



Original Article

Education Quality Measure of Undergraduate Students of Speech and Language Pathology in Pakistan

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ABSTRACT

Undergraduate of Speech and Language Pathology study the basics of the mechanism of human communication, and pathology faced by humans in Speech, Language and Swallowing.

Objective: To measure the quality of education of undergraduate students of speech and language pathology **Methods:** The study was observational and cross-sectional in nature, with data collected using a purposive sampling technique. Students from both the public and private sectors from various institutes and universities across Lahore took part in the study **Results:** The results indicated that 40 students (61.50%) felt a "need for self-improvement" in terms of self-perception in academia. In terms of atmosphere perception, 44 (67.70%) of students had "a more positive attitude." In terms of learning perception, 58 students (89.20%) reported having a "more positive perception of the education they receive." According to perceptions of course organizers, 51 (78.50%) of students believe they are "moving in the right direction." In terms of social self-perception, 54 students (83.10%) rated themselves as "Sociable." In the study, students of all years had different perceptions of learning, course organizers, self-perceptions in academia, atmosphere, and society, but none of these perceptions differed based on gender or institutes **Conclusions:** First-year students had a more positive perception of academics, self-perception, course organizers, academic atmosphere, social and self-perception than students of other years.

INTRODUCTION

Speech and Language Pathology (SLP) falls under the domain of Allied Health sciences and is a part of medical education. SLP is a relatively new field in Pakistan, the curriculum and training program was also based of the programs established in the western countries so the educational environment is somewhat objectionable because of the fact that the assessment and training all is not up to date with the country in which these courses are being taught, as the field of Speech Therapy is as much related to the social and cultural aspect as to theoretical portion [1]. Many educators in the field emphasize that there should be a collective effort to develop a system of

assessment, curriculum layout and clinical training according to the academic and cultural needs of Pakistan [2]. Undergraduates of SLP study the basics of the mechanism of human communication, and pathology faced by humans in Speech, Language and Swallowing, as well as the social and psychological aspects of communication. The students are also made aware of the standardized tools and techniques used for assessment, diagnosis and treatment of Speech, Language and Swallowing disorders, it also involves the study of multiple related medical condition in which the patients might face speech and language difficulty as an effect of the primary

condition [3]. The Speech Language curriculum consists of all the basic medical subjects which are necessary for all the practitioners which deal with the treatment of patients at any level but special focus is given to anatomy and physiology of human speech and hearing, biochemistry and pathology of the conditions which effect speech and the fundamentals, language development, auditory development, communication process, psycho-social impact on speech, test, tools, techniques and imaging strategies used, linguistics, phonetics, psychiatry, medical issues which incur speech and language disorder as a comorbidity, as well as surgical interventions which might effect one's receptive and expressive speech [4]. Allied health Professionals are a part of new approach of medicine which is termed holistic approach in which multiple discipline professionals work together for the care of the patient's need accordance to their specific specialty. Holistic approach has gained popularity in recent years as opposed to allopathic approach in which the patient is only maintained using medicinal treatment but holistic approach promotes rehabilitation as opposed to only medicinal support with the help of multiple professionals [5]. Developed countries are actively working on this holistic framework which incorporate Allied Health Professionals (AHPs). They are now leaders in their respective fields and work in their specific specialty, but even the developed countries are still evolving and they are still working to rule out the gaps in their current model and to develop a concise health care delivery system, this health system will cater to the specified need of the patient in the most efficient rehabilitative manner. AHPs are currently a well-developed part of the health care system and cater to the approach that instead of surviving a life where your quality is compromised you may lead a life which may not be as long but with a better quality [4,6]. Current curriculums are not completely based on the concept of evidence-based practice. Evidence based practice has emerged as the dominant scientific method by which all of the scientific practices are conducted [7]. There is a significant literature present in the support of evidence-based practices. These practices dictate the quality of education at all levels of SLP [8,9]. This study hopes to evaluate the quality of education of the Speech Language Pathologist at undergraduate level considering the standards dictated by the scientific and educational studies. This study hopes to identify the grey areas in the quality of education delivered to undergraduate students.

