Compulsory Community Service for Speech-language and Hearing Therapy Professionals: Readiness, Reality and Readjustment

by
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Thesis presented in partial fulfilment of the requirements for the degree Master of Philosophy (Health Sciences Education) at the University of Stellenbosch

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DECLARATION

I the undersigned declare that the work contained in this dissertation is my own original work and has not previously in its entirety or in part been submitted at any university for a degree

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E S Wranz **Date**

ABSTRACT

Compulsory Community Service for the speech-language and hearing therapy profession was implemented in 2003. This is the first study to assess the perceptions, attitudes and experiences of speech-language and hearing professionals of Stellenbosch University doing Compulsory Community Service. Information on the experiences of Compulsory Community Service professionals inform on the responsibilities of the university where undergraduate studies are completed, the Department of Health (the employer) and professionals doing Community Service. A mixed method study design, using a scale questionnaire, supplemented by open-ended questions was completed by all but one of the group doing Compulsory Community Service in 2009. Results suggested that speech-language and hearing therapists perceived themselves to have the required knowledge, but not necessarily adequate skills to perform Compulsory Community Service. Suggestions to include additional curriculum content were made. All professionals agreed that a positive contribution was made during Compulsory Community Service, but concerns about the shortage of speech-language and hearing therapy services, absence of mentors and supervision, inadequate budgets, amenities and resources were identified. Readjustment must involve adaptation from all stakeholders to ensure that Compulsory Community Service honours its original objectives.

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ABBREVIATIONS

CCS	Compulsory Community Service
DoH	Department of Health
HPCSA	Health Professions Council of South-Africa
SLHT(s)	Speech-language and Hearing Therapist(s)
SU	Stellenbosch University

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Key words: compulsory community service (CCS); speech-language and hearing therapist (SLHT); perceptions; readiness; reality; readjustment.

INTRODUCTION

Compulsory community service (CCS) for speech-language and hearing therapy students was implemented in January 2003 (Department of Health, Government Gazette, 2002). The first group subjected to CCS was medical doctors in 1998, followed by dentists in 2000 and pharmacists in 2001 (Reid, 2002). Seven other groups of health professionals, including speech-language and hearing therapists (SLHTs), started doing CCS at the beginning of 2003 (Reid, 2002), followed by nursing in 2004 (Mohammed, 2008). In 2009, the seventh group of SLHTs of Stellenbosch University (SU) performed their CCS. This is the first research project to report on the perceptions and attitudes of a group of SU SLHTs regarding their CCS.

The Department of Health (DoH) stated that its objective for initiating CCS was to ensure improved health services for all citizens in the country. Health professionals may, through rendering this service, develop their skills and acquire knowledge, behaviour patterns and critical thinking to assist in their professional development (Reid, 2002).

The South African DoH is confronted with the major challenges of providing basic health care to all citizens and repairing the historical inequalities in health services delivery. The ever increasing burden of chronic illnesses (HIV-Aids, tuberculosis, physical disability) and the difficulty of recruiting and retaining health care professionals

in rural and under-served regions complicate the provision of equitable and quality health care services. (Khan, Knight & Esterhuyzen, 2009).

One of the few studies on the experiences of speech-language and hearing therapy professionals during their CCS year in South Africa was done by Penn (2009). The study reported on feedback of 132 graduates from the University of the Witwatersrand on their community service placements from 2003 to 2008. Many graduates described their experiences as life changing and described an initial "overwhelmed" stage. One year group of CCS graduates were questioned later in the year, around August. This group expressed confidence and more proactive problem-solving skills. Across the groups a heightened awareness of their limitations was reported. Through the year they gained confidence to prioritise their caseload and deal with rare syndromes and paediatric dysphagia, and they were able to describe their strategies to overcome these. The results showed that the placement process has improved considerably from 2003 to 2008. Equipment improved, referral systems worked smoother and the recognition of the roles and functions of the SLHTs and/or audiologists on the team became clearer.

Penn (2009) further reported that contextual issues such as poverty, vulnerability and HIV/AIDS provoked considerable ethical issues with CCS professionals as they felt that they were required to deal with issues outside their recommended professional scope of practice. Based on the feedback regarding the adequacy of the undergraduate curriculum in preparing students for CCS, the University of the Witwatersrand undergraduate curriculum was revised and adapted. More module content on cerebral palsy and ethical problem solving as well as rural clinical placement was included.

A study by Khan, Knight and Esterhuizen (2009) exploring the perceptions and attitudes of SLHTs and audiologists, occupational therapists and physiotherapists doing CCS in KwaZulu-Natal during 2005 indicated that only 35% would apply for work in the

public sector and that a mere 24% were prepared to work in a rural area or remain at the same place of their CCS. Concerns were expressed regarding limited infrastructural support, supervision, training, resources at their disposal and communication difficulties during service delivery. Therapists declared that, despite facing numerous challenges, they believed that they made a difference where they worked and that they experienced personal and professional growth.

Although CCS does not exist in Australia, newly qualified professionals often end up working in rural areas. Loud (2001) investigated the experiences of newly qualified physiotherapists, occupational therapists and speech therapists working in rural areas in Western Australia and found that the majority of the recent graduates felt competent concerning their clinical skills, but acknowledged the need for ongoing support to deal efficiently with the wide range of clinical situations encountered in rural and remote clinics. Respondents indicated that the inclusion of content in undergraduate training that focused on issues typically encountered in rural areas contributed most to their effective functioning in these areas. They identified the need for more training in the management of caseloads and general managerial skills as their lack of managerial skills was a major source of high stress levels. Some occupational and speech therapists were required to supervise therapy assistants and did not feel equipped to do so. Graduates felt that academic staff at universities were unaware of rural issues and suggested more interaction and sharing of experiences to inform training programmes.

Research regarding CCS among the other health sciences professions in South Africa resulted in similar findings (Patterson, as cited in Shumba, 2008; Reid, 2002; Visser, Marais, du Plessis, Steenkamp & Troskie, 2006). Newly qualified health professionals, including dieticians, medical doctors, dentists and pharmacists indicated that there were areas in which they felt that they were not adequately prepared for independent practice. Negative experiences included lack of supervision and basic

facilities and resources, bureaucratic problems, poor hospital administration and a breakdown in communication. It was perceived that institutions were not ready to receive graduates. They experienced work overload, cultural barriers, and feelings of remoteness as well as a lack of promotional prospects. Personal issues raised were family and travel complications that included travelling far and on poor roads and the fact that their salaries were paid irregularly. Some professionals did not fully understand their function and role in CCS and felt that their services were under-utilised and that they were not granted the opportunity to work within a team. A survey done by the DoH of 15 district hospitals in rural areas in the Eastern Cape, KwaZulu-Natal and Limpopo Province revealed that technical skills, clinical skills, supervision and management support were lacking among junior doctors when in placement with limited supervision and management support.. The same skills were enhanced in placements where the supervision and management of junior doctors were adequate.

However, most professionals surveyed in the abovementioned study experienced CCS as positive and reported an improvement in knowledge and skills. The majority of CCS doctors felt that they had been well orientated, that they made a difference, that their year was worthwhile and that they developed professionally. Most pharmacists felt valued as part of a team and took some part in the management of the pharmacy or unit.

The goal of CCS, according to the DoH, is to benefit the community where the service is rendered as well as to equip CCS health professionals with appropriate and efficient clinical and professional skills, behaviour and critical thinking skills to mould and further their professional careers (Reid, 2002). The attainment of these two goals will be facilitated if CCS is appropriately implemented. It is imperative that the situational context where the CCS takes place allow optimum learning, teaching and gaining of experience. A context that is flawed by struggle and frustration may prevent effective learning. The health professional should not only gain experience in the holistic

treatment of patients, but should also experience professional growth. Regular evaluation of CCS could provide valuable information to stakeholders. Feedback regarding the health profile of a community may enable the DoH to plan for prevention as well as intervention and ultimately to improve service delivery, while feedback to universities may lead to better alignment of programmes with exit competencies.

