

Factors Affecting the Implementation of Specialized Skills of Therapist in Special Education Centers

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ABSTRACT

Background: The present study is about the factors affecting the professional skills implementation in special education centers. Speech-language pathologists (SLPs) are responsible for the evaluation and treatment of speech language impediments, however they offer multiple services, such as evaluation and treatment of swallowing problems, impaired cognition, and hearing problems. The failure to maintain an effective professional skills implementation in special education centers so many irreversible, fatal consequences among the speech-language pathologist (SLP).

Objectives: To study the factors affecting the implementation of professional skills in special education centers. To conduct comparisons between female and male regarding the implementation of professional skills in special education centers.

Method: This observational cross sectional study was conducted in special educational centers of district Lahore, Mandibahudin, Sahiwal, Okara and Shekhupura Punjab, Pakistan. The sample size of this research study was consisting of 73 speech therapists. Age range of participants are 21 to 50 years. There are 61 (81.3%) male participants and 14 (18.7%) female participants sample size as per topic need participate in survey. To draw the sample from population, purposive sampling technique was used. Instrument was developed with the help of the literature review and expert opinion about the topic. Content analysis was done to find out reliability and validity of the questionnaire. Duration of research was nine months from May 2020 to January 2021. Study is approved from the institutional review board of The University of Lahore, Ref No: IRB-UOL-FAHS/745-II/2020.

Results: All the factor professional knowledge, Environmental factors affecting professional skills, workload and assessment tools are the positively corralled. The result depicted that significant difference in $t(-1.424) p<.000$ between the male and female speech-language pathologist. One way ANOVA was used for analysis result showed that there was significant difference ($t(198)=-.434, sig=.00$) among speech therapists responses on the above mentioned factor.

Conclusion: Factors affecting the professional skills implementation in special education like availability, professional knowledge, workload, and assessment tools was significantly difference among male and females speech-language pathologist. In future such detailed studies are recommended to further enhance the factors affecting the professional skills implementation in special education centers. There is also need to improve the policies regarding vaccination and its implementations all over the country.

Keywords: Professional Skills, Speech-language pathologists (SLPs), Special Education Centers, Gender

INTRODUCTION

The SLPs use a wide range of Speech language pathology practices include the provision of areas for speech language pathology and professional practice¹. In addition, SLPs also work with students with severe communication disorders, including language, speech impairments (speech sounds), fluency (speech speed), voice / resonance, and swallowing disorders - SLPs help patients improve their oral and written expression, auditory processing skills, auditory and reading comprehension. They specialize in oral and household swallowing disorders and rehabilitation in

swallowing, providing services for slow learners as well as other learners who are at risk of school failure. After thorough discussions they help the patients². SLPs focus on personal, academic, emotional, social, and vocational needs that have an influence on achievement of educational goals and offer different roles based on their experience in a particular language. They further help in treatment of verbal and non-verbal basis of course learning for students with disabilities³.

SLPs are independent practitioners whose aim is to provide speech and language services and their services are not controlled or governed or monitored by any other health professional⁴. SLPs may also collaborate with other peer professionals to make a judgment regarding therapy

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mythologies or therapy outcomes. Their professional judgment indicates their performance and expertise in respective field⁵.

Clinician is the most commonly applicable term for describing the specialist's way of working which provides treatment for people with speech, language and related problems. This is chosen in contrast to 'pathologist,' who means a study without involvement of illness or disease, or 'therapist,' which indicates emphasis on treatment⁶. The word clinician may conjure up images of work in medical environments, either at the bedside of the hospital or in health clinics, and a primary concern for conditions and disorders to present. Most importantly, however, it conveys message that the specialist concerned is objective and applies a scientific, problem-solving approach to people-clients-observation, assessment and management⁷.

