

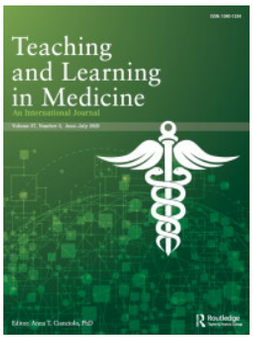
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Lessons from an exploratory qualitative survey on simulation opportunities for clinical education in SpeechLanguage Pathology and Audiology in South Africa

Jennifer Watermeyer; Amisha Kanji

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Lessons From an Exploratory Qualitative Survey on Simulation Opportunities for Clinical Education in Speech-Language Pathology and Audiology in South Africa

Jennifer Watermeyer and Amisha Kanji

Department of Speech Pathology and Audiology, School of Human and Community Development, University of the Witwatersrand, Johannesburg, South Africa

ABSTRACT

Phenomenon: This study explored experiences of simulation-based clinical education in the Speech-Language Pathology and Audiology professions in South Africa, a Global South context where research on this topic is limited. In this context, the COVID-19 pandemic brought simulation to the forefront of clinical education as a training solution when in-person encounters were impossible. As these simulation-based training approaches gain traction, with continued use post-pandemic, it is important to understand how they are currently being used so that appropriate support can be offered to ensure their efficiency and success in the future. ***Approach***: We distributed a survey to South African university departments offering Speech-Language Pathology and Audiology training, inviting participation from students across years of study and clinical educators. Data were collected between October 2022 and February 2023. Twelve responses were received: three from clinical educators and nine from students. We analyzed the responses using descriptive statistics and a domain summary approach. ***Findings***: Simulated activities were implemented as options for clinical education in South African Speech-Language Pathology and Audiology (SLP/A) programs during the pandemic, albeit in a somewhat haphazard way depending on available resources, often with limited preparation or guidance. Some universities have continued using aspects of simulation training post-pandemic. ***Insights***: Our findings, although preliminary, are somewhat consistent with Global North literature, particularly regarding barriers and challenges to implementing these approaches in clinical education. We offer suggestions for enhancing the support of simulation-based clinical education in our context.

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Audiology; clinical education; simulation; South Africa; speech-Language Pathology

Introduction

Clinical education across the health professions has traditionally involved in-person methods of clinical placements, with a strong focus on direct supervision and in-person patient contact. However, increases in student numbers, decreases in placement opportunities, and pressures on healthcare systems and universities have forced training institutions to think creatively about effective, efficient, and sustainable methods of clinical education.[1]

Simulation-based approaches have become well-established as a method of clinical education across the health professions, including in the Speech-Language Pathology and Audiology (SLP/A) professions. Such approaches offer alternative and supplementary methods for preparing students for clinical practice, with training institutions ideally moving toward offering a mixture of both in-person and remote, virtual, or simulated opportunities for clinical education.[2,3]

Although simulation has been implemented in both professions prior to COVID-19 particularly in the Global North, the use of simulation-based training increased particularly during the pandemic when it was offered as a solution to ensure that clinical education continued despite restricted access to patients.[4,5] Technological approaches embraced during this time are likely to be used increasingly going forward,[6,7] making it important to understand current practices and experiences involving simulation-based approaches to clinical training.

Although there is substantial literature on this topic from the Global North, limited research has

CONTACT Jennifer Watermeyer Jennifer.watermeyer@wits.ac.za Department of Speech Pathology and Audiology, School of Human and Community Development, University of the Witwatersrand, Johannesburg, South Africa
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been conducted on the use of simulation-based clinical training in the SLP/A field in the Global South, where resources to support and facilitate simulated activities may be limited, training programs are not necessarily well-established, and additional complexities exist. In this paper, we report on a survey of simulation-based approaches to clinical education in SLP/A in South Africa, where such approaches are only beginning to gain traction, clinical educators may not have training in utilizing these approaches, and there are limited context-specific guidelines available to support students and clinical educators.[8]

