. Can you please tell me about what kind of breastfeeding difficulties you commonly encounter?
   (***Probes***: Latch, suck, positioning, weight gain, complex medical issues)

4. How competent do you feel about assessing infants and their mothers who have breastfeeding difficulty?

5. What do you base this competence on?
   (***Probe***: Training or experience?)

6. Can you tell me where you learnt most about breastfeeding management?
   (***Probe***: Undergraduate degree? Which courses or trainings have you completed?
   ***Follow-up***: which of these trainings would you recommend to new graduates?)

7. Can you please comment on what exposure you had to breastfeeding management on an undergraduate level at university?

8. Can you comment on the tools and procedures you make use of when conducting breastfeeding assessments?

9. Can you elaborate on the areas of swallowing and feeding that you would focus on in terms of management?
   (***Probes:*** Assessment areas? Treatment areas?)

10. Which areas of intervention do you feel the most competent in treating? Probe: Why?

11. Can you please comment on any aspects in breastfeeding that you do not feel confident to treat?

12. Can you elaborate on the collaboration that you are currently involved in when treating infants and families requiring breastfeeding support?
    (***Probe***: Which professionals have you collaborated with previously?)

13. Can you explain what you perceive to be the difference between the speech-language therapist and the lactation consultant in breastfeeding management?

14. Do you think it is important for speech-language therapists working in breastfeeding management to complete training as lactation consultants?

15. Do you have any recommendations regarding improving clinical competence of speech-language therapists regarding breastfeeding management?

**References**

Blake, A. N. (2014). *Breastfeeding knowledge and clinical management among speech-language pathologist*. University of North Carolina.

Eksteen, A. M., De Witt, Z., Krüger, A. M., Stander, L. K., & Swart, A. C. (2020). South African Speech-Language Therapists 'perspectives on their role in breastfeeding management. *Unpublished undergraduate research report*. https://doi.org/10.31826/jlr-2014-110101

## Appendix F: Proof of submission to the Journal of Human Lactation


# Submission Confirmation

Print

Thank you for your submission

| | |
|---|---|
| **Submitted to** | Journal of Human Lactation |
| **Manuscript ID** | JHL-22-12-278 |
| **Title** | Perspectives on breastfeeding management by South African speech-language pathologists: A Qualitative Study |
| **Authors** | Schlome, Danica<br>Krüger, Esedra<br>Pillay, S Bhavani |
| **Date Submitted** | 02-Dec-2022 |