CCS professionals are young and relatively inexperienced. They are often still in need of support, but within the reality of the South African public health service, they may be placed in remote locations to practise their professions without supervision (Reid, 2002). The undergraduate training programme plays a crucial role in preparing health professionals adequately for CCS. The young professionals doing CCS have to function effectively, render a professional service, adapt to sometimes harsh realities, make a useful contribution in the community where they serve and use their resources creatively.

The aim of this research project is to identify the potential gaps that exist between CCS professionals' perceived readiness and the demands of the reality (context) within which they have to function. Possible solutions and recommendations will be proposed according to the findings. The issues that will be explored in this study are depicted in Figure 1.

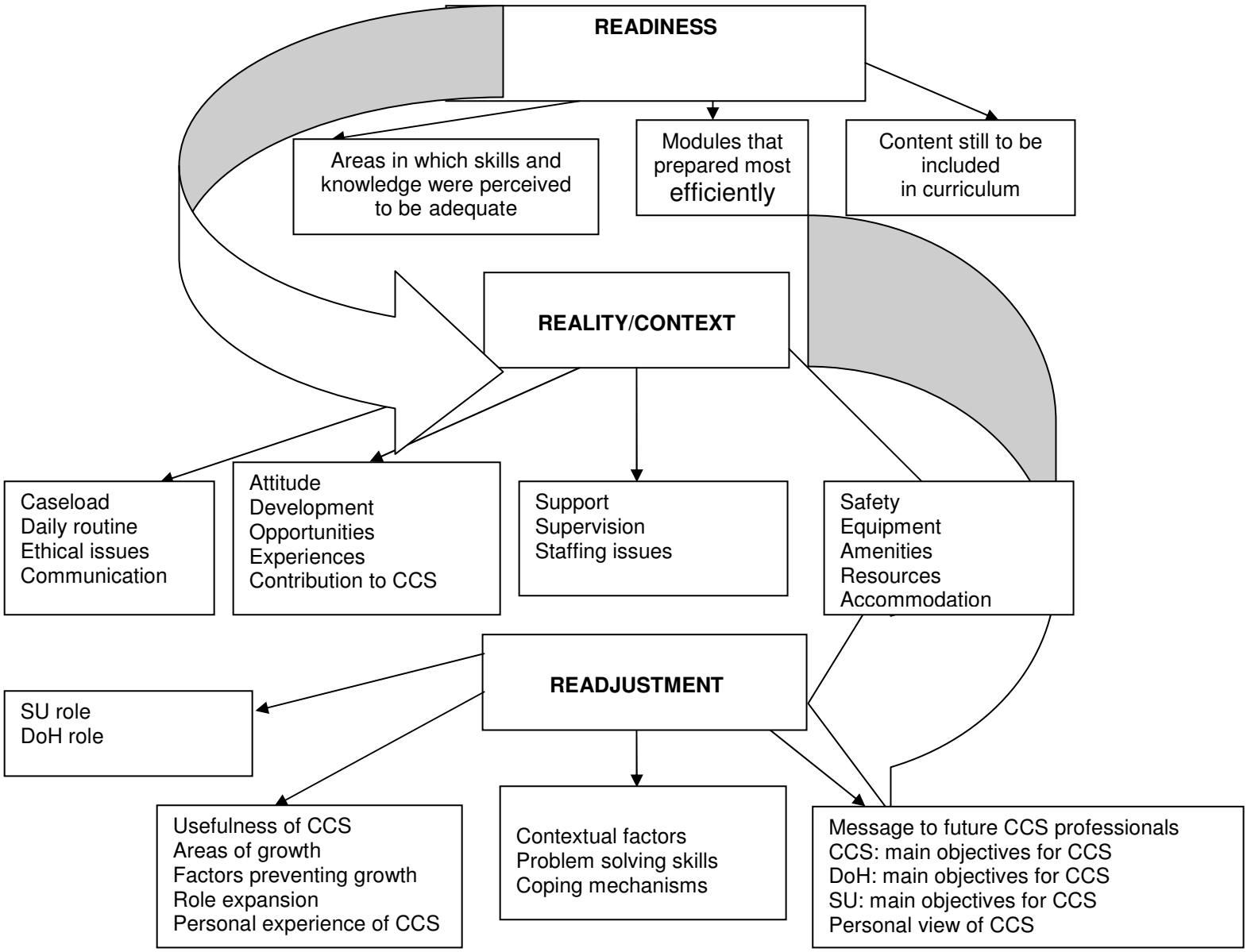

Figure 1: A schematic representation of the different areas of CCS that were explored during this study.

METHODOLOGY

A mixed-method study design using a survey scale questionnaire supplemented by open-ended questions was used for this research study. This method was chosen to enhance construct validity, to increase the possibility of the gathered information complementing each other and to elaborate and clarify the data obtained. A further advantage of the mixed-method approach may be to cross-check and corroborate different types of data by means of triangulation (Schifferdecker & Reed, 2009).

PARTICIPANTS

The participants in this project comprised 18 SLHTs who completed their CCS during 2009 in different primary, secondary and tertiary hospital locations in KwaZulu-Natal, Mpumalanga, the Free State, the Western Cape, the Northern Cape and the Eastern Cape. (Please refer to Figure 2, page 15.) Participation was voluntary and informed consent was obtained from each participant. Of 18 questionnaires sent to participants, 17 were returned and used in this study.

Although this was a descriptive study with a small sample size, the sample consisted of all the speech-language and hearing students who qualified at SU in 2008. In this qualitative study, corroborated by a questionnaire, the emphasis was not on the statistical significance of the data but on the experience or perceptions of this group. The information represented 95% of an entire year group of graduates.

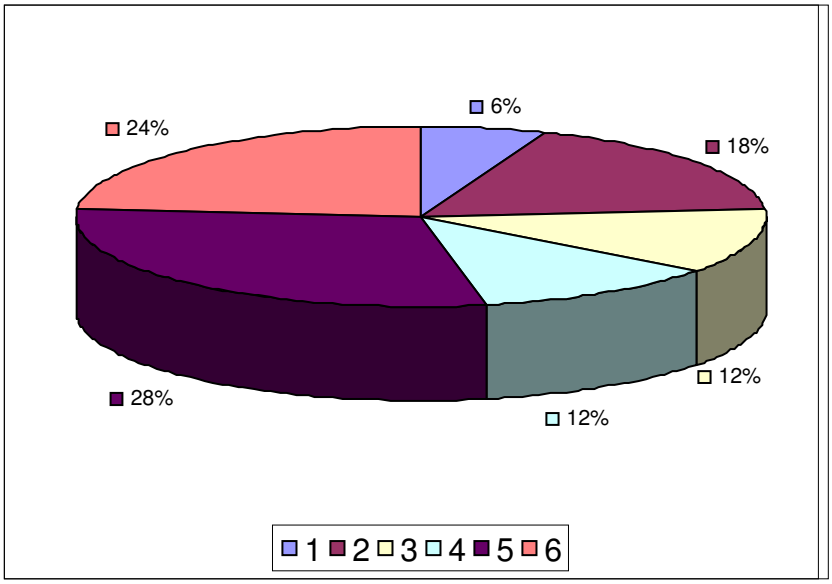

Figure 2: Placement of CCS SLHTs in KwaZulu-Natal (1), Mpumalanga (2), the Free State (3), the Western Cape (4), the Northern Cape (5) and the Eastern Cape (6).

MATERIALS AND PROCEDURES

Following approval from the Stellenbosch University Health Research Ethics Committee, ethics reference number N09/11/329, a questionnaire (see appendix) containing Likert-type as well as open-ended questions, compiled by the researcher, was disseminated to each of the 18 SLHTs who completed their CCS in 2009. The layout of the questionnaire, in terms of sequencing and grouping (open ended and close ended) of questions and wording within the questions was done according to the principles described by Maree (2007).

The questionnaire for this research project comprised three sections of questions, Readiness, Reality and Readjustment, to represent the main areas of investigation for this study. (See Figure 1 for schematic representation of areas investigated.) Each participant was contacted by phone towards the end of his or her CCS year, the end of 2009, to inform the participant of the research project and to request a valid contact address to send the questionnaire to early in 2010. The questionnaire included an information letter and instruction sheet, explaining the aims of the study and instructions for completion.