Opportunities for simulation-based clinical education in SLP/A

Simulation-based clinical education involves a variety of structured activities that represent actual or potential clinical practice situations,[9] with fidelity referring to how closely the simulated activity matches reality.[10] Low-fidelity simulations are typically used to facilitate student learning of procedural or practical skills whereas high-fidelity simulations provide opportunities for more complex skills through the provision of scenarios and related, realistic feedback.[11] Simulated activities used in SLP/A include role-play, computer-based simulation, and virtual environments, and they may involve standardized patients or manikins, etc.[10]

There are several challenges that may be addressed through simulation-based training, such as variations in quality clinical education at external sites, dealing with complex interactions where prerequisite learning may be needed, and the availability of professionals for student supervision at clinical placement sites.[12] In SLP/A, simulation-based approaches can partially replace traditional placement time for students without loss of competency;[13] lead to increased confidence in skills for students;[14] provide a safe environment for students to practice applying theoretical knowledge to practice;[15] and minimize risks for students and patients,[16] amongst other advantages. Although there may be challenges with using some simulated approaches such as standardized patients, Zraick[17] encourages educators to consider involving them to facilitate student learning of clinical skills and to assess students' clinical competency. Clinard[18] however reinforces the need to examine the effectiveness of simulation-based education.

Experiences and practices of simulation-based approaches for clinical training in SLP/A

There is literature documenting experiences of and perspectives on simulation-based clinical education opportunities in SLP/A, across various types of simulated activities both before and during the COVID-19 pandemic. Studies have been conducted in Audiology[2,19] and SLP,[20] with a strong focus on Global North contexts. Findings generally suggest benefits of using interprofessional simulation training as a means to improve students' confidence in knowledge and skills.[2]

The literature frequently reports positive responses from students to simulated activities and increased confidence in clinical skills, although Busch and Ma[21] caution that their research showed moderate to positive sentiments regarding satisfaction, confidence and interpersonal skills gained from simulated activities. Walker[22] and Andre et al.[19] note a lack of structure and guidance, and Alanazi et al.[23] mention a lack of preparation and debriefing for simulation activities.

There is limited research available from the Global South on experiences and perceptions of simulation in SLP/A. A review of simulation-based clinical education in Audiology[2] includes only a few studies from Global South contexts such as Saudi Arabia and Malaysia. A study from Chile[24] notes SLP students' positive perceptions of simulated activities. A study from Malaysia[25] reports that standardized patient training offers good learning opportunities for case history-taking amongst student audiologists. Although a few articles have been published on simulation-based learning and its implications for SLP/A in South Africa (e.g., Nagdee et al.'s study[26]), these have tended to take the form of reviews of literature predominantly from the Global North rather than offering empirical evidence from the South African context to contribute to an understanding of the use of simulation in clinical education in these fields.

The current study

The aim of the current study was to explore the implementation, experiences, and challenges of clinical educators and students involved in simulation-based clinical education in SLP/A in South Africa. South Africa, with its backdrop of significant demographic diversity, extremes of resource allocation, and history of medical innovation, provides an interesting context in which to conduct research on this topic. While there is very limited research on simulation in the SLP/A field in this context, studies on simulation

experiences in other clinical education fields in South Africa suggest that these approaches may be difficult to implement in this context for a number of reasons. These include logistical challenges, costs especially related to high-fidelity simulation,[27] a lack of trained educators with knowledge and skills in simulation,[28] a lack of simulation facilitators,[29] unprepared students,[30] and a lack of equipment for simulated activities.[31] Understanding how simulation is being used in SLP/A clinical education in South Africa, as well as student and clinical educators' experiences in this regard, can assist in gaining insight into how best to support its use for clinical education.

