



## ***Effective Individual and Professional Features in Clinical Training from the Viewpoint of Students, Professors, and Speech Therapists***

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#### **Abstract**

**Background and Objective:** One of the goals of clinical education is providing students with sufficient opportunity to develop the necessary professional competences, which requires constant assessment of the existing situation, recognition of strengths and correction of weaknesses. This study aimed to evaluate and identify the individual and professional features effective in clinical education in the field of speech therapy.

**Materials and Methods:** This study, based on the paradigm of qualitative content analysis, was conducted on 13 students, 6 instructors and 6 speech therapists, who were selected through purposive sampling. Data were collected using in-depth and semi-structured interviews and group discussions. In addition, data analysis was carried out applying the Colaizzi's method.

**Results:** Individual and professional features of individuals involved in clinical practice were recognized as factors affecting the quality of clinical education in speech therapy. Learning motivation and background knowledge were recognized as effective features related to students, whereas feedback provision and clinical experience were identified for clinical instructors. Moreover, accountability of clients was an effective factor in this regard.

**Conclusion:** According to the results of the study, individual and professional features can affect the quality of clinical education in speech therapy. Mostly, the role of clinical instructors was emphasized by interviewees, who recognized the motivation, experience and knowledge of clinical instructors as the important factors for successful clinical education.

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## Introduction

As a knowledge generating and transferring entity that provides specialized human resources in the community, universities have the duty of continuously reviewing their existing status and providing practical solutions for the promotion of the quality of education by analyzing issues and identifying the causes of problems (1). The issue of clinical education is the most important concern in medical education centers. Clinical education is defined as creating the necessary conditions for aligning the basic knowledge of students through performing the skills, diagnosing and treating the diseases, and acquiring different professional skills (2). Clinical education can be recognized as an activity that facilitates learning in clinical settings, where instructors and students equally participate in a process with the goal of creating tangible changes in performing clinical care by students (3). In clinical education, an opportunity is developed for students to turn their theoretical knowledge into various mental and physical skills, which are vital for patient care (4). Clinical settings have variable and unpredictable features, which inevitably affects the education of students. This highlights the importance of the role and

performance of clinical instructors, in a way that some education experts believe that clinical training is more important, compared to theoretical education (5, 6). In fact, teaching and learning are interdependent in the process of education. In this respect, a question is raised that whether the educational programs of rehabilitation fields are followed and implemented in clinical settings in a way that individuals can perform their duties with the necessary expertise and abilities, or it is essential to perform studies from the viewpoints of both professors and students to identify the problems and make the necessary changes (7).

During this course, individual and professional features of individuals involved in clinical education can affect the quality of the education. Some of these features include the experience of clinical instructors and the way they provide feedback to students (8). Individual and professional properties of students (e.g., mastering the theoretical issues) and features of clients are among the other factors affecting the process of clinical education (9, 10). In this regard, a research was conducted in 2014 to evaluate the experience of occupational therapy students in the first clinical internship. Through the analysis process, the results were divided into

three main concepts, including instructor and clinical education, educational program and setting. In addition, secondary concepts, such as importance of primary sessions, experience of interaction with the instructor, supervision requirement and proper feedback, setting up a health record and writing reports, lecture as educational strategy, diversity in evaluation of performance of students, gap between theory and clinical educations, clinical observation (a low-impact notion), role of planning, and personnel were recognized as effective factors and properties of the central and physical structure (11).

In 2009, Khadem al-Hosseini et al. conducted a qualitative in-depth analysis research to determine the experiences of students, instructors and head nurses in intensive care unit (ICU). In this study, 9 nursing students, 5 nursing instructors, 4 nurses from the surgical ward and 1 education supervisor were selected by purposive sampling. After interviewing the subjects, 5 main themes were extracted each having several subthemes. In this regard, the main themes included factors related to proper management of the instructors, experience and sufficient knowledge of the instructor, monitoring of interns by higher-level managers, insufficient knowledge and experience of instructors and management of

instructors (12). Mol Holland and Derald believe that instructors require a higher level of knowledge about clinical education and must be prepared before the internship course of students.

On the other hand, students require preparation more than the academic learnings to work in clinics. In addition, the goals and expectations of clinical education must be clear for these individuals (13). Unsuitable and poorly planned clinical education can cause problems that might decrease efficiency and effectiveness of the education system, resulting in a compromised quality of health care (12). Recognition and evaluation of clinical education methods can help us better understand the issues in education and learning. In addition, results of these evaluations can help improve the education environment (14). It is essentially important to conduct clinical education for fostering efficient workforce. Given the fact that no research has been carried out to better recognize the problems of students during the clinical education course in speech therapy in Iran, our researcher aimed to portray the factors effective in clinical training of students through a qualitative research based on actual experiences of these individuals.

