Introduction of the Objective Structured Clinical Examination in Speech and Language Therapy Education: Student Perspectives

Duana Quigley* MSc PhD, Julie Regan MSc PhD

1Department of Clinical Speech and Language Studies, Trinity College Dublin, Dublin, Ireland

Short Title: SLT Student Perceptions of OSCEs

*Corresponding Author:
Duana Quigley PhD MSc (Corresponding author)
Department of Clinical Speech and Language Studies,
Trinity College,
Dublin 2,
Ireland.
Tel: 0035318961336.
quigled1@tcd.ie

Key words: OSCE, speech and language therapy, perceptions, assessment
Abstract

Introduction & Aims: The Objective Structured Clinical Examination (OSCE) has an established history of assessing clinical competence for medical and allied health care professionals. No research has investigated the use of the OSCE within speech and language therapy (SLT) undergraduate education. This study aimed to evaluate undergraduate SLT students’ perceptions of the OSCE and to determine if perceptions differed depending on stage of undergraduate education.

Methods: An online survey was distributed to second and final year students in a four-year undergraduate SLT university programme after completing an OSCE. Quantitative survey data were analysed descriptively and statistically using Fischer’s exact tests. Thematic analysis was used to analyse narrative survey comments.

Results: The response rate was 80%. Students perceived the OSCE to be a fair (95%) and meaningful way (97%) of assessing clinical competencies, which provided them with greater confidence for practice (91%). The OSCE was deemed to be less stressful than a written exam (65%). No significant differences were observed between second- and fourth-year students’ perceptions. Five major themes included clarity of expectations, time allocated, consistency between examiners, influence on student learning, and personal impact.

Discussion: Survey findings suggest that undergraduate SLT students across different stages of education and different clinical contexts perceive the OSCE as a fair and meaningful assessment approach. This study provides initial evidence that the OSCE is suitable for assessing clinical competencies specific to the profession of SLT.
Introduction

The development of professional and clinical competencies is a fundamental component of speech and language therapy undergraduate programmes. Examination of these skills is an integral component of the assessment process to ensure a graduate meets the necessary standards of proficiency to practise as a speech and language therapist (SLT) [1]. Core clinical competencies expected of student SLTs often overlap with other allied health professions (e.g., effective communication skills, ability to collaborate with clients) and therefore examination of core competencies can replicate assessment processes of students in other disciplines [2]. However, criticisms abound for over-reliance on assessing global and general competencies as they may be unrepresentative of the precise knowledge and skills required in a specific clinical setting [3]. There are a number of profession-specific clinical competencies that student SLTs need to develop and integrate, reflecting our unique role in the assessment, diagnosis and management of clients with a range of communication and swallowing disorders [4]. Clinical populations may include clients with aphasia, dysarthria, dysphagia, dysfluency, developmental language disorders or speech sound disorders. Therefore, profession-specific assessment of these discrete clinical competencies and how a student can integrate them in clinical decision-making is necessary [4,5].

It is recognised that that the assessment of clinical competencies may be complex and challenging, often lacking structure or standardisation [6]. Some educators within the discipline of SLT have attempted to address the challenge of assessing discipline-specific clinical competence through the introduction of simulation and standardised patient clinics (e.g., [7,8]). While important insights can be gleaned from these studies in relation to perceived benefits of
using standardised patients for assessment, such as decreases in student anxiety and increases in student confidence, measures of actual competence change are currently not available [7].

Traditional approaches to the assessment of student competency within healthcare education include written exams, oral presentations and essays, all of which have been questioned from validity, subjectivity and fairness perspectives. Since its introduction over forty years ago to assess clinical skills of medical students [9], the OSCE has been adopted as a strategy for evaluating a wide range of clinical and technical skills and knowledge [10]. The Objective Structured Clinical Examination (OSCE) is an assessment method that claims to enable a more valid and reliable assessment of specific clinical competencies and to overcome documented challenges of subjectivity. The OSCE now has an established history of assessing clinical competence for medical and allied health care professionals. During an OSCE, students progress through several structured and time-defined stations, with each station examining and grading a student’s performance on a specific clinical competency in a simulated environment [6, 11]. Thus, OSCEs enable assessment of the “show how” domain of Miller’s (1990) pyramid of clinical competency (as distinguished from the other levels in the pyramid of “knows”, “knows how” and “does”) [12]. The criteria for assessing students’ performance at each OSCE station are specified in advance of the examination and can provide a means of both formative and summative assessment for students [13, 14]. It is argued that the OSCE allows for a more structured and consistent assessment of defined clinical skills, with minimal interference from other possible variables [9].