Both authors of this manuscript are dually qualified as Speech-Language Pathologists and Audiologists, although JW works in the SLP department and AK works in the Audiology department at the same university. Both authors are currently involved in studies on simulation opportunities in SLP/A, and both authors have experience as clinical educators who have supervised student learning during simulated activities. Working in the South African context requires constant reflexivity and engagement with the realities of this context. Clinical teaching and learning can be more challenging due to the diversity in student bodies, limited resources, external pressures such as educational expenses, etc. Our experience as clinical educators and academics has also made us aware of the challenges associated with planning curriculum such that students are afforded sufficient opportunity to bridge the gap between theory and practice.

Methods

Study design

We employed a descriptive survey research design for this exploratory study, including both closed- and open-ended questions. The qualitative aspects of the study were guided by suggestions for qualitative descriptive studies[32] and qualitative online surveys.[33] We designed an anonymous national online survey with options for responses from different stakeholders (including students, academics and clinical educators in SLP/A) to gain perspective on their experiences of simulated activities in clinical education. The decision to use this design was based on experience with a similar project[34] where using a qualitative online survey had yielded a satisfactory number of participants and sufficiently rich data. In their description of qualitative surveys, Braun et al.[33] assert that this approach can be used successfully to gain insights into participants' experiences, perceptions, and reported practices. The open-ended questions were thus used as an opportunity for participants to elaborate on particular closed-ended responses and relay their experiences of engaging with simulation-based clinical education.

In our planning, we considered different options and configurations for approaching this exploratory study. We decided to target both SLP/A in the same study because these professions are often housed in the same department at South African universities. This decision was related to factors such as survey fatigue (noted in other recent studies we had conducted) and to the challenges of accessing university-based participants (which we describe later in this paper). We offered participants the option of participating in an online interview instead of completing a survey, but the response rate for this option was poor and we did not pursue it.

Survey design

Our study objectives included the following:

1. To describe the types of simulated activities used within the SLP/A curricula for clinical education;
2. To explore participants' understanding of simulation in clinical training;
3. To investigate how simulation approaches are currently being implemented in SLP/A clinical education programs in South Africa;
4. To describe the experiences of stakeholders who have engaged in simulated activities as part of clinical training; and
5. To describe the challenges or barriers encountered by stakeholders involved in simulated activities.

Our question design was informed in part by JW's qualitative survey of telepractice experiences in clinical training.[34] The academic and clinical educator survey consisted of 29 questions (6 demographic, 6 closed-ended, 17 open-ended) and the student survey consisted of 23 questions (3 demographic, 4 closed-ended, 16 open-ended). Topic areas included: types of simulated activities, implementation within the institution, preparation received for these activities, facilitators, challenges, and thoughts about additional support required. All open-ended questions were presented as free text boxes. The survey link was developed using Microsoft Forms. A list of the survey questions may be found in the Supplementary Material.

Both authors designed the survey questions, which then went through a refinement process informed by

the input of two research assistants. Most questions in the survey were found to be clear, straightforward and understandable, with minor revisions made to enhance clarity and reduce repetition.

Participants and recruitment strategy

There are seven universities in South Africa that offer SLP/A degrees. All South African degree programmes in the SLP/A professions are offered as a four-year undergraduate curriculum. The survey link was distributed to five universities. The SLP department at one of the universities is still new and we did not receive a response to our request to distribute the survey. Another university did not provide us with permission. We also advertised the study *via* the South African Speech Language and Hearing Association and on profession-specific Facebook pages. The advertising and recruitment process took place over several months.

Securing permission from each university to distribute our survey posed a significant challenge. This process took several months as we had to navigate the requirements of each university to access students and clinical educators for research purposes. In some instances, we had to obtain ethics clearance from institutions in addition to the ethics clearance already secured through our own university.

Participants were selected using non-probability, purposive sampling. Participants comprised (1) qualified *academics and clinical educators* registered with the Health Professions Council of South Africa who are singly or dually qualified as Speech-Language Pathologists and/or Audiologists; and (2) *students* registered in an undergraduate speech therapy or audiology programme who had some exposure to "hands-on" clinical practice. All participants needed to have experience of simulation opportunities. We did not specify inclusion criteria according to characteristics such as gender. The total size of the student body across all universities that offer SLP/A degrees is approximately 1000–1500, with approximately 60–100 clinical educators.