DATA ANALYSIS

Responses to the questionnaire were analysed quantitatively and qualitatively. The Centre of Statistical Consultation, SU, assisted in the analysis of the quantitative questions. The responses to the first 32 questions were analysed quantitatively and plotted in a histogram to indicate the percentages obtained from each question. Questions 6-32 were also analysed qualitatively as part of the question allowed for personal comments or elaboration. A qualitative data analysis software package (Atlasti®) was used to assist the process of analysing the last 25 open-ended questions. The open-ended questions were coded, grouped into themes and analysed qualitatively. The qualitative data analysis allowed the researcher to further compare and confirm the

different responses for each question. The responses were interpreted and grouped into the three main themes of this study: Readiness, Reality and Readjustment.

RESULTS

In the following sections the quantitative and qualitative results of the questionnaire will be discussed under the headings: Readiness, Reality/context and Readjustment (to adapt, change or alter). The Readjustment discussion comprises the recommendations ensuing from this research project.

READINESS

The questions that were posed to the CCS professionals in this section of the questionnaire dealt with the kind of skills (what is expected in terms of acquired clinical skills) and knowledge (what is required in terms of acquired academic knowledge) that they perceived themselves to have in different areas of service delivery. Questions also required information about the modules that they felt prepared them most for their CCS experience and additional content they would recommend for inclusion in the undergraduate curriculum to prepare the SLHT more efficiently for CCS.

The results pertaining to their perceptions of readiness to work in certain areas of professional service delivery are depicted in Figure 3. The modules on the horizontal axis represent the main topics that were covered during undergraduate training. (Please refer to addendum B for list of topics covered during undergraduate training).

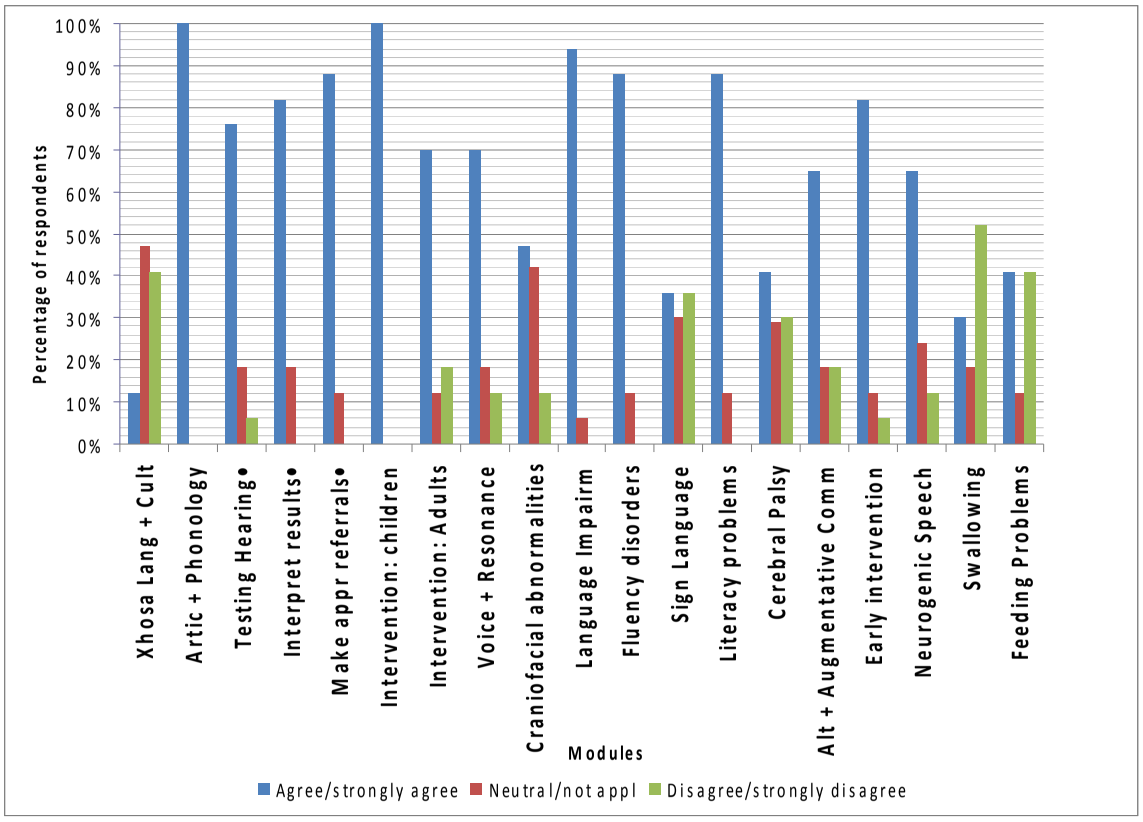

Figure 3: Readiness: CCS professionals' perceptions of their knowledge and skills to perform in the respective areas of service delivery.

More than half of the respondents (65%) indicated that the necessary skills had been provided by their training, whereas the majority (88%) felt that their training had provided them with the necessary knowledge. The responses regarding their skills and knowledge to work within certain areas revealed that in 11 areas, 70% or more respondents felt that they had the required skills and knowledge to provide the CCS service. The areas of perceived competence were articulation and phonology, testing hearing, interpreting results of hearing tests, making appropriate referrals, intervention with children and adults, voice and resonance, language impairments, fluency disorders, literacy problems and early intervention. In both the areas of alternative and augmentative communication and neurogenic speech disorders, 65% of respondents indicated that they perceived their skills and knowledge to be adequate.

The areas of service delivery in which less than 50% of respondents agreed that they felt confident to work in, were craniofacial abnormalities (47%), cerebral palsy (41%), feeding disorders (41%), sign language (36%), swallowing disorders (30%) feeding disorders (41%), and Xhosa language and culture (12%).

A few areas, such as Xhosa language and culture (47%), craniofacial abnormalities (42%), sign language (30%) and cerebral palsy (29%), yielded high percentages of neutral and not applicable responses. These responses may indicate that service delivery in these areas may not have been part of the respondents' case loads.

In Figure 4 the modules that SLHTs judged to have prepared them most efficiently for CCS are depicted. The modules on the horizontal axis represent the main topics that were covered during undergraduate training.