Numerous studies have demonstrated the validity and reliability of the OSCE as an assessment method [15,16]. However, some argue that existing OSCE validity research is somewhat narrow, concentrating too much on the validity of the content of the OSCE station or the
validity of the OSCE process, without considering broader factors that may be influential [17]. A central element of evaluating the validity of the OSCE more broadly is gathering students’ perceptions on how the OSCE promoted or impeded learning [18]. Greater student participation in appraising assessment methods can also contribute towards quality assurance of undergraduate programmes [19]. Previous research has explored the perceptions of medical, nursing, midwifery, dentistry, dietetics, and pharmacy students towards OSCEs [20-26]. Positive attitudes have referred to the OSCE building students’ confidence in skills needed for clinical practice and highlighting areas that require further development through feedback from OSCE performance [10, 23, 24-27]. Some studies indicate that it provides valuable learning opportunities, is a motivator to learn, and that students engage more meaningfully with the module objectives that are assessed through an OSCE [13, 20, 28-30]. The OSCE has been considered by students to be fairer and more objective than other means of assessment [27, 28, 31] but concerns in relation to possible collusion or increased examiner leniency have been raised when students sit the OSCE after their peers [32]. However, students themselves have challenged this assertion [33]. Other negative perceptions tend to centre on the OSCE being a stress-inducing experience for students [29, 34, 35], with OSCEs deemed responsible for higher levels of anxiety than students experience in other forms of examination [22]. It is argued this is due to the added pressure of needing to integrate theoretical and clinical knowledge and skills, time pressure involved, and the constant observation of examiners [22, 29, 36]. In addition, students have expressed a view that the simulation experienced in an OSCE station does not replicate real clinical experience nor facilitate a true reflection of their clinical competencies [37]. Conversely, other studies have argued that the degree of integration and application of knowledge required, coupled with the necessity to perform under pressure over an extended period of time, is more representative of clinical practice, increasing the relevance of the OSCE as an assessment strategy for health care professionals [13, 20, 27, 38]. Indeed,
other studies have reported that students perceive the OSCE stations as being “true to life”, preparing them for clinical placements and professional practice [32].

While the former findings provide valuable information about the perspectives of a wide range of medical and allied healthcare students, there is a dearth of literature to understand speech and language therapy students’ perceptions of the OSCE. To date, we only found one published study describing OSCEs in the discipline of speech and language therapy. Zraick et al. [39] explored the use of an OSCE that used standardised patients with acquired communication disorders to evaluate students’ interpersonal and communication skills [39]. However, speech and language therapy students’ perceptions of the OSCE were not gathered. Information on SLT student perceptions is crucial to determine student acceptability and to tailor future development of the OSCE. It is well acknowledged that student participation in assessment design promotes student engagement and that both formative and summative assessment drives student learning [40]. Previous research has identified that student perceptions of the OSCE can differ depending on both the stage of education and on the clinical context of the assessment [41]. Students who are earlier in their education may have limited exposure to clinical practice and could perceive the OSCE to be more stressful. It is therefore important to explore variables such as clinical context and stage of education when evaluating student perceptions of the OSCE.

**Research Aims**

The aims of this study were to identify undergraduate SLT students' perceptions of the Objective Structured Clinical Examination (OSCE) within an Irish undergraduate university programme. Additionally, it aimed to determine if stage of undergraduate speech and language
therapy education influenced students’ perceptions of the OSCE. Specific research questions were:

1. What were undergraduate SLT students’ perceptions of the OSCE?
2. Did perceptions of the OSCE differ at different stages of undergraduate SLT education?

**Methods**

Ethical approval was obtained from the Research Ethics Committee, School of Language and Communication Sciences, Trinity College Dublin. The study was conducted in the Department of Clinical Speech and Language Studies, Trinity College Dublin. Two OSCEs had been introduced within two separate modules within a four-year undergraduate programme. The first OSCE was developed within a practice education module for second year undergraduate students. The learning outcomes for this module were within a broad clinical context with focus on assessment of children and adults with developmental and acquired communication and swallowing disorders. The second OSCE was developed to assess fourth year undergraduate students’ clinical competencies within the more specific clinical context of dysphagia. Both OSCEs were completed separately within a speech and language therapy department in a university setting in December 2018.