The final response rate for the survey included 12 participants – nine students and three clinical educators. One student only partially completed the survey. The distribution of participants across universities and student and clinical educator (CE) participant groups is illustrated in Figure 1. Unfortunately, we do not have information on how many people may have clicked on the survey link but not started it; however, since the questions were not compulsory, our sample does include incomplete responses. Responses to the qualitative questions ranged from a few words to several sentences or a short paragraph.

Ethical considerations

Ethics clearance was obtained from the University's Human Research Ethics Committee (HREC) Non-Medical (clearance #H220439). Completion of the anonymous survey was taken to mean implied consent was given. The data were saved in an Excel spreadsheet and stored in a password-protected, encrypted data cloud. We extended the survey to colleagues at our own university but ensured that the survey links were distributed by departmental administrators to avoid potential coercion. Similarly, we encouraged department heads to distribute the survey links *via* departmental administrators to avoid potential coercion of students and colleagues known to them, and colleagues at other universities known to us.

Data collection

Data were collected between October 2022 and February 2023.

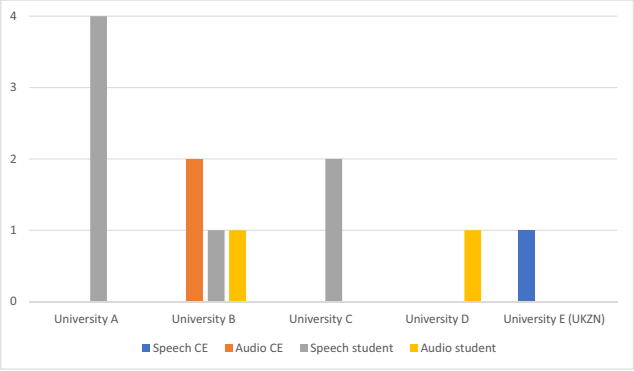


Figure 1. Distribution of survey responses across participant groups and universities.

Data analysis

Given the low number of participants and the disparate perspectives across some categories of participants, it proved difficult to apply true thematic analysis to this dataset as we had originally planned. We therefore analyzed the data using descriptive statistics for closed-ended questions and a domain summary approach for open-ended questions (as described by Braun et al.[35]). Findings were separated out by profession and participant category. AK analyzed questions related to study objectives one to three and JW analyzed questions related to objectives four and five. We held several debriefing discussions to achieve consensus on the domain summaries identified in the data analysis.

Trustworthiness

We ensured credibility through regular peer debriefing sessions. Transferability was promoted by including questions about participant demographics to ensure that the context was not ignored, and through purposive sampling of participants. Dependability was achieved by keeping a detailed record of the methods and design of the study. Confirmability was achieved through regular auditing and discussion between the authors to promote reflexivity.

Table 1. Clinical areas reportedly targeted by SLP/A simulation activities.

Speech-Language Pathology	Number of universities	Audiology	Number of universities
Articulation and phonological disorders	1	Adult diagnostic audiology (initial consultations)	1
Childhood speech and language, preschool language	3	Cerumen management	1
Learning Disability	1	(Newborn) hearing screening	1
Vocal pathologies	2	Auditory evoked potentials	1
Acquired neurogenic communication disorders in adults	2	Vestibular assessment	1
Pediatric dysphagia	1	Occupational audiology	1
Early childhood intervention	1	Pediatric aural rehabilitation	1
Speech and language screening	1	Central Auditory Processing Disorders	1
Fluency disorders	2		
Craniofacial disorders	1		

Results

Our findings related to aspects of simulation such as the types of activities used for clinical training, the clinical areas targeted *via* simulation-based approaches, participants' understanding and implementation of simulation, and a strong focus on participants' experiences of simulation-based opportunities.