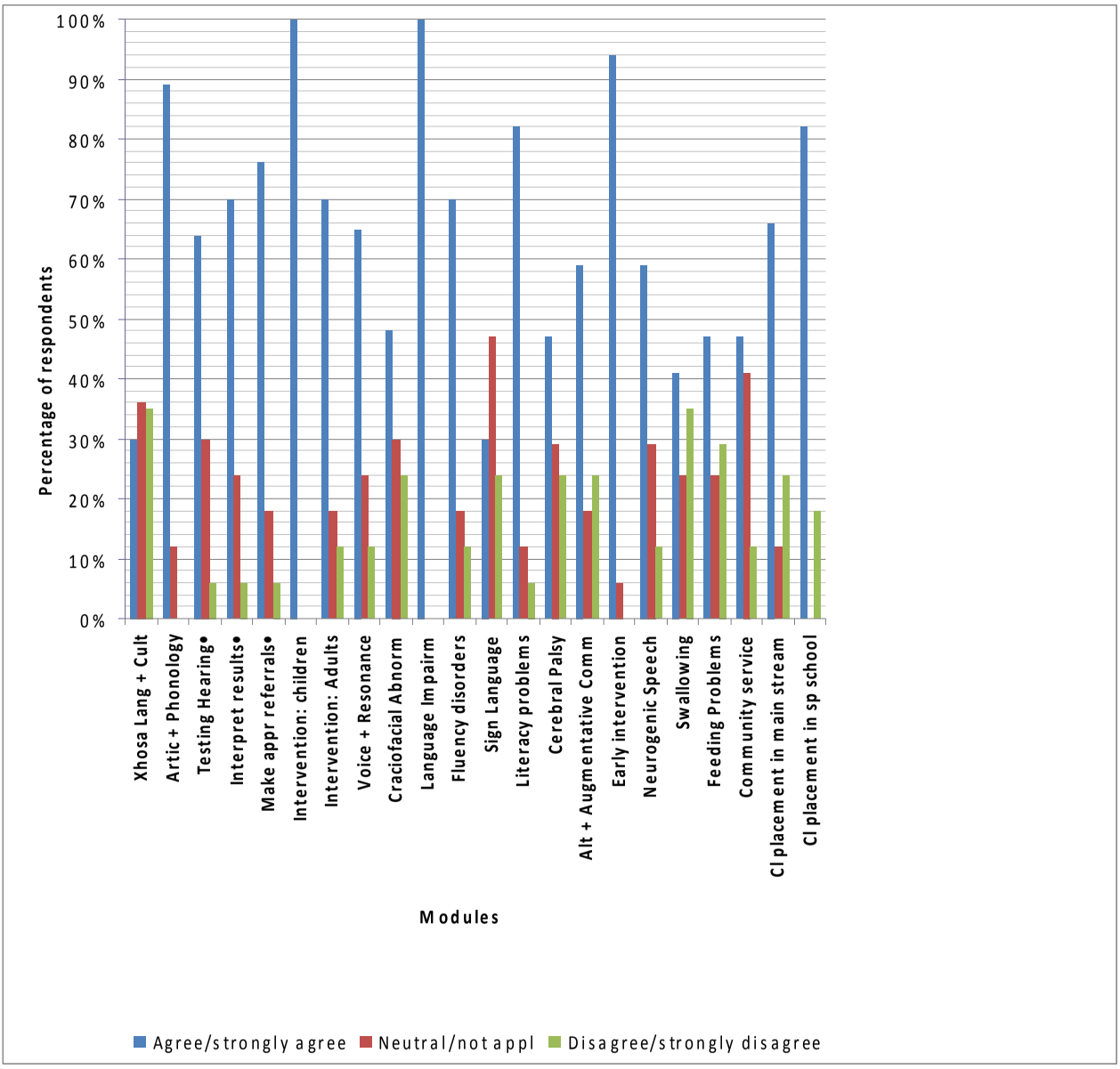

Figure 4: Readiness: Perceptions of CCS professionals regarding modules that prepared them most efficiently for CCS.

According to the graphs in Figure 4, it was evident that the same modules that CCS professionals perceived to have prepared them most efficiently for CCS were also the areas of service delivery that most of the respondents perceived themselves to have adequate skills and knowledge in. Respondents indicated that the following six modules did not prepare them for their CCS: Xhosa language and culture (30%), craniofacial abnormalities (48%), sign language (30%), cerebral palsy (47%), swallowing disorders (41%) and feeding disorders (47%).

In the areas of swallowing and feeding disorders, less than half of the respondents felt that the modules had prepared them adequately and that they had the necessary skills and knowledge to perform their clinical duties adequately.

In the following figure, respondents' recommendations about content that could to be added to improve the undergraduate curriculum are illustrated.

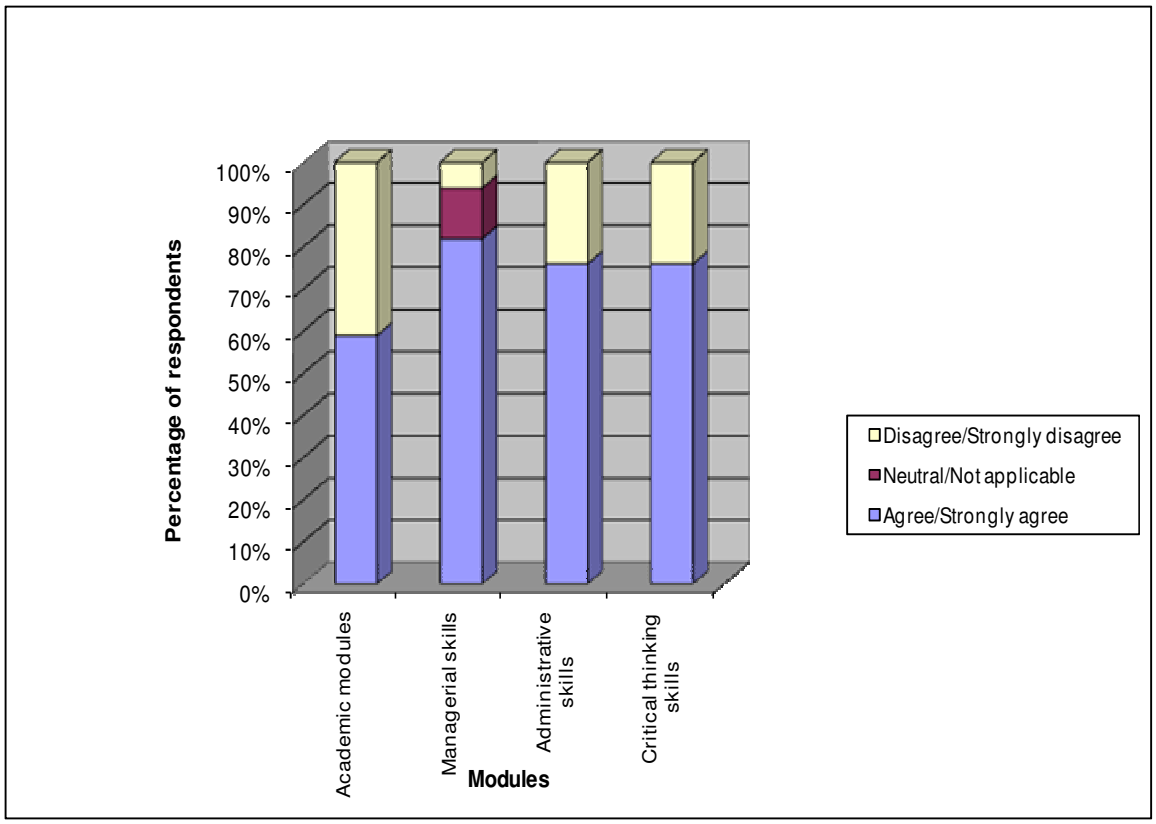

Figure 5: Readiness: The content CCS SLHTs proposed to be included in the undergraduate curriculum.

Responses indicated that 59% of the CCS professionals recommended more academic content, 82% requested training in managerial skills and 76% wanted both administrative and critical thinking skills content to be included in the undergraduate curriculum. When the qualitative response to each question was analysed, the following suggestions were put forward: more clinical exposure to swallowing disorders (pediatric and adult dysphagia) feeding disorders, literacy problems and cases with autism and other related disorders. More theoretical content regarding the following modules was recommended: fluency disorders, neurogenic speech disorders, swallowing disorders, feeding disorders, literacy problems and autism. The need for additional knowledge regarding the professional roles and duties of rehabilitation team members as well as more opportunities to observe other professionals in the multi-professional team, were also expressed. Fifty-five percent of respondents suggested that training of managerial and administrative skills should be included in clinical training modules. One respondent suggested that speech-language and hearing therapy undergraduates should be provided with knowledge regarding the South African Revenue Service. It is evident that CCS professionals experience that they are required to perform administrative and managerial tasks that they were not prepared for during their undergraduate training.

REALITY/CONTEXT

The questions in this section of the questionnaire dealt with the nature, complexities and size of caseloads, the attitudes of the CCS professionals as well as the development of skills, knowledge and confidence during CCS. It also addressed issues of stress, ethical judgement, frustration and emotional experiences during this year. CCS professionals were also requested to comment on personal and professional development, communication difficulties with clients as well as the adequacy, state and availability of workspace, equipment and resources.

More than half of CCS therapists experienced communication difficulties, mostly relating to language, with their clients. Eighty-two percent of CCS therapists felt competent with regard to their problem-solving skills when dealing with difficult-to-handle cases while others consulted relevant sources (notes and text books) or other professionals.