Each OSCE comprised a circuit of eight stations. At each station, students had to complete a specific task such as a case history, administration of a test, data analysis, or treatment selection (see OSCE station outlines in Figure 1). Stations were a combination of observed, unobserved, linked and technology enhanced stations as defined by Khan et al [6]. Each station was ten minutes duration and students had one-minute break between stations. Examiners were academic teaching staff, clinical teaching staff, and service users who are involved in
undergraduate teaching. Rest stations were integrated into the OSCE circuit to reduce student fatigue. A full OSCE circuit was one hour twenty minutes duration.

FIGURE 1 HERE

Study Design

The study is mixed methods in design, as it meaningfully amalgamates a qualitative and quantitative approach to design, data collection, and analysis [42]. An anonymous online survey design was developed in Surveymonkey™ and disseminated to undergraduate students within one week of OSCE completion. A survey was selected as the most appropriate research design compared to focus groups or semi-structured interviews. Given that participants were current undergraduate students, they may have felt uncomfortable providing feedback face to face and hence an anonymous survey was deemed to promote more valid and less biased feedback. A survey design method to determine student perceptions of the OSCE is in keeping with previous research [43, 44]. As the survey collected both quantitative data (e.g., responses to a Likert Scale) and qualitative data (e.g., free field comments), a mixed methods approach to analysis was deemed appropriate [42]. The mixed methods framework we adopted falls within a synergistic approach, in which we view the sum of the qualitative and quantitative approach to be of greater value than a single perspective [45].

Participants

All second year and fourth year students who completed one of the two OSCEs were invited to respond to the survey. None of these students had any previous experience of an OSCE examination as part of their clinical education. During their undergraduate programme, previous assessment approaches had included written examination, group problem-based learning oral presentations, oral presentations, written essay or multiple choice questions (MCQ’s).
Survey

The survey was designed specifically for this study and the content was based on previous research. The survey included six four-point (strongly agree, agree, disagree, strongly disagree) Likert style questions and two open ended questions. For each question, students could add narrative comments. The survey took maximum of five minutes to complete.

Data Collection Procedure

Within one week of the OSCE examinations, second- and fourth-year students were emailed a link to the anonymous online survey by an executive officer who acted as a gatekeeper for the study. The link to the survey was only provided after the OSCE results were received by the students, thereby disassociating any links between participation in the study and any potential perceived influence on grading. This separation was strengthened by the anonymity of whether students participated in the survey or not.

Data analysis

Survey data was analysed both quantitatively and qualitatively to obtain an in-depth understanding of data. Quantitative data was exported from Surveymonkey in an excel document for descriptive analysis. Percentages and raw data were obtained for the total group and for subgroups (i.e., second year and fourth year students). To test for an association between survey responses and year of undergraduate education (second year versus fourth year), data (strongly agree and agree data plus disagree and strongly disagree data) was entered into a 2x2 contingency table and one-sided Fischers exact tests of Independence were carried out within SPSS Version 25. Statistical significance was set at <0.05.
For the qualitative data, thematic analysis was applied to all free field comments in the student survey to identify, analyse, and report themes within the data [46]. Aligned with Braun and Clarke’s (2006) six phases of analysis, we: (i) familiarised ourselves with the data; (ii) generated initial codes; (iii) searched for themes; (iv) reviewed the themes; (v) defined and named the themes; and (vi) produced a written argument in relation to story that the data told [46]. Through this recursive process of analysis, individual themes were generated and interconnections between themes were constructed, enabling us to capture patterns of meaning across the data that related to the focus of this inquiry [46-48]. Reflexivity is demonstrated through illustrative quotes that make explicit how we engaged with the data and how themes were constructed [49].

Results

Response Rate

There was a survey response rate of 80% (29/37 second year students; 26/32 fourth year students).

Student Responses

Figure 2 provides the total combined responses of each question of the survey and shares the responses by class cohort. A series of Fischer’s exact tests of Independences found no significant differences in responses between second- and fourth-year students on any item (p>.05 on each test).