Types of simulated activities used for clinical education

Participants mentioned a range of clinical areas targeted for simulated activities at their institutions, across SLP and Audiology (Table 1).

According to most (six of the eight) student responses, simulation was predominantly used to target child language (including language intervention for school-aged children). All clinical educators and most students indicated having personal experience with the simulation areas mentioned.

Understanding and implementation of simulation in SLP/A programs

Because the literature suggests that simulation is in its infancy in our context, we felt it important to explore participants' conceptualization of simulation because their understanding may influence what is implemented. Five of the eight student responses suggested that simulated activities mimic real-life scenarios or aspects of clinical care. Two clinical educators referred to the use of cases or case studies and one indicated the use of role-play and online presentations. Another clinical educator described simulated learning as involving artificially created scenarios to provide an experience of something that is possible in real life.

Responses from participants regarding the types of simulated activities reportedly implemented as part of clinical training are detailed in Figure 2. Findings indicated a strong reliance on low-fidelity simulation activities such as role-play and case studies with less of a reliance on high-fidelity activities such as virtual reality and manikin work. Clinical educators appeared to over-report advanced technology use compared to students. Conversely, students reported greater use of low-fidelity simulation, compared to clinical educators. This discrepancy may have arisen because not all the universities included were represented by both clinical educator and student participants and each university has different simulation resources available.

Two clinical educators indicated that simulation is used to supplement clinical teaching and one indicated

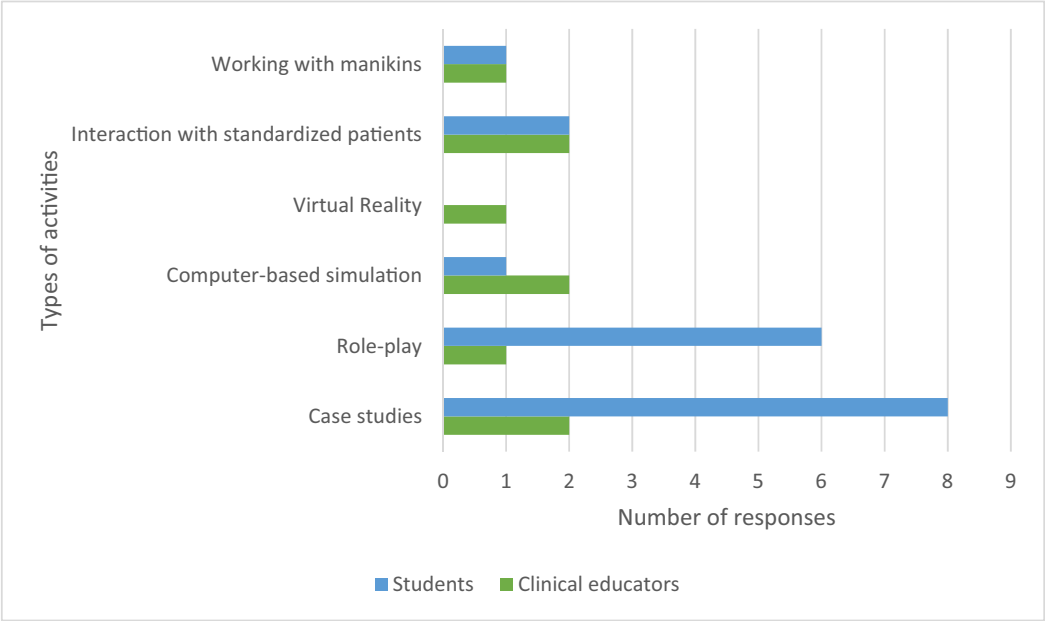


Figure 2. Types of simulated activities reportedly implemented.

that it is used both to supplement and to replace traditional approaches to clinical training in some areas. All clinical educators indicated that simulation activities were used for clinical, SLP/A assessment tasks only. In comparison, students indicated that these simulated activities included assessment and treatment, with two students indicating assessment or treatment only. Again, this disparity could have arisen because we did not have both clinical educator and student participants from all universities. The number of simulated cases that students were reportedly exposed to varied from two to 10 sessions.