METHODS

The study has been observational and cross-sectional in nature, with data collected using a purposive sampling technique. The Dundee Ready Educational Environment Measure questionnaire was used to collect data from

Bachelor students of Speech Language Pathology. The study included 67 participants, and the students came from both the public and private sectors, as well as from various institutes and universities throughout Lahore. The data was analyzed using SPSS version 21 and references were cited using EndNote. The data was organized to measure the quality of education received by speech and language pathologists.

RESULTS

In this study, 77.12% of the participants were females, while 22.87% were males. In terms of perception of learning, 89.20% students had "a more positive perception of education they receive," 9.20% students aware that "their teaching has been updated and fully" and only 1 student was aware that "inappropriate teaching or non-constructive". In terms of course organizers' perceptions, 78.50% students thought they were "moving in the right direction," 15.40% students thought they were "models of course organizers' perceptions," and 6.20% students thought there was "some need for reforms." In terms of academic self-perception, 40.50% of students felt a "need for self-improvement," 23.40% were "confident," and 2.10% had a "negative outlook on their academics." Atmospheric perception was more positive in 67.70% of students 27.70% had "a good feeling overall," and 4.60% students thought "there are many issues that need to be changed." Regarding the social self-perception, 83.10% students thought they were "Sociable," 13.80% students thought they were "Not in a good place," and 3.10% thought they were "Very good socially." P-values for all aspects were 0.010 for perception of learning, <0.001 for course organizer perception, <0.001 for Academic Self Perception, <0.001 for Atmospheric Perception and 0.087 for Social Self-Perception (Figure 1,2; Table 1).

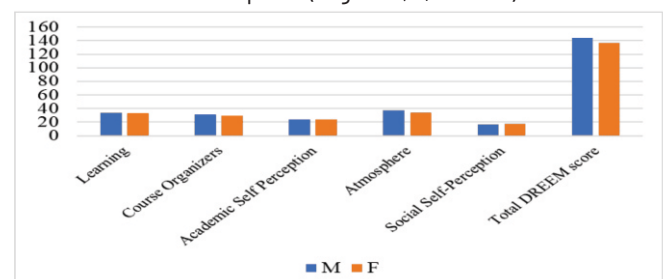


Figure 1: Gender-wise comparison among different perceptions

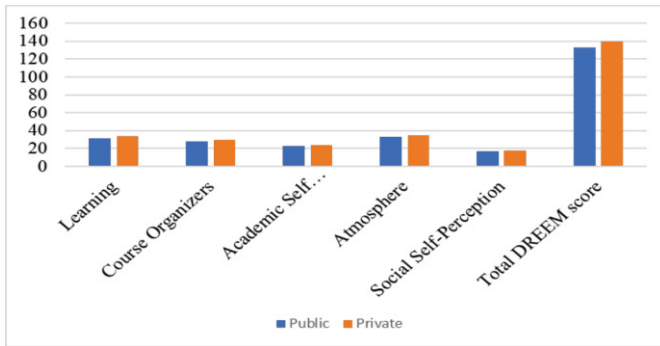


Figure 2: Comparison of different perception between Public & Private Institutes

	Learning			Course Organization			Self-Perception			Atmosphere			Socialization		
	Neg (%)	Pos (%)	Highly Pos (%)	Neg (%)	Pos (%)	Highly Pos (%)	Neg (%)	Pos (%)	Highly Pos (%)	Neg (%)	Pos (%)	Highly Pos (%)	Neg (%)	Pos (%)	Highly Pos (%)
1 st	0	100	0	33.3	66.7	0	0	100	0	0	100	0	0	100	0
2 nd	0	83.3	16.7	0	58.3	41.7	0	45.8	54.2	0	25	75	0	75	0
3 rd	0	83.3	16.7	0	100	0	0	50	50	0	16.7	83.3	0	50	50
4 th	4.3	91.3	4.3	0	100	0	8.7	65.2	26.1	13	78.3	8.7	8.7	91.3	0
Total	1.5	89.2	9.2	6.2	78.5	15.4	3.1	61.5	35.4	4.6	67.7	27.7	13.8	83.1	3.1