In summary, the results in figure 2 reveal an overwhelming majority of students agreed that the OSCE was easy to understand (96%), fair (95%), a meaningful way to assess clinical competencies (97%), instilled confidence in clinical practice of placement (91%), and
highlighted strengths areas to work to develop (93%). Some students were in strong agreement about the potential positive attributes of the OSCE. For example, as displayed in figure 2, over half of students strongly agreed with the former survey questions (ranging from 55-73%) and less than ten-per-cent disagreed or strongly disagreed (ranging from 3-9%). There was less consensus amongst students in relation to one question of the survey, that is, whether the OSCE was less stressful than written exams. While the majority of students agreed (33%) or strongly agreed (33%), over one quarter of fourth year students (27%) and two-fifths of second year students (41%) disagreed that the OSCE was less stressful (figure 2).

FIGURE 2 HERE

Qualitative analysis

Following the completion of all phases of thematic analysis as described by Braun & Clarke [46], five themes were constructed from the analysis of the free field narrative comments of the student survey. Each theme is outlined below, illustrated by responses from second year (SY) or fourth year (FY) students.

(i) Theme 1. “Everything was laid out as expected”: Clarity of expectations

A large proportion of positive comments in relation to students’ experiences of the OSCE related to the clarity and transparency about what would be expected from them on the day. This included clear links between lectures/tutorials and OSCE stations, provision of relevant resources and easy to follow instructions in advance, and a structured and organised OSCE environment.

“Each tutorial had a clear focus on each station” (SY)
“The instructions were helpful and clearly laid out” (SY)

It was evident that their clarity about the assessment focus of each station, and how the OSCE environment would be structured and sequenced, supported students’ preparation for the OSCE and increased their confidence on the day of the OSCE.

“I was confident because I knew how the day was structured. If we didn’t get as much information, I definitely would not have been as confident or comfortable.” (SY)

“The clear structure and sequence of stations made the environment very relaxed and pleasant for an exam!” (FY)

Related to this, any perceived degree of uncertainty in relation to examiners’ requirements, such as a belief that some OSCE instructions lacked specificity, was negatively appraised.

“Fill in the blank stations (orofacial, swallow trials) not enough indication of how much information is expected” (FY)

“Make it clear exactly what you have to do (e.g., do you have to assess Information Carrying Words 3 times or once etc?)” (SY)

(ii) Theme 2. “Make the length of the stations more even”: Time allocated for assessment tasks

Students frequently shared a perception that the time allocated for an assessment task in the OSCE station could have a positive or negative impact on their examination performance. For example, it was commonly remarked that time constraints in a specific OSCE station impeded their ability to fully demonstrate their competencies for a particular clinical task.

“The case history station was too short considering it was not a bedside assessment situation, which did not leave enough time to go further than standard questions” (FY)

Conversely, some students considered the duration of OSCE stations to be adequate, while others believed that too much time was provided for some stations.
“The other stations were long enough” (FY)

“Break stations were appreciated but the break between the two halves were very long…” (SY)

“10 mins is perfect, slightly long for some stations and a little tight on others - provides a rounded exam experience” (FY)

(iii) Theme 3. “Some lecturers are harder markers than others”: consistency between examiners

Students’ remarks pointed to a perception that the examiner of the OSCE station had an impact on how high or low they were graded, indicating a view that a level of subjectivity and lack of inter-rater reliability existed.

“Feel some lecturers are harder markers than others” (FY)

“For each case history case, there should be a clearer protocol in place for the examiners” (FY)

At times, this concern was explained by students’ belief that some examiners are more intimidating than others, thereby unnerving them somewhat in the examination process.

“I feel a rest period between the case history and ethical dilemma would be a good hit as the nature of the 'role plays' are quite stressful when you consider the individuals behind them” (FY)

“Choose the least daunting people in the department for case history and medical/legal” (FY)

Despite this alarm for some students, many maintained that the OSCE was a fair and objective mode of examination, more reflective of clinical practice.

“Fair way of accessing our skills” (SY)

“All the lecturers in the stations made it an enjoyable experience...I feel it was very fair” (FY)
“This type of assessment is much more relevant to our training than written essays” (FY)

“As clinicians, written exams are not a true reflection of our ability to perform. You can have a very good clinician who is also a very poor examinee, but you can have a very poor clinician who can spew out essays” (FY)

(iv) Theme 4. “Really good prep for placement”: influence on student learning

The positive impact on student learning, as a result of preparing for and completing the OSCE, was resounding. Students referred to how the preparation for the OSCE facilitated the translation of theory to practice, integrated a distinct practical element into the preceding lectures/tutorials, and provided a structure and motivation to practise clinical competencies.