## Materials and Methods

This study, based on the paradigm of qualitative content analysis, was conducted on professors, students and speech therapists of Tehran, Iran, who were selected through purposive sampling. To collect the data, 6 semi-structured interviews with professors and therapists, as well as 1 individual in-depth interview and 3 group interviews (4 individuals per group) were carried out. Sample size was determined based on data saturation, which was indicative of ending the sampling process. The interview session started by explaining the objectives of the research and raising questions by the researcher. After that, the researcher acted as a facilitator and asked more questions to encourage all subjects to participate in the meeting in order to obtain more and deeper information. However, semi-structured interviews were conducted for professors and therapists who were not able to attend focused sessions. These interviews were recorded with a minimum of 2 recording devices in order to prevent losing data or not recording the interviews. In addition, the important and key notes were written down, and Colaizzi's method was applied to analyze the data. Moreover, triangulation was used to assess the credibility of the data.

## Results

In this research, individual and professional characteristics of instructors, students, and clients were extracted as the main concepts affecting clinical education, which are explained below:

### Students:

The student concept includes the codes of learning motivation, critical thinking skill, self-confidence, and background knowledge and skills, which are further explained in this section.

### Learning Motivation:

Motivation of students was one of the notes pointed out in several interviews. This topic was more crystallized in interviews with professors, who regarded it one of the most important learning factors during the internship of students:

((The impact of student motivation and intelligence is undeniable. If students are interested in their field and have perseverance, it is normal to be able to use the experiences and skills of the professors.)) Instructor 4

((Students must want to learn. It means that we need to see whether students have a primary motivation for this field and work. Some of our classmates are not that interested in this area. Therefore, even the best professors cannot make a difference.)) group discussion 1

**Critical Thinking Skill:**

Some interviewees regarded critical thinking as the necessity for passing a high-quality clinical course and considered the lack of it a disadvantage for students.

((The next point is to have critical thinking. Scientific criticism means scientific evaluation of a work and pointing out its both strengths and weaknesses, determining what could have been done if the student were in the place of the writer. We need to increase this type of thinking in students in order to improve their analyzing ability)) instructor 3

**Self-confidence:**

One of the issues that were observed in some interviews, especially in the interviews with the professors, was the comparison of the past and present level of self-confidence of students, which decreased in the present time.

((On the other hand, from many years ago that the internship one and two were started, it seems that students have been significantly dependent, meaning that they ask a lot of question regarding their duties. I remember when I started the fourth semester, I had a high self-confidence and was able to take a case on my own)) instructor 6

**Background Knowledge:**

It is obvious that students who are passing a clinical course must be familiar with and

master the theoretical foundations of the work. They should also conduct studies in parallel with clinical education in order to enhance and update their knowledge. In this regard, there were some references to this issue during the interviews.

One of the instructors regarded mastering the theoretical discussion the first step in clinical education, stating:

((In my opinion, the first stage is to completely learn the educational contents. This is a significantly important issue but not at all sufficient)) instructor 5

One of the therapists believed that theoretical courses do not adequately cover the subjects, and further evaluation of various types of disorders is of the duties of students:

“Cases are so complicated that the information received until through one course (two units) is insufficient. Therefore, it is very important to read a lot of books, not just for treatment but for all areas)) therapist 4

One of the professional features that students need, especially during their clinical course, is report writing skill, which is applied to write, record, and use the necessary notes. One of the respondents in the interview considered writing and taking notes as a factor contributing to learning, expressing:

((When I interview, ometimes I see that

students take no notes and just watch, which is not enough. They must record what is stated, at least what the professor asks and what the patient answers. However, they even want us to teach them how to jot down the notes)) instructor 6

**Instructor:**

Another obtained concept was related to the individual and professional features of clinical instructors, which included secondary concepts of self-discipline, teaching motivation, method of feedback provision, level of education, emphasizing supervision, clinical experience, and up-to-date knowledge.