Therapist have variety of strategies such as articulation treatments, intervention, swallowing and oral therapies. The eight areas of speech-language pathology service delivery are collaboration; counseling; prevention and wellness; screening; assessment; treatment; modalities, technology, and instrumentation; and population and systems⁸. They deal with targets either individually, in a group or the large-scale gatherings like class rooms. A SLP may also work in hospital or health center clinics as a speech and language therapist (SLT), but there are other places where they can contact clients. SLPs may contact their place of residence, maybe the family home or a care home, or the place they go to during the day, such as a day center or school⁹. SLPs may also work in other settings, including resource centers offering an augmentative communication service system for users. The speech therapist will also address the re-educational approaches to be used for deglutition and phoning rehabilitation, seeking to instill a relaxed and positive state of mind about the treatment and post-operative rehabilitation¹⁰.

As there is huge gap of factors affecting the professional skills implementation in special education centers, while many people are familiar with speech therapists in clinics and hospitals, but have no idea what a speech therapist does in a special education center environment¹¹. There are many factors affecting the professional skills implementation in special education centers in Pakistan the present study focus these factor like availability, professional knowledge, factors affecting professional skills, workload and assessment tools. The failure to maintain an effective professional skills implementation in special education centers so many irreversible, fatal consequences among the speech-language pathologist (SLP)¹².

The professional skills of a speech and language therapist are affected by several factors like collaboration and communication with colleagues, support from administration, provision and condition, workload and SLP training and knowledge. Factors other than pre-professional training, such as years of experience, styles and strength of professional experience or continuing education, which also affect the degree to which the provision of specific EI services by individuals is both relaxed and competent. Literature on experience, sort, or strength of case load and their ability to perform special duties with satisfaction is very small in the technical fields.

Some experts, in the scientific context, however, accept the connection between it as it is described as relaxation, and the practice on palms has been examined¹³.

Speech language pathologists do not have laptop skills, their area of professional knowledge suffers from communication problems. However, older and younger generations of SLPs face plans to adapt IT technologies to their treatment goals. During professional practice SLPs also face several challenges like work load, false time management, erratic clients response and behavior, lack of collaboration with seniors, insufficient management support and unpredictable work assignments. This study will assess several performance indicators of speech therapist like their professional knowledge, time management, workload and patient involvement. Results of this study will help speech therapists to focus more on high output performance indicators¹⁴.

Speech therapists help young children to start speaking and help adults with speech difficulty to speak affluently. The current study is aimed to highlight various factors that hinder the implementation of methods of therapy, use of equipment's and technology at special education centers and find out how these skills can be effectively implemented in their speech techniques to give expected outcome (Cheng et al., 2001). This study will guide us how to effectively run a speech center by implementing core professional skills and get desired outcome and satisfaction of patients. Speech Therapists are working in Pakistan in various rehabilitation centers, special education centers and find out limiting factors in applying professional skills of SLP in a practical setup is ultimate rationale of this study¹⁵.

Literature Review: This part explores literature review on factors affecting the professional skills implementation in special education centers in Pakistan. It will explore the following areas: overview of the concept special education, categories of learners with special needs and factors influencing the implementation of professional skills implementation in special education centers¹⁶.

Prizant, et al., (2018) studied that the language-impaired children and adolescents have difficulty establishing and maintaining wonderful social relationships on a regular basis, including relationships with their peers. Speech pathologists need to understand which aspects of communication most effectively promote the interaction of their peers and potentially improve their peer relationships. Speech pathologists' decisions that really contain the cons and the emphasis in the intervention can encourage them to communicate in which they can minimize and make significant communication mistakes. Understand, and the pathologists of this speech are practicable. Speech pathologists should adopt strategies to decorate the social discrimination of patients¹⁷.

Party, (2012) stated that the expert therapists who are jogging with children and especially people who are walking with children and adults who are experiencing anxiety feel that speech therapists may be qualified through this speech wrapping assistant who Perform without supervision. These included some medical skills, some mutual skills and some management skills. Physicians who regularly paint with elderly people with neurological disorders, however, were generally more conservative than

those who were helped using their assistants who helped straighten were under surveillance¹⁸.