“It will provide students with more knowledge on a practical level. Many students struggle on the conversion of theory to practice and this aids in that” (FY)

“It was refreshing to have a practical element within our lectures and it was good motivation to study known how relevant it is to the job” (SY)

It was recognised that practising and developing clinical competencies for the OSCE also enhanced their preparation for clinical placement in various healthcare settings.

“I liked the clinical approach and how it gave us an opportunity to practice our clinical skills before placement” (SY)

“I do feel more prepared and confident for placement after preparing for assessments and administering them. Knowing that I am competent in these skills before placement is very reassuring” (SY)

“found the whole experience really beneficial for hospital placement” (FY)

Students commented that completing the OSCE and receiving feedback on their performance, offered them a personalised account of their strengths and weaknesses. This increased their
confidence in their clinical competencies in some areas and enabled them to develop an individual learning plan for developing other specific clinical competencies.

“I know what to work in now before I start placement” (SY)

“It helped me to understand what my strengths and weaknesses were” (SY)

There was less agreement on how the OSCE aligned with clinical practice. Some students maintained there was a strong alignment between their experiences of the OSCE and speech and language therapy practice. Other respondents claimed there was a disconnect between the examination task and what would typically take place in a healthcare setting with real clients.

“Simulates real clinical setting” (SY)

“Allowed me to practice as it would be in a clinic” (SY)

“I think most students would naturally perform better in context with actual clients” (SY)

“Some stations did not seem representative (e.g. if unsure about swallow trials in the clinic, we would get the chance to ask the client to do another trial, but during the OSCE we could not re-watch the video)” (FY)

Theme 5. “It was nerve-wrecking”: Personal impact

Many students were of the opinion that the OSCE had a personal impact. Mostly this personal impact related to feelings of anxiety. While some students considered the OSCE generated more stress than written exams, others believed the stress they felt was comparable or even less than with written exams.

“It is much less stressful than a written exam” (FY)

“The OSCE was equally as stressful as written exams” (FY)

“The OSCE was, in fact, profoundly more stressful than written exams” (FY)

Feelings of heightened anxiety were attributed to the fact that the OSCE structure and format was a new experience, or that the OSCE was assessing newly developed clinical competencies
“It was nerve wrecking doing assessments and case histories for the first time!” (SY)

“I was quite nervous because I had never been assessed in this way before” (SY)

For one respondent, the OSCE format was deemed to be unsuitable for students with personal issues such as anxiety disorders or other disabilities.

“Nine stations in one day for those with disabilities is inaccessible - especially for those who are easily drained by that most social interaction…it was a very uneven testing field for those who cannot cope with that level of stress over one day.” (SY)

Discussion

To the authors’ knowledge, this was the first study exploring speech and language therapy students’ perceptions of the OSCE in a university setting. Quantitative and qualitative analysis of the data collected in this study demonstrated that students held many positive views of the OSCE, regardless of their stage in the undergraduate programme. A majority of the participants rated the OSCE as being easy to understand, fair, confidence-boosting, and a meaningful way to assessing their clinical competencies by highlighting strengths and areas to develop. This concurs with the findings of other studies that reported students’ satisfaction with the perceived objectivity and fairness of the OSCE [26, 27, 30]. Unlike the students in Ghouri et al.’s (2018) study [31], the speech and language therapy students in this inquiry did not make reference to increased examiner leniency over time. Instead, some participants raised the issue of individual examiner harshness and possible lack of inter-rater reliability between stations in the OSCE. Others commented that inadequate time negatively impacted their ability to be fairly assessed.

Additional positive experiences expressed about the OSCE were raised in the themes that were constructed, that is, that it clarified expectations of the assessment process and provided a positive influence on their learning. Students commented that the OSCE facilitated their ability...
to transfer theory to practice, simulated clinical experiences they will encounter on placement, and motivated them to practise the development of specific clinical competencies. The emphasis on the ability of OSCE to replicate clinical practice and helpfully pinpoint areas for development is echoed by others [10, 23, 26, 30]. This, in turn, appeared to augment student’s self-confidence in their standards of proficiency as student clinicians. However, a minority of participants disagreed, perceiving a disconnect between the OSCE assessment task and the real-life clinical practice, similar to the perspectives of nursing students [37].