Two clinical educators indicated that simulation is still being used post-pandemic. Half of the student participants indicated that simulation is still being used and the other half indicated its use at the height of the pandemic only. Minimal to no training was received to facilitate or supervise simulated cases. Student preparation included observation, related theory and an online orientation.

Clinical educators' experiences of simulated activities

Clinical educators' responses to questions regarding experiences of providing or supervising simulated activities related to several different aspects – for example, the need for debriefing after simulated tasks; the challenges of teaching communication aspects online; and the appropriateness of using international software programs and cases. Their experiences related to various types of simulated activities such as role-play, standardized patients, case studies, computer-based simulations and virtual reality.

When asked how their experiences of simulated activities might differ from in-person clinical activities, clinical educators described simulation as having "*ups and downs*" (PID10) and spoke about challenges related to "*mimicking reality accurately and it being costly*" (PID10). They also mentioned shifts in supervisory and marking styles required when implementing simulation-based activities, because "*it is difficult to assess student progress as there is no concrete evidence to prove that they completed the work themselves*" (PID13) and "*as a supervisor one's role is different [compared to traditional training approaches]*" (PID22).

Despite these challenges, some clinical educators mentioned that simulation has provided new opportunities for student learning and allowed for extension beyond 'traditional' approaches to clinical education. As one participant indicated, simulation "*provided a different type of learning opportunity for students and there were opportunities for assessment tools or procedures not routinely used in the clinic*" (PID22).

Clinical educators highlighted the challenges of determining progress and allocating marks for clinical skills taught and assessed *via* simulated activities that students completed in their own time, "*as there is no concrete evidence to prove that they completed the work themselves*" (PID13). In addition, some clinical educators mentioned that "*some students achieve marks disproportionate to other marks*" (PID22), suggesting challenges in

achieving equivalence of marks across different types of clinical training opportunities.

Clinical educators offered suggestions regarding elements required to ensure the successful implementation of simulation-based clinical education, such as "*more training on designing and facilitating simulations*" (PID10), "*a sound theoretical basis*" (PID 10) for students, and "*more case-based examples*" (PID13). One clinical educator spoke about the need for students to think holistically and see the bigger picture when engaging in simulated learning activities. Another clinical educator spoke about the need for students to work independently as well as in groups with other students and to be guided by clinical educators. A third clinical educator spoke about students requiring an attitude to learning in order to engage successfully with simulation.

In terms of carrying simulated clinical learning opportunities forward, one clinical educator spoke about it being a growing field that requires further research. Another clinical educator spoke about the need for the Health Professions Council of South Africa (HPCSA) to allow simulated activities as part of clinical hours (at the time of the study there was a cap on the number of clinical training hours for SLP/A that could be acquired *via* simulated activities, set at no more than 15% of the total clinical hours).

Students' experiences of simulated activities

Most students (six of the seven who responded to this question) indicated a positive experience of clinical learning *via* simulation. Students found simulated-based activities offered them a helpful platform to make the transition from theory to practice – "*a way to learn without diving headfirst into real life patients*" (PID14). They valued opportunities to "*practice with cases and improve knowledge*" in a safe environment that "*allows for mistakes to occur*" (PID23).

There were some challenges noted, however. One student indicated that engaging with simulation-based activities was not a positive experience and they did not feel they learned as much as they could have *via* a real-life scenario. Another student indicated that they found role-play awkward to engage in. Some students felt that simulated activities were more rigid and inflexible compared to real-life cases because "*you don't have the opportunity to try different options and methods and you're forced to do it one way*" (PID15). This was coupled with feelings of frustration at not seeing a case through from start to finish due to one "*not being able to see if the treatment works as it is not a real patient*" (PID23).