Where CCS professionals indicated that they were not placed in a well-run department, they had to draw up schedules, keep strict diary entries, run varied clinics that were far apart and adapt to increasing caseloads to manage their daily routine efficiently. Those who did not have access to a supervisor, had to find solutions on their own. The daily routines of the CCS professionals were varied and busy. Most of the SLHTs reported a fixed daily routine, starting with either administrative tasks or a meeting, visiting outside clinics, seeing out- or in-patients, providing therapy to in- and out- patients, school visits, meetings with the multi-professional team, attending support groups and report writing. Eighty-eight percent could manage their caseload while 71% stated that they were able to handle the scope of problems in their caseload and felt confident enough to manage cases in which ethical judgement skills were required. The referred cases that were not within the scope of practice of the SLHTs included critically ill cerebro-vascular accident patients, clients who needed hearing assessments where no facilities to conduct hearing tests existed, patients who needed medical treatment for middle ear infections, requests for wax removal, assisting with buggy seating in cerebral palsy clients as well as teaching of English and sign language.

A high percentage (88%) of the respondents started their CCS with a positive attitude and 64% were still positive towards the end of their CCS. All agreed and strongly agreed that they felt they made a positive contribution in the community where they spent their CCS. The factors contributing to the change in attitude in these

participants who were less positive after their CCS were incompetence of colleagues, mismanagement and poor hospital administration, unfair and disrespectful treatment of employees, lack of resources, language barriers, cultural differences, governmental issues, low remuneration and patient care and management issues. One SLHT, for instance, reported that a doctor neglected to place a nasal feeding tube for a patient even after numerous requests.

Of the 18 respondents, 15 (88%) testified to an improvement in their skills whereas 94% reported increased knowledge and confidence. The factors that contributed towards the development of confidence included working within the multi-professional team and with many different professionals, gaining experience and personal growth, developing strategies to ensure efficient patient care, experiencing positive results and successful outcomes, receiving positive feedback from patients and being alone in a remote place.

Despite the positive attitudes towards their CCS, over 75% of respondents reported stress, negative emotional experiences and frustration. Nearly 90% stated that they had opportunities to develop personally and professionally, while 83% viewed their managerial skills to have improved. The respondents listed some of the following factors to have contributed to their improved skills: the fact that they worked independently (a case of "sink or swim"), that they were exposed to a variety of different cases and that they had the opportunity to attend courses (some of them at least). A few felt that some of their skills were neglected because they were not practising them due to lack of exposure to specific pathologies; for example, in one location swallowing and feeding disorder cases were handled by more senior therapists. Other respondents reported that the absence of appropriate equipment, for example audiometers and middle ear analysers, prevented them from doing hearing and middle ear testing.

A high percentage of respondents (89%) reported that they had the opportunity to work in a multi-professional team, whereas less than half of the respondents stated that they did not have a professional to consult if they encountered problems. Mentorship and supervisors were available for only a few of the CCS professionals. Some worked in big departments where the head of the department was an SLHT, while others could phone an SLHT working nearby for assistance and consultation. Some, however, started speech therapy services from scratch and worked alone, some had to search for assistance in other provinces, while some encountered fellow speech-language therapists who visited occasionally but were unwilling to assist them.

The responses that related to the staffing of the CCS placements comprised varied and interesting information. In 10 locations the CCS SLHT was the only speech-language therapist. In all the other locations there were also occupational and physiotherapists. In most cases, CCS SLHTs were either in the minority or equal in numbers to the CCS occupational therapists. Many of the locations had only CCS professionals on their staff. Three of the respondents reported that they had no supervisor while nine had supervisors from different professions, such as the chief radiographer, the matron, the physiotherapist, a radiographer, a hearing aid acoustician, an occupational therapist, an assistant rehabilitation manager of the district and a senior speech-language therapist who was not willing to provide supervision. Five respondents were fortunate to be supervised by senior speech-language therapists. Eight respondents reported that they had access to mentors but eight had no access. The mentorship contact was provided by means of e-mail and telephonic communication.

A high percentage (83%) of respondents felt safe to travel to their workplace and clients. Only 29% had adequate equipment to deliver a professional service while 47% reported inadequate equipment that were not serviced or looked after. Only 30% reported

clean, efficient and safe amenities (bathrooms and therapy rooms) in their workplace, while only 35% reported adequate resources which included basic and critical elements such as books, a budget, a computer or Internet access. The availability and quality of resources varied from well-stocked therapy cupboards to no equipment at all. CCS professionals used their own materials and had to make do with what was available, and some reported that no budgets existed for the speech therapy department. The workspace allocated to SLHTs doing their CCS ranged from no designated therapy space to very unsafe spaces where building projects were in progress, sharing a room with the audiologist (hearing tests and speech therapy occurred simultaneously) and waiting for an hour to use an occupied therapy room. Theft of computers, which left staff without this convenience, was reported. Respondents often had to use their own books for reference purposes because budgets did not allow for the purchase of books, reference materials and journals.

When CCS speech-language therapists were requested to comment on their accommodation, 12 of the 17 reported that they were satisfied. Accommodation included living on the hospital grounds, in the nurses' home, in commune houses, with family, shared accommodation with other CCS professionals and privately rented flats. Only one of the respondents was unhappy with her living conditions.

DISCUSSION

READINESS AND REALITY

Results regarding the growth in knowledge as well as skills since the start of their CCS confirmed that therapists perceived their knowledge to have increased more than their skills during CCS. This calls attention to the fact that CCS professionals start their CCS with satisfactory academic knowledge but that they not necessarily perceive that they have adequate skills in all areas in which they have to perform during CCS.

The areas, in which SLHTs did not feel adequately equipped to work in, included the following: Xhosa language and culture, craniofacial abnormalities, sign language, cerebral palsy, and swallowing and feeding problems. Students had limited opportunities to apply their sign language skills during their undergraduate training, a fact that may account for their perceived lack of skills and knowledge in this area. In the case of Xhosa language and culture, respondents' perceptions may be due to the fact that SLHTs studying at SU are allocated to provinces where Xhosa is not the dominant language. Only 36% of all SU graduates were placed in the Western and Eastern Cape, where their knowledge of Xhosa would have been more appropriate.

The other areas of service delivery, such as feeding and swallowing disorders, are the more specialised areas in the scope of the SLHT's practice and perceptions of competency may depend largely on the amount of exposure to these areas during undergraduate training.

As many CCS professionals remarked, knowledge and skills improve with increased exposure to certain pathologies. True development of skills and knowledge, however, is more readily honed when receiving mentoring and working under appropriate supervision. Cannon and Newble (2006, p 9) listed among the requirements for achieving quality learning outcomes that teachers should provide for "an environment that is challenging, supportive and low threat". Mentoring and supervision are particularly important when a professional feels unsure in treating patients with the abovementioned pathologies. In the case of treatment of children and adults with swallowing and feeding disorders, the possibility of a patient choking or aspirating is always a reality and even skilled therapists need to be aware of these life-threatening complications. Dysphagia, the impairment of any part of the swallowing process, is

associated with the development of aspiration pneumonia (Palmer, 2008). Langmore, Terpenning, Schork, Chen, Murray, Lopatain, & Loesche (1998) stated that aspiration pneumonia is the second most common type of nosocomial infection in hospitalised patients and a major cause of morbidity and mortality among the elderly who are hospitalised.

The results confirm yet again that curriculum design for speech-language and hearing therapy should take cognisance of and implement the suggestions generated by this study. The findings of this study concur with those of Khan, Knight and Esterhuizen (2009) and Penn (2009) who also found that dealing with feeding and swallowing disorders and clients from multi-lingual and multi-cultural backgrounds were problematic for CCS professionals.

In 11 areas CCS SLHTs judged themselves to have adequate skills and knowledge to render appropriate services. The areas included articulation and phonology, testing hearing, interpreting results of hearing tests, making appropriate referrals, intervention with children and adults, voice and resonance, language impairments, fluency disorders, literacy problems and early intervention. These areas of service probably represent the curriculum content and practical experience to which students are exposed to mostly during their undergraduate training. These cases are also obvious and typical speech-language and hearing therapy pathologies and most often associated with the services that SLHTs can offer.