A further area of dissatisfaction with the OSCE that was shared by a greater proportion of the participants was the personal distress that the OSCE caused. Over one third of the speech and language therapy students believed the OSCE was more stressful than written exams, akin to the perceptions of dental students [22]. Students remarked that is was “nerve-wrecking” and invoked feelings of anxiety, confirming the claims of others that the OSCEs can be stress-inducing for nursing and allied healthcare students [29, 34, 35]. While the students in the former studies attributed this stress to time pressure, being observed by examiners, and the requirement to integrate theory to practice in real-time, speech and language therapy students in this study suggested the increased anxiety was as a result of the OSCE being a new assessment experience of recently developed skills and competencies or as a result of existing personal anxiety issues.

No statistically significant differences were observed in perceptions of the OSCE between second- and fourth-year students, indicating the perceptions about the OSCE were stable across more junior and senior student cohorts. The stability of student’s perspectives is especially compelling considering second- and fourth-year students were being examined on different clinical competencies and simulations were focussed on different client groups. In addition, fourth years had the benefit of experiences from clinical placement that may have supported
their performance and positive regard of the OSCE, yet second year students had not yet completed any days of clinical placement when the OSCE took place.

**Limitations**

There are several limitations to this study. All student participants in the study were registered on a single undergraduate programme in one university setting. This may possibly limit the generalisability of the findings to students from other medical or allied healthcare university programmes. However, the findings are distributed across different year cohorts and different examiners, suggesting a broader possible application to the implementation of the OSCE in other institutions. While this study evaluated one assessment method, student perceptions were obtained on two separate OSCEs which assessed competencies within different clinical areas. While this may be viewed as a limitation, it ensured that student perceptions obtained weren’t limited to one specific clinical context or to one stage of education.

An additional limitation is that the student survey was completed at one time point, after the students had received their grades from the OSCE. The grades that students received on the OSCE may have influenced how they completed the student survey. As the student survey was anonymous, there is no way of exploring any possible correlations. Perhaps some of the students’ existing perceptions of teaching staff’s assessment practices introduced bias to students’ perspectives of the OSCE. Yet, traditional constructs of examiners as being either too lenient or too harsh (i.e., “doves or hawks”) have been considered too simplistic, with research showing that variance in examiners’ scores are typically legitimate and based on expertise and contextualised appraisals [50]. While the OSCEs were examined by teaching staff and service users, involvement of other stakeholders including family members and interprofessional colleagues may have optimised the assessment process. A final limitation is that the use of an
anonymous web-based student survey prohibited the authors from asking the students clarifying questions about their ratings on the Likert scales. This limitation is allayed somewhat by the inclusion and integration of the findings of a thematic analysis of the students’ free-field narrative comments within the survey.

Conclusion

The examination of profession-specific clinical competencies of student SLTs requires profession-specific assessment [11]. To date, there is little research exploring the perceptions of students who have completed OSCEs within the SLT discipline to examine such competencies. Based on findings from this survey, SLT students at different year levels perceive OSCEs positively. In summary, students positively appraised OSCE stations that had clear expectations, explicit marking criteria, tasks directly linked to topics taught in lectures and adequate time to complete them. They believed this resulted in a motivation to learn and practise new skills and increased their readiness for competencies expected to be demonstrated on placement and clinical practice. It is important that the numerous benefits of OSCEs identified by students are not permitted to be overshadowed by the concerns that were raised. Concerns in relation to the anxiety that the OSCE may invoke will need to be considered when preparing OSCE protocols and providing instructions for students. Diligent and careful design of OSCE protocols, coupled with further feedback from staff and students, will help to ensure that the OSCE remains a method of valid and reliable assessment within speech and language therapy education that is positively regarded by students.

Acknowledgements: We appreciate the time of the undergraduate speech and language therapy students who responded to the anonymous survey.
Statement of ethics: Ethical approval was granted by the research ethics committee within the School of Language, Speech and Communication Sciences, Trinity College Dublin.

Disclosure Statement: The authors report no declarations of interest.

Funding sources: No funding sources to report.

Author Contributions: Both authors (DQ, JR) designed the study, collected data and analysed data. Both authors wrote and reviewed the paper.

References
1. CORU. Speech and language therapist registration board: Criteria and standards of proficiency for education and training. 2014. Dublin (Ire): CORU.


49. Braun V, Clarke V. Reflecting on reflexive thematic analysis, Qualitative Research in Sport, Exercise and Health. 2019; 11(4): 589-597

Figure Legends

Figure 1. OSCE Format Across Second and Fourth Year
Undergraduate Speech and Language Therapy Programme

Figure 2. Perceptions of speech and language therapy students of the OSCE (n=55)