**Self-discipline:**

Having discipline is one of the most important factors to succeed in any field. In this regard, clinical instructors are no exception:

([The clinical instructor] observed and jotted down for me. After the session, he talked about the things that happened or answered my questions about the cases. Everything was going very well. My first supervisor was so disciplined and everything was carried out exactly based on his plan. He would monitor everything in the session)) instructor 5

**Learning Motivation:**

Motivation of clinical instructors was another code obtained regarding individual and personal features. One of the participants

regarded the presence of unmotivated instructors the cause of lack of motivation of students, affirming:

((Instructors must learn about this issue. I have encountered instructors who were so unmotivated that you could not expect them to motivate the students)) therapist 2

Another participant considered the motivation of clinical instructor the cause of increased quality of clinical course:

((One of the most important issues about instructors is their own motivation. If an instructor is motivated, his teaching will have objectives and he would dedicate time to train his students and not just fill his time by the course. Meanwhile, the instructors' motivation can inspire students to take their job more seriously)) group discussion 2

**Method of Feedback Provision:**

One of the issues pointed out by the respondents about the instructors during the interviews was tolerance of instructors and the way they treated students during the treatment session. According to one of the professors, the problems of students must be pointed out during the treatment session to have the necessary influence.

((Students must understand that they lack experience. Sometimes if we do not point out their problems at the right time, its impact

would decrease and they would not learn the lesson. Students must learn that whenever they make an error, they will receive a remark from the professor)) instructor 6

A group of students regarded the type of feedback provision by professors to be an important factor, believing that the instructors can respectfully point out the errors of students in the presence of families:

((You see, there are two aspects to the issue; firstly, the way the professor treats the students must not affect the trust of patients in students. For example, they say you should not have done that and must be careful. Or if they point out your error immediately, the patient should not notice it but we must notice and correct it, which increases its impact since at that moment you understand your mistake and correct it. The type of noting must be in a way that it would not decrease the trust of patients in therapists)) group discussion 2

**Level of Education:**

One of the issues related to demographic characteristics, which was obtained during interviews, was importance the level of education of clinical instructors. One of the therapists stated that one of the weaknesses of his own clinical education course was being trained by an undergraduate instructor:

((Our instructors were not that experienced.

We would ask some questions and they failed to completely explain the topic. I was very dissatisfied with my instructor. One of the weaknesses of my internship was having two newly graduated instructors who were unable to answer our questions)) therapist 1

**Emphasizing Monitoring:**

In this research, the interviewees regarded the monitoring of performance of students during the clinical education course by instructors an important issue in proper guidance of students. According to these individuals, lack of suitable guidance and monitoring was the cause of confusion of students during the clinical sessions. In this regard, one of the participants considered the evaluation of treatment plan of students for patients by clinical instructors a necessary act:

((I feel that it is better if the instructor assesses the plan at the beginning of the meeting and recognizes its weaknesses and reminds me to correct them)) therapist 5

Some other participants considered sufficient monitoring by clinical instructors the cause of several errors and mistakes in treatment:

((When you are a student, you might make many mistakes, which are not pointed out by professors. It would be better if the professors and instructors evaluated the work of students, which can lead to assessment of both the case

and the therapist to recognize the weaknesses and strengths of that individual)) therapist 2

### **Clinical Experience:**

One of the issues emphasized by the majority of interviewees, who recognized it as the necessity of a good instructor, is clinical experience. According to one of the students, an experienced instructor is the strength of the clinical course:

((In my opinion, if the professor were experienced, we would use his work and learn more by watching them instead of just learning the theoretical courses from them. I had a good clinical course since we had a very experienced professor in the first semester)) group discussion 3

### **Up-to-date Knowledge:**

Another professional feature of a clinical instructor is having up-to-date knowledge and the ability to turn theoretical knowledge into clinical skill:

((In my opinion, a good instructor is the one who is audience based. What it means is that he would first talk about the philosophy of what he is about to do and say what works for which treatment. In addition, the instructor must scrupulously evaluate the case)) therapist 2

### **Clients:**

One of the factors that plays a significant role in the treatment process and the rate of

progression of references in speech therapy is the factor related to clients and their families, which included the subcategories of the cultural and educational level and accountability.

### **Cultural and Educational Level:**

One of the factors that direct the treatment and counseling process is the educational and social level of parents of clients:

((In terms of parents, another important issue is recognizing their cultural and educational level, which really affects our job and their attitude toward us and vice versa)) group discussion 2

One of the students considered the level of education of parents an important factor in more adequate understanding of treatment methods and their purposes:

((If the parents have a low social level and cannot comprehend what is going on here, we must understand them and communicate with them)) group discussion 3

### **Accountability:**

According to the participants, the level of cooperation and accountability of clients plays a significant role in their treatment process:

((Lack of cooperation of mothers might harm the treatment process)) instructor 5

((It is very important for mothers to be



present during the treatment session. breastfeed their children and go, as if it is a  
 Sometimes, mothers would just come and kindergarten)) therapist 4