According to Ebert (2010) more general variables that are prevalent in various speech or language therapies can also lead to positive results. For instance, in speech or language treatment research, the position of the clinician is usually minimized or ignored, while evidence indicates that Clinics are an integral part of comparative field therapy. In comparison to speech language pathology, especially in relation to extra people, strange factors can be compared. Many speech therapists have specific elements within the interaction between physician and user about their care, specific to the duration of the care schedule, and the perceptions of success of the client have an effect on the results of care. The implicit clinical center of seasoned professionals can shape these views, but the idea is not always to capture these well-known elements by looking at speech and language behavior. The risk of ignoring common factors takes a look at the effectiveness of remediation. Ignoring these variables first will not eliminate their effects, and the findings of the analysis can be confused by their unacknowledged existence. Second, by means of ignoring the relevance of bizarre elements, we fail to realize and take advantage of records which can permit us to maximize treatment outcomes¹⁹.

According to Walsh (2018) this is now it is not uncommon for these misconceptions that precise education is the least relevant part of the general faculty device; this assumption is incorrect, as in many, special education requires more challenging and more difficult than general education. Through taking special educational criteria into account, special education is meant to offer education to each pupil. Specialized education is based on asset adjustment in a passive activation environment, teaching methodological plans and analytical exercises, while style schooling involves students on a daily basis with trend / shared settings²⁰.

Stevens et al. (2011) published a report conducted on beginner working at the clinics. The target students were having English as their second language, which is a major constraint during their clinical practice. In this study, several concerns i.e. communication, learning style professional behavior was highlighted, which may ultimately help the professionals to improve their skills in the future. Barkimer (2009) in his research about Speech-Language Pathology in the Schools published in an article of The Ohio State University compiled the constraints faced by the SLPs during their practice at schools. The major problems are limited parental discussion and involvement, huge assignments, discouraging staff and last but not the least is scarce resources. Other constraints were highlighted from a study conducted at Ohio, by Bernard et al. 2016 where the SLPs were working at the schools. So far the highlighted limitations were a collaboration with colleagues and demand for evidence of clinical practice by higher authorities^{21, 22}.

McAllister et al., (2004) in his research about "Facing and managing dilemmas as a clinical educator" has presented the experience of clinical specialists while performing their responsibilities as pathologists in higher education. This study can be referenced for the future improvement of clinical practitioners particularly at the

higher level of education. The key constraints are workload, false time management, erratic client response and behavior, lack of collaboration with seniors, insufficient management support, and unpredictable work assignments. Besides highlighting these problems, few practices were mentioned that are necessary for the SLPs. These responsibilities may include self-realization, the realization of duties as a clinical educator, self-confidence and realization of relationships with colleagues and the patients²³.

Evans, (2002) evaluate, renew and expand their dedication and specialty to opportunities for ethical coaching duties. In particular, this long-term approach of the Workers' Behavior Team focuses and builds on a realistic software program of innovation that guides and prepares people for our responsibilities as well. Decide the corporation. Enables you to achieve your desires. With that in mind, it seems like a tool to convert PD instructors into a tool you know how to convert your experts²⁴.

Iqbal, (2003) states that the priority of training our disabled population has gained growing recognition in Pakistan over the past three decades. Interest in this newsletter arose through the International Year of Persons with Disabilities (1981), and the United Nations Declaration of 1983. In the 1980s, Pakistani authorities launched a crash program to increase the delivery of education for men and women, increasing the quantity and quality of existing centers. However, the persistent absence of any form of schooling for children with a desire for individual education denies the unexpected majority of these young people the right to go to high school²⁵.

Jani, (2005) at present, national coverage defines the philosophy of special education in Pakistan, especially in the areas of school education aspirations, unique school curricula, and especially in the areas of assessment and innovation for teacher education packages in schools. Indicates goals. Education for children with unique educational aspirations is the responsibility of the Ministry of Education in Punjab and Sindh, even in Balochistan and KPK. This portfolio was developed by the Ministry of Women's Development, Social Welfare and Special Education. In addition to assessing the individual needs of education in Pakistan, he called on the federal and provincial governments and NGOs to liaise for the training of special children and to ensure co-operation and co-operation in sports²⁶.