CCS professionals felt very strongly generic skills training should be added to the undergraduate curriculum, including managerial (financial, conflict and personnel management and supervisory), administrative (budget writing, meeting protocols and social management) and critical thinking (problem solving, ethical problem solving and clinical reasoning) skills training. Although CCS professionals requested additional

academic content in the form of a module on critical thinking to be included in the undergraduate curriculum, they felt confident about their problem- solving skills when confronted with difficult cases. One way of adding some of the abovementioned content to the existing undergraduate SLHT curriculum may be to expand the existing modules of Bio-ethics and Ethical Reasoning as well as Community Studies during the second year to include these topics or make them part of the fourth- year advanced seminars. Another cost-effective way of addressing these requests would be for SLHT students to attend similar modules provided by other health profession training courses. Both the departments of Physiotherapy and Dietetics, for instance, have modules on Health in Context during their first-year and the Occupational Therapy programme includes a module that covers themes to address health issues in the 21st century. The Department of Dietetics offers a third-year module on Management Principles. An added benefit of combining health professional modules would be that knowledge of each others' professional fields may be encouraged by class discussions and social interaction. Pascoe and Singh (2008) wrote in their article "By the end of this course you should be able to…" that students should become lifelong learners who should continually construct their knowledge through accessing information. Students cannot be taught everything they need to know about speech-language and hearing pathology during their undergraduate training. The lecturers and clinicians can at most ensure that students meet exit criteria and that they are equipped with an awareness of how to continue developing their knowledge.

More than half of the respondents reported that they had to manage cases that were not within their scope of practice. It appeared that inappropriate referrals made to SLHTs are due to a lack of knowledge regarding the scope of practice and role of the SLHT within the multi-professional team in CCS contexts.

More multi-professional team-work should be undertaken both as an undergraduate and during CCS. Offering combined modules may contribute to the knowledge about the role and scope of practice among various other health professionals in the multi-professional team. The lack of understanding of the role of the CCS dietician within the team and not being able to work as part of a team were also reported by Paterson, Green & Maunder (2007). It was reported that at one placement dysphagia patients were being referred to dieticians. Penn (2009) found that CCS professionals reported insufficient knowledge regarding specific areas of practice of other health professionals working with them.

Contributory factors to negative attitudes of respondents included incompetence of colleagues, mismanagement of hospitals, disrespectful treatment of employees, insufficient resources as well as poor communication.

These issues and responsibilities fall under the jurisdiction of the DoH and have to be addressed by the DoH promptly and efficiently. It is advised that CCS professionals be provided with avenues by the DoH to report irregularities to the relevant authorities.

READJUSTMENT (TO ADAPT, CHANGE/ALTER): RECOMMENDATIONS

This section of the questionnaire provided information regarding speech-language therapists' perceptions of CCS objectives compared to the DoH objectives for CCS. It also interrogates the personal changes CCS professionals underwent. In addition, they were requested to comment on the usefulness of CCS, what information they would like to convey to future CCS professionals and to list suggestions regarding changes, adaptations or modifications for SU and the DoH to improve conditions and make the CCS year more successful.

All the CCS professionals agreed that they made a positive contribution where they rendered their CCS, but the concern was raised that there were too few SLHTs to supply the services that were demanded and that certain services would be discontinued once their CCS term came to an end as the DoH did not make that CCS post available to a future CCS SLHT. Penn (2009) reported in her study that many of the professionals applied for posts in the same location where they did their CCS but were disillusioned by the lack of available permanent posts.

By far the majority of respondents agreed that CCS provided a wonderful working and learning opportunity since the young clinicians were exposed to a variety of different pathologies. They also stated that it provided them with an opportunity to gain practical experience, while delivering a useful and very necessary service to the community. They claimed that they had grown most in the areas of project management, laryngectomy management, dysphagia management, treating specific language impairment, working within a team, referring cases, clinical and administrative skills, learning a new language and dealing with communication barriers. CCS speech therapists all agreed that this year was a valuable experience in which they grew personally and professionally as well as emotionally. They were granted the opportunity to work with well-trained professionals, often within a multi-professional team and gained useful practical experience. They were afforded opportunities to improve their managerial skills, to develop "common logic" as well as the confidence to negotiate on behalf of clients. They felt that they made a professional difference by providing a scarce service to recipients who needed it desperately. A few commented that they had to go "through a harsh learning school to experience what speech therapy is really like."

CCS professionals claimed that they had gained the most experience in the areas of project management, management skills, communication, team-work, administration,

administrative skills and managing a big case load. They stated that their clinical management of articulation problems, pre-term babies, language disorders, autism, clients with global developmental delay, communication barriers, adult and pediatric clients with neurological problems, treating and feeding of cerebral palsy clients and clients with laryngectomies improved. They had gained confidence, knowledge and skills to manage independent trouble-shooting and had experienced that one could still mean something to the patient even when confronted with language barriers, no support and no equipment.

A few factors, that prevented CCS professionals' growth regarding their clinical skills and their theoretical knowledge, were identified. These included the absence of a supervisor or mentor, not being exposed to enough pathologies and not being able to attend courses and workshops. Some stated that clients with dysphagia and voice disorders were referred to them, but due to the lack of equipment to do objective testing (for example indirect video fluoroscopy), they were not able to treat these clients effectively or to maintain and improve their clinical skills and to interpret results. Others had no opportunity to assess or treat laryngectomy, feeding disorder and swallowing disorder cases because experienced therapists managed the patients; in other places the medical staff did not refer those clients to the speech-language therapist. Inadequate budgets left CCS SLHTs with little or no finances to buy or maintain equipment and to attend Continuing Professional Development activities, courses or workshops to facilitate professional development. These issues were also identified in previous studies done by Khan, *et al* (2009), Paterson (as cited in Shumba 2008), Penn (2009) and Reid (2002). Naidoo and Chikte (2002) stated that the prerequisites for a successful community service program should include good planning, adequate infrastructure and sustainable funding. Without these components, necessary as well as comprehensive services to the public will be compromised.

In other instances, respondents felt frustrated because clients were only seen once a month for therapy, which influenced a favourable prognosis for speech therapy negatively. They developed strategies to overcome unforeseen obstacles by problem solving, training staff to deal with problems, consulting experts or researching the problem and managing it.

When questioned about the comparison between the undergraduate context and the context in which they did their CCS, they mentioned that the undergraduate preparation was mainly focused around the educational environment whereas during CCS they were required to work more in the hospital, community clinics and with doctors in hospitals. This required of them to be competent in delivering specialised services such as video fluoroscopy and management of feeding and swallowing disorders.

One therapist remarked on the fact that one is often alone when doing CCS, where as a student there are always fellow-students to discuss cases with or supervisors to consult. Some remarked on the different approaches of professionals from other universities, the differences between a small regional hospital and a huge tertiary hospital like Tygerberg Hospital, and the region-specific pathologies (e.g. malnourished children) prevalent in certain areas, such as the Northern Cape. A few respondents commented on the differences between the rural nature of their CCS placement compared to the mainly urban settings where their training took place.

CCS SLHTs stated that CCS provided them with an opportunity to gain experience, to deliver a service to disadvantaged communities and to afford patients access to rehabilitation. They added that CCS provided an environment for a newly qualified speech-language therapist in which to learn, apply skills and knowledge, and grow professionally and personally. They declared that CCS should promote and inform

about our profession among other health professionals. They also speculated that some of the objectives of the DoH may be to attract staff to rural places and keep them there filling posts through CCS where there would not have been a speech therapy service otherwise. The stated objectives by CCS speech therapists correspond with those expressed by the DoH when CCS was initiated.