**Table 1: Main and Subordinate Concepts Extracted**

Concepts	Sub-concepts
<b>Student</b>	Learning motivation Criticism skill Self Confidence Prerequisite knowledge
<b>Teacher</b>	Discipline Teaching motivation Feedback method Education level Supervision Clinical experience up to date Knowledge
<b>Client</b>	Cultural and education level responsibility

**Table2: Interviews Information (teachers)**

Interviews	Academic rank	Time(minute)	Education level	sex
<b>First</b>	Instructor	59	MSc	Male
<b>second</b>	Assistant Professor	84	Phd	Male
<b>Third</b>	Instructor	33	MSc	Female
<b>Fourth</b>	Assistant Professor	23	Phd	Male
<b>Fifth</b>	Assistant Professor	35	Phd	Female
<b>Sixth</b>	Assistant Professor	49	Phd	Female

**Table3: Interviews Information (therapists)**

Interviews	work experience(year)	Time(minute)	Education level	sex
<b>first</b>	4	36	MSc	Male
<b>second</b>	3	32	MSc	Male
<b>third</b>	4	42	MSc	Male
<b>fourth</b>	3	33	BS	Female
<b>Fifth</b>	3	39	MSc	Male
<b>sixth</b>	2	29	BS	Female

**Table4: Interviews Information (students)**

Interview	semester	number of members	Time(minute)	university	sex
first	8	4	55	Tehran	Female
second	8	4	63	Tehran	Female
third	6	4	61	Iran	2 Male 2 Female
fourth	8	1	33	Iran	Female

## Discussion

One of the individual features pointed out about students was the motivation of students and its impact on improvement of clinical education, which is in line with the results obtained by Dehghani et al., who regarded lack of motivation of nursing students and their inappropriate level of skill the cause of problem in fundamental patient care (15). In a research by Chipchase et al. on necessary features of students to enter the clinical area, the obtained concepts were knowledge and understanding of theory issues, as well as professional and interpersonal processes, duties and skills (9), which is somehow consistent with our findings regarding the prerequisite nature of theoretical contents for students.

From the viewpoint of the participants, having the critical thinking skill is one of the features that must be acquired by students. This skill enables the students to make clinical decisions in order to meet the needs of clients and accurately performing the best performance

(16). In this regard, our findings are in congruence with the results obtained by Eslami et al., who showed that 94% of the students had a weak critical thinking skill on the last nursing semester (17). Another subtheme that was crystallized in relation to individual and professional features was the personal and professional characteristics of clinical instructors. This subtheme included most of the obtained codes, which showed the great importance of the role of clinical instructors in the education of clinical skills.

All of the participants (professors, students and therapists) greatly emphasized the individual and professional features of an instructor for spending a fruitful clinical course. One of the properties pointed out in interviews, especially during group discussions with students, was how instructors provided feedback for students during the clinical course. In this respect, the majority of participants were against the provision of feedback in the presence of clients. This

finding is consistent with the results obtained by Yazdankhah Fard et al., who demonstrated that the most stressful part of clinical education was humiliating experiences and the most stressful factor was pointing out the errors of students by professors in the presence of other personnel and physicians (18). In a research by Ernstzen et al., participants claimed that immediate and verbal feedback improved their learning experience (14), which is not consistent with a part of our findings regarding the provision of feedback by instructors.

Clinical experience of instructors was another issue pointed out by participants, who regarded the concept as one of the most important and critical factors for a good clinical instructor. In a research by Heydari et al., one of the main themes was individual factors, which included the subtheme of power of instructor comprising of proper attitude, high flexibility, solving the problems of students, accurate responses to questions, providing beneficial notes, and having high clinical experience and up-to-date theoretical and clinical information (18). Mol Holland and Derald believed that instructors require a higher level of knowledge about clinical education, and they must be prepared before starting the course with students. Moreover,

students must be more academically prepared before entering the clinical setting and must clearly understand the goals and expectations of clinical education (13).

From the point of view of participants in the present study, the cultural and educational level, and cooperation and accountability of clients and their families could play a determining role in quality of the clinical course. In this regard, our findings are in line with the results obtained by Dastgheybi et al., who regarded the level of knowledge and cooperation, as well individual health and gender of patients the most effective factors in clinical education (19). In addition, individual feature and informing the patients and their impact on learning of interns were other findings pointed out in a research by Henriksen and Ringset, in a way that some certified-to-teach patients in a specific field played the role of instructor for students (10). In the research by Larin et al., this element was taken into account, and students regarded patients as the source of clinical learning, yearning for having the best performance in this regard (20).