Lytton (2010), on his latest work entitled 'Problems and Issues in Education', while putting light on the issue, adds "During the strong economic domestic historical past, with the help of a supportive mother and father, there is a need to beautify a child's overall modest academic overall performance." In addition, this argument can be expected from the scholarly teaching performance in which the child is recommended to make appropriate decisions about his teachers and experts who are interested in his mental abilities, interests and sports. While children will need to take care of illiterate mania. Discover yourself by working hard to walk the streets to discover yourself²⁷.

METHODOLOGY

It is observational cross sectional study. This study was conducted in special educational centers of district Lahore,

Mandibahudin, Sahiwal, Okara and Shekhupura Punjab, Pakistan. The sample size of this research study was consisting of N=73 (Male = 61 and Female= 14) speech therapists. The sample size is calculated by the following formula keeping the margin of error equal to 5% and level of significance equal to 5%. To evaluate the factors affecting the professional skills implementation in special centers of district Lahore, Mandibahudin, Sahiwal, Okara and Shekhupura. To draw the sample from population, purposive sampling technique was used in this research study.

Inclusion Criteria:

- Speech Language Therapist working in Special Education Center of having minimum 1 year experience was included.
- Therapist minimum qualification diploma in speech language pathologist.
- Therapist currently working in special education centers were included.
- Speech Language Therapist age range 22 to above be included.
- Therapist of district Lahore, Mandibahudin, Sahiwal, Okara and Shekhupura were be included.
- Both genders male and female will be included.

Exclusion Criteria:

- Speech language Therapist who are on leave was not included.
- Speech language Therapist who are not willing to fill the questionnaire.

Instrument was developed with the help of expert opinion, articles and book. Content analysis was done to find out reliability and validity of the questionnaire. Validity co relation is significance level of 0.05. In reliability analysis the cronbach alpha value is 0.98 for all cases. Questionnaire was measure the availability, professional knowledge, workload, and assessment tools used by Speech therapists. Five point LIKERT scale was used in developing questionnaire i.e. “Strongly Disagree”, “Disagree”, “Neutral”, “Agree” and “Strongly Agree” options. Content analysis was done to find out reliability and validity of the questionnaire. Data was collected through survey method. The respondents were investigated about the detailed questionnaire is given in the supporting information. Descriptive analysis was done with the help of table, frequencies and percentages. Difference of knowledge, attitude and practices between the groups was assessed with ANOVA, to see if the different SLT’s have difference or similarities.

RESULTS

The results deals with data analysis “Factors affecting the professional skills implementation in special education centers”. Mean score, independent t-test and ANOVA test was use as statistical techniques.

The background detail of the speech therapists regarding age, gender, qualification, work experience, and work setting are shown in Table 1. The sample consisted of 75 speech therapists from special educational centers of district Lahore, Mandibahudin, Sahiwal, Okara and Shekhupura. Among the participants, 68 (90.7%) are 20-30 years old, 6 (8.0%) participants are 31-40 years old while the remaining 1.3% participants are 41-50 years old.

Concerning gender specification, 61 (81.3%) are male participants, and 14 (18.7%) female participants.

Most of the selected participants were qualified, according to survey the qualification of the participants were BS 10 (13.3%), MS 33 (44.0%), Diploma 17 (22.7%) and Other 15 (20.0%). The work experience of the participants were 1 to 3 years 51 (68.0%), 2 to 5 years 2 (2.7%), 3 to 6 years 17 (22.7%) and more than 6 years 5 (6.7%). The professionals were adopting different work strategies and settings. The work setting of the participants were special education center 26 (34.7%), medical center 39 (52.0%) The selected participants were also investigated about their social activities, like number of the seminars they are participating. The collected data set showed that conferences attendance was 0-20 times for 72 (96.0%) of the participants. Few participants was 2 (2.7%) attended the seminars for 21-40 times. While the remaining 1.3% were present in the seminars for 41-60 times. The no. of workshops attended 0-20 times was 74 (98.7%) and 1 (1.3%) was 81-100 Times. The no. of seminar attended 0-20 times was 74 (98.7%) and 1 (1.3%) was 81-100 Times.