One student spoke particularly about peer role plays, which seemed to be used frequently across the universities. This student found them unrealistic, citing an example of having to role-play a child with a communication disorder. Other students spoke about feeling less inclined to participate and engage in simulated activities because they did not involve real patients. In particular, students reported feeling "*less empathetic*" (PID 24) when engaging with a simulated patient because the simulated activity did not feel sufficiently realistic and the personal aspect of being able to connect with a real patient was missing from simulated activities.

When asked how they felt simulated activities prepared them clinically for in-person scenarios, one student felt that simulation-based training helped with critical thinking, knowledge, and "*familiar[ity] with the audiological equipment*" (PID28) and testing procedures. Another student felt that simulation offers a useful way of including more practical demonstrations in lectures. However, challenges were noted in terms of the short time frame between completion of theoretical content and engagement with simulated activities requiring the transfer of skills learned in simulated tasks into a real-life scenario, leaving students with little time to process and make sense of the theory.

Students also provided some insight into aspects that assisted them to engage with simulated activities. Responses were varied, referring to facilitators such as internet access, engaging with relevant clinical educators and lecturers, and understanding theoretical knowledge. Two students spoke about being placed in a group, which helped them to work through simulated cases: "*It was easier discussing with my classmates how to do the cases and navigating ourselves through the program.*" (PID20)

When asked whether they thought simulated activities are an acceptable alternative to in-person clinical education, half of the students indicated yes and half indicated no. One student indicated that simulated activities should be used in conjunction with in-person activities. Responses related to the support participants required for simulated activities were rather ambivalent, with one student indicating no need for additional support and another indicating that they were not sure what support they required. Three students specified the type of support they felt they required, which included the need for access to better technology ($n = 1$), more advice from the lecturer ($n = 1$), and clearer instructions about the simulated task ($n = 1$).

Discussion

Our findings, although preliminary, seem to confirm assertions in the literature that the use of simulation-based clinical education is in its infancy across the SLP/A professions in South Africa. This is evident in participant responses related to the period in which simulation was initiated or implemented. Some universities implemented simulation under emergency conditions during the COVID-19 pandemic to ensure that students continued to obtain clinical hours and experience – but not all universities appear to have continued to use simulation-based clinical education post-pandemic. Our results show that simulation opportunities have been or are being used across a range of clinical areas and disorders, which is promising.

Our findings are somewhat consistent with Global North literature, particularly on the topic of experiences of simulation in clinical education. Similar to previous studies,[2] student participants reported simulation-based learning opportunities as generally positive experiences. Student understanding of the concept of simulation closely aligns with literature suggesting that it involves replication of real-life scenarios.[36]

Although the COVID-19 pandemic propelled the use of simulated activities for clinical education in our context, these activities seem to have been implemented rather haphazardly without much structure or careful planning, or else have continued to be implemented based on somewhat shaky foundations with limited preparation of students and their educators. Simulated activities can provide positive opportunities for clinical learning, but there is a lot of groundwork required to better prepare students and staff for engaging with these scenarios and a need to consider the degree of realism of such activities in relation to clinical outcomes. These findings echo those of studies conducted in other health professions engaging with simulation in South Africa[28–30] and also with the findings of studies conducted further afield. Dudding and Nottingham,[37] for example, reported barriers to simulated learning including a lack of knowledge, undertrained staff, and minimal guidance from professional accrediting bodies – suggesting that the challenges to implementing simulation-based clinical education may be more widespread than we had initially assumed.

Simulated activities for clinical education in our study (based on the types of simulated activities reportedly implemented) primarily seem to involve low-fidelity tasks such as case studies or peer role plays, which students were often left to complete in their own time, and which can pose problems for clinical educators in terms of marking. This trend may relate to a lack of funding and resources to facilitate the implementation of more high-fidelity, technology-driven options or the inclusion of trained simulated patients, confirming the findings of studies conducted on simulation experiences in other health professions in South Africa.[27,31] Our findings differ in this regard from studies such as that of Dudding and Nottingham[37] who report widespread use of high-fidelity techniques for simulation training in SLT/A in the United States, using approaches such as standardized patients and computer-based simulations.

