



Strategies to Promote the Quality of Occupational Therapy Fieldwork Education: A Qualitative Study

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Abstract

Background: Clinical education is a bridge between theory and practice. The purpose of this study was to develop strategies to promote the quality of occupational therapy fieldwork education.

Methods: The qualitative content analysis was used to identify the promoting strategies of fieldwork quality in occupational therapy from students' and fieldwork educators' perspectives during the 2019–2020 academic sessions. Participants were 12 fieldwork educators (mean age=39.33 yr, Male=5, female 7) and 14 students (mean age=23.28 yr, Male=7, female 7) in the code extraction phase and 16 fieldwork educators (12 of them were in code extraction phase too) in actions of strategies scoring phase.

Results: Following the content analysis of the data, the prompting strategies categorized into 4 major categories and 10 subcategories: factors related to Fieldwork educators (Improving clinical teaching skills, Enhancing fieldwork management skills, Motivating fieldwork educators, and Fostering coordination between fieldwork educators), related to Educational Planning (Modifying clinical fieldwork planning, Revising curriculums), related to Students (Empowering students, Motivating students) and related to Fieldwork settings (Improving the social environment, Improving physical environment). Based on the qualitative content analysis and 3 expert panels. Finally, the 23 promoting actions were identified.

Conclusion: Improving the quality of fieldwork education in occupational therapy needs a systematic collaboration between educators, students, and educational planners. Doing the promoting actions on fieldwork education process in occupational therapy may improve the quality of fieldwork education process.

Keywords: Education, Occupational Therapy, Educator, Qualitative Research

Conflicts of Interest: None declared

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Introduction

Clinical Education (CE), known as Fieldwork Education (FE) in Occupational Therapy (OT), prepares students to enter the professional world by providing support, creat-

ing multiple learning challenges and opportunities and enhancing students' clinical reasoning and professional competence (1, 2). One of the principal components

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↑What is “already known” in this topic:

Paying attention to the strategies to improve the quality of occupational therapy fieldwork education may promote the quality of fieldwork education in occupational therapy.

→What this article adds:

The strategies for prompting the quality of fieldwork education in occupational therapy are as below:

- Strategies related to fieldwork educators (Improving clinical teaching skills, Enhancing fieldwork management skills, Motivating fieldwork educators and Fostering coordination between fieldwork educators),
- Strategies related to educational planning (Modifying clinical fieldwork planning, Revising curriculums),
- Strategies related to students (Empowering students, Motivating students),
- Strategies related to fieldwork settings (Improving social environment, Improving physical environment).

providing these conditions in FE is 'fieldwork educators' (3, 4). Fieldwork educators not only play a crucial role in enhancing the quality of students' learning in FE but also are primarily responsible for providing services to clients and ensuring the quality of students' services to clients (1). Quality refers to the satisfaction of minimum standards (5, 6). The quality of FE is contingent on several key components, including universities, students, health networks, and educators, which make providing high-quality FE difficult and challenging. Fieldwork educators have a very significant role in fieldwork education; therefore, they should be sufficiently competent and take full responsibility for training undergraduate students. The student-educator relationship is a key element of successful learning in fieldwork education (7).

Based on the World Federation of Occupational Therapists (WFOT), each occupational therapy student should complete a minimum of 1,000 hours of fieldwork to ensure his/her capability in integrating theory and practice; additionally, diverse placement options with different duration of fieldwork should be provided for students in their FE (8).

Bester et al. (2011) defined quality in FE as establishing and meeting the minimum FE standards in order to ensure the utilization of similar teaching and learning approaches among fieldwork educators and students. Short et al. (2017) considered student preparation prior to fieldwork training as a useful step in improving the FE process in occupational therapy (9).

The low quality of fieldwork education leads to the deceleration of academic achievements of would-be occupational therapists (1). These low competent occupational therapists deal with clients' lives in the future and would have a destructive impact on public health, which results in considerable capital losses (9). Considering the significance of the quality of FE in OT, this study is an attempt to identify effective actions for promoting the quality of education in occupational therapy fieldwork education.

Methods

This study was a qualitative study conducted among OT fieldwork educators and students during the 2019–2020 academic sessions. This study was a part of Participatory Action Research (PAR) which in the planning phase, the solutions (actions) should be clarified by participants so for doing the planning phase of that study. Four steps were taken to determine the effective actions (Fig. 1).