Table 1: Description of Sample

Background variables	Categories	N=75 %
Age	20-30 Years	68 (90.7%)
	31-40 Years	6 (8.0%)
	41-50 Years	1 (1.3%)
Gender	Male	61 (81.3%)
	Female	14 (18.7%)
Qualification	BS	10 (13.3%)
	MS	33 (44.0%)
	Diploma	17 (22.7%)
	Other	15 (20.0%)
Work Experience	1 to 3 years	51 (68.0%)
	2 to 5 years	2 (2.7%)
	3 to 6 years	17 (22.7%)
	More than 6 years	5 (6.7%)
Work Setting	Special Education Center	26 (34.7%)
	Medical Center	39 (52.0%)
	Other	10 (13.3%)
No. of Conferences attended	0-20 Times	72 (96.0%)
	21-40 Times	2 (2.7%)
	41-60 Times	1 (1.3%)
No. of Workshops attended	0-20 Times	74 (98.7%)
	81-100 Times	1 (1.3%)
No. of Seminar attended	0-20 Times	74 (98.7%)
	81-100 Times	1 (1.3%)

Table clears that independent sample t-test was applied to find out the mean comparisons in between the male and female responses on these above defined factors availability, professional knowledge, workload, and assessment tools the result shows that on “Avalibility” Male (M= 3.617, SD= .620) and Female (M= 3.46, SD= . 1.15) t (1.424) p<.0.15) mean score show male has more availability then the female speech-language pathologist. Further result show that on “Professional Knowledge” Male (M= 3.66, SD= .620) and Female (M= 3.46, SD= .888) t (.645) p<.0.55) mean score show female has more Professional Knowledge then the male speech-language pathologist. Above factor show that on “Factors affecting Professional Skills” Male (M= 3.73, SD= .620) and Female (M= 3.65, SD= .828) t (1.648) p<.0.52) mean score show

male has more Factors affecting Professional Skills then the female speech-language pathologist. Above factor show that on "Workload" Male (M= 3.81, SD= .877) and Female (M= 3.62, SD= 1.165) t (0.342) p<.0.10) mean score show male has more Workload then the female speech-language pathologist. Last factor show that on

"Assessment Tools" Male (M= 3.62, SD= .660) and Female (M= 3.58, SD= .988) t (0.325) p<.0.73) mean score show male has more Assessment Tools then the female speech-language pathologist.

Table 2: Effect of Gender on Factors Affecting the Professional Skills Implementation (add a column of f% with N)

Variables	Gender wise classification	N	Mean	Std. Deviation	Df	T-value	P-value
Availability	Male	61 (81.3%)	3.6176	.62024	73	1.424	0.15
	Female	14 (18.7%)	3.4684	1.15483			
Professional Knowledge	Male	61 (81.3%)	3.6657	.88894	73	.645	0.55
	Female	14 (18.7%)	3.7387	1.22300			
Factors affecting Professional Skills	Male	61 (81.3%)	3.7336	.82853	73	1.648	0.52
	Female	14 (18.7%)	3.6544	1.28160			
Workload	Male	61 (81.3%)	3.8196	.87778	73	0.342	0.10
	Female	14 (18.7%)	3.6249	1.16514			
Assessment Tools	Male	61 (81.3%)	3.6217	.66027	73	0.325	0.73
	Female	14 (18.7%)	3.5890	.98813			

DISCUSSION

Findings of this study show that majority 90.7% of the participants are 20-30 years old. Also a good majority 81.3% male participants and 44.0% participants had MS qualification. A majority of 68.0% participants were 1 to 3 years work experience. The work setting of the participants were a majority 52.0 works in special education centers. A huge majority 98.7% were 0-20 times attended conferences. A huge majority 96.0% were 0-20 times attended workshops. A huge majority 96.0% were 0-20 times attended seminar. According to research on special education centers environment are being asked to have deeper understandings of child development and early education issues; to provide richer professional and educational experiences for all children ²⁷.