The following specific recommendations flow from this study:

- SLHTs doing their CCS should be invited by SU to speak to the final-year students to provide information on the CCS locations, to inform them about the nature and scope of case loads, to provide tips on the resources that are needed and to inspire and motivate them.
- It is recommended that SU prepare SLHTs more effectively to work within a multi-professional team during their undergraduate studies, should grant them more opportunities to observe other professionals while working and should provide more time for hands-on experience and more clinical exposure to fluency disorders, early intervention, swallowing and feeding disorders as well as basic audiology procedures.
- The content and clinical exposure of the modules on craniofacial abnormalities, sign language, cerebral palsy, and swallowing and feeding disorders should be expanded.
- It is suggested that the supporting role of SU should be in the form of e-mail access to various mentors and a dedicated website for CCS professionals where requests or questions can be posted and can be answered by professionals. This role may partly be fulfilled by the South African Speech Language and Hearing Association (SASLHA), with mentors being invited to offer a voluntary service to CCS professionals through this association. The SASLHA currently offers a facility whereby

professional queries may be addressed on its website, which may be considered by CCS professionals as one avenue of mentoring assistance.

- It is recommended that the DoH provide at least one permanent speech-language and hearing therapy post at each CCS location. Staffing issues coupled with the absence of supervisor and mentoring provision were highlighted as a major concern. If speech-language and hearing therapy supervisors were appointed in permanent posts, it may ensure continuity of services and at the same time provide the essential mentoring and supervision that are currently lacking.
- It is suggested that the DoH appoint or nominate a speech-language and hearing therapist/audiologist (with professional experience of two years of more) responsible for supervision and mentoring of services in each of the six provinces.
- It is advised that the DoH compile a leaflet clearly stating its objectives and its expectations of CCS professionals as well as indicating which services should be provided as well as those needing to improve during the CCS year to ensure that all CCS therapists are informed on what is expected of them before they start their CCS.
- A thorough and informative orientation opportunity should be prearranged by the DoH for all new CCS professionals when they arrive at their location. This should inform them about the specifics of the location, the organogram of the organisation and their duties and obligations as well as give them an opportunity to meet their superiors and fellow staff members. This will ensure that all stakeholders are informed about the duties and expectations during CCS.

- Adequate and efficient equipment, amenities, conveniences and resources (books, a budget, a computer and Internet access) should be provided at each CCS location. A safe work place is also a requirement.
- It is recommended that CCS professionals be required by the DoH to formally (in writing) report on areas of difficulty and to offer suggestions and make recommendations for future CCS professionals before they complete their community service year.
- The Health Professions Council of South Africa (HPCSA), the forum of highest representation for SLHTs in South Africa, is advised to attend to the contents of this paper and use the suggestions relating to supervision and post allocation at CCS locations to address this complex and critical problem.
- It is recommended that future research compare the perceptions of newly qualified CCS professionals with those of established speech-language therapists regarding their readiness, skills and knowledge. The outcome of such studies may indicate the need for a comprehensive mentoring structure within the profession.
- It is suggested that ongoing CCS research on the experiences, perceptions and attitudes of SLHTs include the areas sampled in this study to investigate whether suggestions have achieved their aims and to ensure ongoing monitoring of identified problem areas. Research should be done on each CCS group and a focus group discussion should be included towards the end of the CCS year.
- A few suggestions to streamline the questionnaire are made. The first four questions may be combined to allow for plotting of the answers in a grid-

type manner to make the questionnaire less bulky. Additional information on which specific academic module content is needed should be included in Question 5.1. A question enquiring whether a CCS professional plans to or would like to stay on in the current CCS location and why, will be added.

CONCLUSION

The experiences of newly qualified graduates doing CCS emphasised the unique opportunity to learn, develop and improve skills, knowledge and experience during this year. This research study confirmed that this year serves to equip newly qualified speech therapists with valuable work experience and the confidence to formally register as an SLHT and to start their career with sufficient skills and knowledge. The specific areas where CCS prepared professionals the most for service delivery after completion of CCS were articulation disorders, early intervention, language disorders, autism, global developmental delays, adults and paediatric neurodevelopmental problems, feeding and treating CP.

Conditions and experiences at CCS placements, however, do not always encourage professionals to stay on in the rural areas where their services are most needed. New services are started by CCS therapists, but are discontinued because posts are vacated and not filled again.

The rhetoric regarding no or badly maintained equipment, absent or inadequate budget allocation, too few staff to provide critical services as well as inappropriate or absent supervision and mentoring has not changed since CCS started for SLHTs in 2003.

Newly qualified SLHTs reported perceptions of high levels of competency to work in many areas, but concern was raised that they perceived themselves not to have adequate skills and knowledge in all areas where they were required to work. Suggestions

have been put forward to SU to explore existing courses in the Health Sciences Faculty where the skills that are perceived to be inadequate may be acquired.

Almost all the CCS SLHTs agreed that they improved their knowledge, skills as well as confidence during CCS, but it was also stated by some that they could have developed even more with the help and support of appropriate supervision and/or mentoring as well as exposure to a greater variety of pathologies.

Most respondents felt that they had the opportunity to develop significantly because they were on their own while a few stated that it was exactly this factor that prevented them from developing clinical skills and confidence. Van der Wiel (2004, as cited in Paterson *et al* 2007) stated that the lack of supervision may be unfavourable to the development of a newly qualified professional. The first few years of one's career are important for cultivating good habits, favourable attitudes and proper work ethics. If these habits are not cultivated early in one's career, it may be difficult to eradicate undesirable habits without a competent and exemplary role model present.

CCS professionals also reported their increased awareness of the immense need for speech-language and hearing therapy services. Factors that included emotional distress included witnessing destitution and poverty among many patients and the deaths of babies and HIV-/Aids victims, and feeling isolated and far from loved ones. It appears though even in the midst of these emotionally upsetting circumstances, CCS professionals were extremely positive not only about their personal, professional and managerial improvement but also about the entire CCS experience.

Previous complaints about safety, the CCS allocation process and accommodation identified by Reid (2002) and Shumba (2008), seemed to have been resolved satisfactorily since comments about these have not been reflected in this research questionnaire.

The perceptions of speech-language therapists regarding the objectives of CCS and those expressed by the DoH for CCS concur. Both parties agree that CCS provides an opportunity to gain experience and that a valuable service is delivered to remote communities. A very important objective was added from the side of SLHTs suggesting focused marketing of the SLHT profession to inform other health professionals about their role within the multi-professional team and to define their scope of practice.

The limitations of this study include the inclusion of only one group of CCS professionals, which limits generalising the results obtained. The results of this study, however, contribute to the body of research about the allied health professionals' CCS experience in South-Africa since 2003 and serve as an indispensable input to the Division of Speech-language and Hearing Therapy to examine the undergraduate curriculum for alignment with the required competencies of professionals by CCS.

In the following message of one CCS speech-language therapist to students much of the integrity, maturity, sincerity as well as dedication of young professionals are expressed: *I will tell them that things will be difficult and things will not be as you expect, but you are the only one in control of you so what you decide to make of it is what it will be. Complaining will not get you anywhere and nobody likes to listen to complaints; they do, however, listen to questions and suggestions.*

It is evident that the responsibility of preparing new graduates effectively for CCS and ensuring that the conditions and work circumstances are favourable and safe and allow them to perform the duties that are required of them are to be shared by all parties involved. These parties are the DoH, SU, CCS professionals (SLHTs) as well as the SASLHA and the HPCSA. More effective communication concerning needs, wants and

suggestions from all parties needs to take place. One body with a representative of each of the mentioned parties needs to coordinate research results about CCS and research findings need to be considered and weighted for importance. Responsibilities should be assigned to the respective responsible and reliable parties and recommendations ought to be implemented. Regular follow-up meetings to monitor and regulate CCS and implementation of suggestions are also proposed. CCS should be managed in an organised, coordinated manner with all stakeholders involved in all parts of the process. The communities that are being served through CCS deserve a quality service.