The gaps in terms of preparation are explained by the emergency conditions under which simulation was introduced during the COVID-19 pandemic to ensure continuous clinical training.[8] However, if simulation is to be integrated successfully into SLP/A curricula in our context and used to its full potential, comprehensive context-specific training opportunities need to be made available for both students and clinical educators. Van der Merwe and colleagues[29] highlight the need for educator competency in both the development and delivery aspects of simulated activities to ensure requisite student learning. Watermeyer et al.,[38] in relation to telepractice, have argued that preparation and training should be tailored toward student needs and grounded in an understanding gleaned from the empirical study of real-time clinical teaching activities.

Both clinical educators and students referred to the central role of theory in relation to simulated activities, with student responses offering some important points for consideration in terms of how simulation is integrated with theoretical content. Students also raised concerns related to their engagement with simulated activities – for example, the rigidity of cases and the lack of realistic engagements with patients. These findings point to the need to consider how to facilitate and support highly immersive simulated learning opportunities with careful consideration of intended learning outcomes, students' levels of experience, contextually related resource availability and institutional and student needs.[29,36]

The concerns raised by students regarding their ability to engage with simulated activities need to be considered too – in particular, their dissatisfaction with the lack of realism in the simulated scenarios and their inability to engage with these activities in a truly empathetic manner. Alinier and Oriot[36] address these issues at length in their debate paper, emphasizing the need to make simulated activities work for

students in a realistic manner. They suggest focusing more strongly on pre-simulation debriefing activities, during which some of the issues around students' disbelief and the challenges related to a lack of true reality and simulated activities can be addressed. They also suggest that more time needs to be spent on preparing students to engage with simulated activities not just in terms of the technical skills involved, but also focusing on professional conduct, behavior and communication skills – and the latter presents an important future research thrust with which we are currently engaging.

Limitations

Limitations of the study include the small sample size; the omission of responses by some participants to the open-ended questions; and the lack of opportunity for us to probe answers further since there were not enough participants who accepted the offer of an interview. We acknowledge that we have not included in this study an audit of what each university is doing in terms of simulation, which presents an important opportunity for a follow-up study.

We were disappointed by the low response rate to our survey given the total national population of students and clinical educators across SLP/A. While general research fatigue trends undoubtedly played a role here[39] and the length of the survey may have contributed too, we wondered whether the poor response rate again confirms that simulation as a clinical education tool is in its infancy in our context.

Conclusion

Regardless of the limitations, our experience in conducting this study has important implications for future studies. We believe this kind of research into experiences across training institutions in SLP/A is essential if we are to understand and strengthen clinical practices, particularly in Global South contexts where these approaches to clinical teaching may be relatively novel and have been implemented in less-than-ideal emergency situations. However, this kind of national-level research and implementation of curricular advancements requires buy-in from institutions and departments. Perhaps there is an opportunity to encourage greater participation in this type of research if students and clinical educators are able to see direct implications of the research for their own practice.

If we are to move forward with building capacity and implementing simulation approaches as strong, effective means of supplementing traditional approaches to clinical education in SLP/A, then it is important that this is done with clear expectations, structure, and support. Support may include guidelines for clinical educators on how to effectively incorporate simulation within the curriculum. In addition, the development of communities of practice across health professions may be helpful for offering support to clinical educators involved in clinical education – especially in Global South contexts where there may be particular challenges and resource constraints to implementing simulation opportunities.

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ORCID

Jennifer Watermeyer http://orcid.org/0000-0001-7918-8832
Amisha Kanji http://orcid.org/0000-0002-9577-4935

Data availability statement

The data that support the findings of this study are not publicly available due to privacy or ethical restrictions. However, they can be shared in anonymized format on reasonable request.

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