In the current study availability of a speech therapists, equipment availability, workplace environment and sufficient financial resources is necessary. A 24.0 percent of them were agree and 45.3 percent were strongly agree that speech therapists are always available to offer their services. A 29.3 percent of them were neutral, 20.0 percent of them were agree that equipment available at my workplace is sufficient for providing the therapy needed. A 20.0 percent of them were neutral, 16.0 percent of them were agree that at my workplace speech therapists are given separate place to carry sessions. A 29.3 percent of them were neutral, 22.7 percent of them were agree that there are sufficient financial resources to carry out day to day tasks of the special education centers ²⁸.

In this current study professional knowledge is another factors affecting the professional skills implementation in special education centers. A 28.0 percent of them were agree that you have deep knowledge about the remedial strategies of different communication problems. A 21.3 percent of them were agree that you way of conversation and body language is easily understood by the patient, whereas 52.0 percent were strongly agree. A 62.7 percent were strongly agree that you believe in teamwork in achieving therapy goals. The findings of this study show that factors affecting professional skills; a 28.0 percent of them were agree that you pay complete focus on patients during clinical sessions, whereas 56.0 percent were strongly agree. A 32.0 percent of them were agree that you feel motivated in dealing with every type of

patients, whereas 45.3 percent were strongly agree. A 22.7 percent of them were agree that you take proper consent from patients caretakers before starting treatment, whereas 62.7 percent were strongly agree. A 36.0 percent of them were agree that you believe in creative ideas of treatment rather than bookish one, whereas only 48.0 percent were strongly agree ²⁹.

In this current study workload is another factors affecting the professional skills implementation in special education centers. A 25.3 percent of them were agree that no of speech therapists are sufficient according to patients' ratio, whereas 37.3 percent were strongly agree. A 29.3 percent of them were agree that due to the excessive workload sometimes it is frustrating to take that much sessions, whereas 44.0 percent were strongly agree. A 34.7 percent of them were agree that Time management during sessions is a great challenge for SLPs, whereas 38.7 percent were strongly agree ³⁰.

CONCLUSION

The level of professional skills implementation in special education centers was significant among the participants. The sample t-test was applied to find out the mean comparisons in between the male and female responses on these above defined factors of and the result shows that the male and female speech-language pathologist have significant mean score. Therefore, it is explored that all the above defined factors have equal variances assumed between male respondents had more score of mean then females. The mean comparisons in between the 0-20 Times and 20< No. of Seminar attended speech-language pathologist responses on the professional skills implementation and the result clears that the 0-20 Times and 20< No. of Seminar attended. One way ANOVA was used for analysis result showed that there was mean significant difference among speech therapists responses on the above mentioned factor. Because mean significant values was less than .05, which defined that factors affecting the professional skills implementation in special education centers was not same effected on the group responses. The POSTHOC comparison among speech therapists responses on the bases of effect of availability and professional knowledge and also their mean significant difference. One way ANOVA was applied for analysis on

speech therapists on 'Workload on Factors affecting Professional Skills the result elaborated that there was mean significant difference among speech therapists responses on the above mentioned factor.

Recommendations: In future such detailed studies are recommended to further enhance the factors affecting the professional skills implementation in special education centers. There is also need to improve the policies regarding vaccination and its implementations all over the country. The results of this study provide previously uninvestigated information regarding the factors affecting the professional skills implementation in special education centers ability to fulfill their roles and responsibilities. However, there were limitations to this study due to the nature of survey research, the operationally-defined scales, and the assumptions made by the researcher. Therefore, future research is warranted to further investigate the ways in which current SLPs can help shape or inform pre-service or in-service education.

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