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APPENDIX A

QUESTIONNAIRE

COMPULSORY COMMUNITY SERVICE (CCS) FOR SPEECH-LANGUAGE AND HEARING THERAPISTS (SLHT): READINESS, REALITY AND READJUSTMENT

Personal and Contact Details	
Contact details: Tel: e-mail:	Cell phone:

Please mark your choice with X:

SD=Strongly Disagree, D=disagree, N=Neutral, A=Agree, SA= Strongly Agree NA= Not applicable

SECTION 1

READINESS: PERCEPTIONS OF SPEECH-LANGUAGE THERAPISTS

		SD	**D**	**N**	**A**	**SA**	**NA**
Q1	My training provided me with the necessary **skills** to start my CCS						
Q2	My training provided me with the necessary **knowledge** to start CCS						
Q3	**I felt I had the skills and knowledge to work in the following areas:**						
Q3.1	Xhosa (or any other official language) and culture (if other language please indicate which one)						
Q3.2	Articulation and Phonologic impairments						

		SD	D	N	A	SA	NA
Q3.3 Q 3.3.1	***Basic audiometry**:* • *Testing hearing and middle ear function*						
Q 3.3.2	• *Interpretation of results*						
Q 3.3.3	• *Appropriate referrals*						
Q 3.4	*Intervention with children*						
Q 3.5	*Intervention with adults*						
Q 3.6	*Voice*						
Q 3.7	*Craniofacial abnormalities*						
Q 3.8	*Language impairments*						
Q 3.9	*Fluency disorders*						
Q 3.10	*Sign language*						
Q 3.11	*Literacy problems*						
Q 3.12	*Cerebral Palsy*						
Q 3.13	*Augmentative and alternative communication*						
Q 3.14	*Early intervention*						
Q 3.15	*Neurogenic speech disorders*						
Q 3.16	*Swallowing*						
Q 3.17	*Feeding problems*						

		SD	D	N	A	SA	NA
Q 4 Q 4.1	**The following modules prepared me most efficiently for CCS** *Introduction to Xhosa (or any other official) language and culture*						
Q 4.2	*Articulation and Phonologic impairments*						
Q 4.3	*Psychology*						
Q 4.4	*Linguistics*						
Q 4.5 Q 4.5.1	*Basic audiometry:* • *Testing hearing and middle ear function*						
Q 4.5.2	• *Interpretation of results*						
Q 4.5.3	• *Appropriate referrals*						
Q 4.6	*Intervention with children*						
Q 4.7	*Intervention with adults*						
Q 4.8	*Voice and Resonance*						
Q 4.9	*Craniofacial abnormalities*						
Q 4.10	*Language impairments*						
Q 4.11	*Fluency disorders*						
Q 4.12	*Sign language*						
Q 4.13	*Community Service*						
Q 4.14	*Clinical placements at main stream schools*						
Q 4.15	*Clinical placements at special schools*						
Q 4.16	*Literacy problems*						
Q 4.17	*Cerebral Palsy*						
Q 4.18	*Augmentative and alternative communication*						
Q 4,19	*Early intervention*						
Q 4.20	*Neurogenic speech disorders*						

		SD	D	N	A	SA	NA
Q 4.21	*Swallowing*						
Q 4.22	*Feeding problems*						
Q 5	**These areas may be included in the undergraduate Course to prepare me more efficiently for CCS:**						
Q 5.1	*Academic modules (Please specify which areas)*						
Q 5.2	*Managerial skills (eg. Financial, conflict management, personnel management, supervisory skills) Please specify*						
Q 5.3	*Administrative skills: (eg. Budget writing, meeting protocols, social management) Please specify*						
Q 5.4	*Critical thinking skills: (problem solving, ethical problem solving, clinical reasoning) Please specify*						
SECTION II **REALITY/CONTEXT: PERCEPTIONS OF CCS SPEECH-LANGUAGE THERAPISTS**							
Q 6	When I am confronted with difficult to handle cases, I can problem solve Please explain:						
Q 7	I could manage the size of my caseload						
Q 8	I could handle the scope of problems in my caseload						
Q 9	Most of my cases were speech therapy/audiometry (please mark one and also your choice of SD, D, N, A or SA.						
Q 10	I could manage my daily routine efficiently Please explain what you experience and do						
Q 11	My caseload included referred cases that are not in my scope of practice Please quote examples:						
Q12	My attitude at the beginning of CCS was positive						
Q13	My attitude at this stage is positive If attitude changed, please explain what contributed to change						
Q14	My skills have improved since I started CCS Please provide more information.						
Q15	My knowledge has improved since I started CCS Please provide more information						
Q 16	My confidence has improved since I started CCS						

	Explain why or why not	SD	D	N	A	SA	NA
Q 17	I am confronted with ethical issues that I feel competent to handle If SD/D, please explain:						
Q 18	I feel I have made a positive contribution in the community where I do CCS Please explain:						
Q 19	I experienced stress during this CCS year What caused most stress during CCS? Please explain:						
Q 20	I experienced frustration during this CCS year What caused most frustration during CCS? Please explain:						
Q 21	I have had emotional experiences during this CCS year Please give some examples:						
Q 22	I have had opportunities to improve myself professionally Please give some examples						
Q 23	I have had opportunities to improve myself personally Please provide some examples						
Q 24	I have had opportunities to improve my managerial skills Please provide some examples						
Q 25	I had people whom I could consult if I encounter problems Please give some examples						
Q 26	I experienced communication difficulties with my patients Please give some examples						
Q 27	I have had the opportunity to work within a multi-professional team						
Q 28	I am satisfied with my CCS experience						
Q 29	I felt safe when I went to work/travel to see clients						
Q 30	I had adequate equipment which is serviced and looked after Please provide more information:						

Q 31	The amenities/conveniences, where I worked, were efficient, clean and safe Please provide more information:	SD	D	N	A	SA	NA
Q 32	I had adequate resources (books, budget, computer, internet access) Please provide more information:						

SECTION III

READJUSTMENT: PERCEPTIONS OF SPEECH-LANGUAGE THERAPISTS

Q41 What in your opinion can the University of Stellenbosch do to make the CCS year more successful for SLHT graduates? (regarding ongoing support, preparation etc)

Q42 What would you recommend the Department of Health do to improve conditions for CCS SLHT graduates?

Q43 What are your comments on the usefulness or success of CCS for SLHT graduates?

Q44 What would you recommend the University of Stellenbosch can do to improve you perception regarding your readiness or preparedness on graduation for CCS?

Q45 In which areas do you feel you have grown the most?

Q46 Are there any areas where you feel you could have improved/grown, but could not because of external factors? If yes, please identify these areas and explain which external factors prevented you.

Q47 Which specific modules prepared you the best for your CCS year? (Please refer to Q4 and name the modules)

Q48 Do you see your role as a speech-language and hearing therapist expanded through the CCS experience?

Q49 Was the context in which you acquired your clinical skills (as an undergraduate), similar to the CCS context where you had to apply these acquired skills? Please name specific examples

Q50 Which issues were you required to deal with during CCS for which you feel you were not adequately prepared?

Q51	How did you deal with the issues for which you felt unprepared?
Q52	Please describe what this CCS year has meant to you
Q53	What would you tell the next group of CCS therapists about your experience if you could speak to them now?
Q54	What do you perceive as being the main objective of CCS?
Q55	What do you perceive as being the main objective of CCS for the Department of Health?
Q56	What do you think <u>should</u> be the main objective of CCS for the Speech-language and Hearing therapist?
Q57	If you provided different answers at Q13, Q14 + Q15, what would you recommend to align the objectives for future CCS?

APPENDIX B

List of Modules that covers (summarises) the main topics covered during undergraduate training. (I year, II year, III year, IV year).

Introduction to Xhosa language and culture	I
Articulation and Phonologic impairments	II
Psychology	I, II, III
Linguistics	I, II, III
Basic Audiometry:	
• Testing Hearing and middle ear infections	I
• Interpretation of results	I
• Appropriate referrals	I
Intervention with children	I,II,III,IV
Intervention with adults	I,II,III,IV
Voice and Resonance	II
Craniofacial abnormalities	II
Language impairments	II,III
Fluency disorders	III
Sign Language	III
Community Service	II
Clinical placements at main stream schools	II,III
Clinical placements at special schools	III
Literacy problems	III
Cerebral Palsy	III
Augmentative and alternative communication	IV
Early intervention	IV
Neurogenic speech disorders	IV
Swallowing	IV
Feeding disorders	IV

Stellenbosch University Year Book (2005, 2006, 2007, 2008)