### **Conclusion**

From the viewpoint of the participants, the individual and professional features of

students (e.g., background knowledge and self-confidence), individual and professional characteristics of the clinical instructors (e.g., motivation and experience) and individual properties of the clients (their level of satisfaction) affected the clinical education course. With regard to the results obtained from interviews, it could be concluded that lack of experienced instructors with proper clinical knowledge is one of the main challenges in the area of clinical education in the field of speech therapy.

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### References

- 1- Fasihi H.T, Soltani AS. A survey of input and process of clinical education in Iran University of Medical Sciences. *Payesh*. 2003; 2(2): 127-132.
- 2- Cox KR, Ewan CE, editors. *The medical teacher*. Churchill Livingstone; 1988.
- 3- Delaram M. Clinical education from the viewpoints of nursing and midwifery students in Shahrekord University of Medical Sciences. *Iran J Med Educ*. 2006; 6(2): 129-135.
- 4- White Ruth, Christine E. Ewan. *Clinical teaching in nursing*. Springer, 2013.
- 5- Atack L, Comacu M, Kenny R, LaBelle N, Miller D. Student and staff relationships in a clinical practice model: impact on learning. *J Nurs Educ*. 2000; 39(9):387-92.
- 6- Lucas J, Wilson-Witherspoon P, Baxley EG. Walking the balance BEAM: the art and science of becoming a successful clinical teacher. *Fam Med*. 2002; 34(7): 498-9.
- 7- A'bdi K, Maddah SS, Rahgozar M, Dalvandi A. Evaluation of Educational Situation of Rehabilitation Branches in Welfare and Rehabilitation University from the Student's Viewpoint in Educational Year 2003-2004. *Arch Rehabil*. 2007; 7(4): 57-64.
- 8- Yazdankha Fard M.P.S, Kamali F, Zahmatkeshan N, Mirzaie K, Akaberian S, Yazdanpanah S, Jamand T, Gharibi T, Khoramroudi R, Hajinejad F. The Stressing Factors in Clinical Education: The Viewpoints of Students. *Iran J Medical Educ*. 2008; 8(2): 341-350.
- 9- Chipchase LS, Buttrum PJ, Dunwoodie R, Hill AE, Mandrusiak A, Moran M. Characteristics of student preparedness for clinical learning: clinical educator perspectives using the Delphi approach. *BMC Med Educ*. 2012; 12(1): 112.

- 10- Henriksen AH, Ringsted C. Learning from patients: students' perceptions of patient' instructors. *Med Educ.* 2011; 45(9): 913-9.
- 11- Rezaee M, Khankeh H, Rasafiani M, Hoseini M A. Occupational Therapy Students' views of the First Fieldwork Education: A Qualitative Study. *J Med Educ Dev.* 2014; 7 (13): 34-44
- 12- Khademolhoseini SM, Alhani F, Anooshe M. Pathology of clinical training in nursing students of intensive care unit: A qualitative study. *Int J Crit Care Nurs.* 2009; 2(2): 81-86.
- 13- Mulholland, Derald M. An early fieldwork experience: student and preceptor perspectives. *Can J Occup Ther.* 2007; 74(3): 161-171.
- 14- Ernstzen DV, Bitzer E, Grimmer-Somers K. Physiotherapy students' and clinical teachers' perceptions of clinical learning opportunities: a case study. *Med Teach.* 2009; 31(3): e102-e115.
- 15- Dehghani H, Dehghani K, Fallahzadeh H. The educational problems of clinical field training based on nursing teachers and last year nursing students view points. *Iran J Med Educ.* 2005; 5(1): 24-33.
- 16- Heravi M, Rejeh N, Anoosheh M, Alhani F. Nursing Students' Comprehension of Community Health Nursing Training in Field: A Qualitative Research. *Iran J Med Educ.* 2011; 11(5): 526-538.
- 17- Akbar R.I, Shekarabi R, Behbahani N, Jamshidi R. Critical Thinking ability in nursing students and clinical nurses. *Iran J Nurs.* 2004; 17(39): 15-29.
- 18- Heydari H, Kamran A, Mohammady R, Hosseinabadi R. The Experiences of Nursing Students of the Mentorship Program:a Qualitative Study. *Health Sys Res.* 2012; 8(3): 439-448.
- 19- Dastgheibi S.M.R, Kamali M, Dadgoo M, Chabok A. Internal Elements and External Factors Affecting Physiotherapy Clinical Education from Physiotherapy Student's Perspectives: Qualitative Study. *J Res Rehabil Sci.* 2014; 10(3): 393-407.
- 20- Larin H, Wessel J, Al-Shamlan A. Reflections of physiotherapy students in the United Arab Emirates during their clinical placements: a qualitative study. *BMC Med Educ.* 2005; 5(1): 3.