Table 1: Comparison between Undergraduate Students and Registrars' Perception Regarding Learning, Course Organization, Self-Perception, Atmosphere, and Socialization

DISCUSSION

In a study conducted at King Saud University Medical School, the educational environment was assessed using the Arabic translation of the Dundee Educational Readiness Environment Measurement (DREEM). Over 500 questionnaires were distributed, with 222 of them being analyzed. The results showed that the overall score was 45.0%; 40.7% for students' perception of learning, 48.2% for teacher perception, 46.3% for self-perception in academia, 44.4% for perception of atmosphere, 46.1% for social self-perception; and that first-year students' scores are significantly higher than others. Preclinical students were also significantly more numerous than clinical students, and gender was not a statistically significant variable in this study [10]. Dundee's 50-item Formative Educational Environment Measure (DREEM) is a standardized method and Delphi monitoring system composed of nearly 100 medical educators from all over the world and proven by more than 1000 students in different countries such as Argentina, Ethiopia and Bangladesh to measure and diagnose the higher education environment in the health professions. This method has been designed to set up a specific non-cultural tool by combining qualitative and quantitative techniques. This tool has been interpreted into Norway, Spanish, Portugal, Netherlands, Sweden, China and Arabs and has been used in different contexts, including Thailand, Middle East and the United States [11-16]. The significance of environmental recognition for better administration of learning, evolution, and change among health practitioners is important. Pololi and Price (2000) have since created a 31-item survey with three subscales at four US medical schools. Their inventory is not supposed to be uncultured or common to medical professions other than medicine; the two inventories share a number of factors, which could be interpreted as evidence of a shared understanding of what constitutes an efficient environment for academics in the tertiary health-related professions [17]. A previous study was done on the same pattern using the same criteria and questionnaire; in that study, a sample of 180 students was initially included, and 153(85%) were enrolled after excluding 17(9.4%) participants who did not meet examination selection criteria and 10(5.5 percent) were absent. Furthermore, 35(23%) of the students were boys, while 118(77%) were girls. There were 70(45.8%) fourth-year students and 83(54.2%) final-year students. The mean DREEM score was 116.13±18.24 overall. The DREEM questionnaire had a consistency or reliability value of 0.89 for low achievers and 0.83 for high achievers [18]. In the study, students of all years had different perceptions of learning, course organizers, self-perception in academia, atmosphere, and social self-perception, but these perceptions did not differ

based on gender or institutes. Due to limited time, this study was only performed in Lahore. This study was carried out on a small population. The gender difference was present in this study because males made up only 3 of the 65 participants; an equal number of participants from each class and institute should be taken. This study shows that the students were aware of the academic parameters but they answered more particularly to the portions they felt the most strongly about, but some sections where the faculty has a better understanding show marked variations in the answers of the students as the students were not trained those areas to judge so this section was susceptible to personal opinion and biases as the students were not in a position to understand the guidelines and procedures used in formulating the curriculums. Interprofessional collaboration is in high demand right now. Furthermore, it is growing as more people realize that no single profession can meet a patient's complicated needs. Instead of operating in isolation, the proposed multidisciplinary approach entails a group of professionals from many fields collaborating to deliver the best possible care to patients. In relation to the work of SLPs in acute care settings, there is a considerable demand for improved education [19]. In the future, more comprehensive research will be proposed to improve the elements impacting the use of professional skills in special education centers. In the future, more extensive research will be proposed to improve the elements that influence speech and language pathologists' professional skills in special education settings [20].

CONCLUSIONS

The first-year students had a more positive perception of academics, self-perception, course organizers, academic atmosphere, social, and self-perception than students of other years.

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