Step 1: Code extraction

The purpose of this study was to introduce the actions to promote the quality of occupational therapy fieldwork education actions-based fieldwork educators and students. Therefore, the qualitative exploratory analysis was used to identify the promoting actions of fieldwork quality in OT from students' and fieldwork educators' perspectives. Fourteen OT students and 12 OT fieldwork educators and professors (n=26 in totality) participated in the study. The demographic characteristics are presented in Table 1. To



Fig. 1. Steps for determining actions

Table 1. Demographic characteristic of participants (fieldwork educators=12, Students=14)

	Age (year)				Fieldwork education experiences (year)				Gender		Education level			Academic degree		Fieldwork education field			
	Minimum	Maximum	Mean	SD	Minimum	Maximum	Mean	SD	Female	Male	Graduated	Fieldwork Level I	Fieldwork Level II	Ph.D.	MS (Ph.D. student)	Physical disabilities-Adult	Physical disabilities-pediatrics	Psychosocial- adult	Psychosocial- pediatric
Fieldwork educator (n=12)	27	57	39.33	8.92	1	28	11.83	8.85	7	5	-	-	-	6	6	5	3	2	2
Student (n=14)	21	26	23.28	1.26	-	-	-	-	7	7	5	3	6	-	-	-	-	-	-

enrich the data, the participants with different characteristics were selected via the purposive sampling method; to be more precise, the students of both genders who were at different levels of fieldwork education were included and the professors and educators had different work experiences (10). The data were collected through focus groups and individual interviews. There were four focus groups as follows: 1) the students who studied fieldwork education level I, 2) the students who studied at fieldwork education level II, 3) the students who finished their fieldwork education and had a master's degree, and 4) the fieldwork educators who were Ph.D. students in OT. Six individual semi-structured interviews were conducted with the OT professors who were fieldwork educators as well. Not having much free time, they preferred individual interviews to focus groups. The number of participants in the focus groups ranged from 4 to 8. The focus group interviews lasted 68–94 minutes (Mean=79.32min) and the individual interviews took 41–58 minutes (Mean=46.18). The interviews were conducted at the most convenient time and places for the participants (for instance, OT clinics, OT classes or the OT Department of the School of Rehabilitation Sciences). Before the interviews, the participants were briefed on the objectives of the study and were assured that their comments would be kept confidential. Moreover, they gave their consent to their participation in the study and to their voice being recorded. The interviewer started the interviews with open and general questions, for instance, “would you please tell me about your experiences in fieldwork education? What factors in your fieldwork do you think could improve the fieldwork education process?” The interviews were recorded by a digital voice recorder (MP3) and were subsequently transcribed verbatim. The process of data gathering continued until data saturation was reached. The audio files were transcribed verbatim immediately after the interviews for further analysis. Data analysis was done based on the qualitative content analysis of Graneheim and Lundman (11). The audio files of the interviews and their verbatim transcriptions were reviewed several times to gain general insights into the participants' comments. Afterward, the

content of the interviews was examined several times by the first author. Then, the meaning units were extracted from the transcriptions and condensed. The condensed meaning units were considered as the primary codes. After that, the primary codes were grouped into different categories and subcategories.

Trustworthiness

To ensure the trustworthiness of the data, four evaluative criteria of Lincoln and Guba, including credibility, dependability, transferability, and conformability, were used (9).

In this study, to enhance the credibility of the data, the researcher had prolonged engagement with the participants, conducted interviews with both males and females, and obtained different perspectives on the subject. Moreover, the interview transcriptions along with the extracted primary codes were audited by the interviewees for member check. However, none of the participants made any changes nor provided any comments on the extracted codes. In addition, all the steps involved in data analysis were done by a team of researchers. For data triangulation, the participants with different backgrounds and areas of expertise were interviewed. In addition, both focus groups and individual interviews were used to enhance the credibility of the data. Six faculty members preferred individual interviews to focus groups; so, they were interviewed individually.

To establish dependability, in every step of coding the interview transcriptions, both the transcriptions and the obtained codes were audited by three separate researchers who were familiar with qualitative analysis and were experts in the area under study, and their comments and suggestions were considered in data analysis. Hence, all the steps involved in coding and categorizing the data were fully explicated to clarify the stages of data analysis for the reviewers.

Transferability was ensured through Maximum diversity in the selection of participants and clear and transparent reporting of the data and results, which make auditability possible (Table 1).

Step 2: Initial action extraction

In this step, the meaning units and extracted codes were re-examined in an expert panel with all members of the research team (n=5).

Step 3: Final action extraction

In this step, the actions extracted from the previous step were reviewed in another expert panel with the Head of Department, the Clinical Assistant of Department, supervisors (Physical disabilities-Adult, Physical disabilities-pediatrics, Psychosocial-pediatrics), and three members of the research team (n = 7).

Step 4: Scoring the actions

In the third expert panel, the fieldwork educators rated each action from 0 to 2 (2 = strongly agree, 1 = agree, 0 = disagree) using the Scoring Listed Criteria (12). These scoring criteria had three elements, namely, acceptability, feasibility, and effectiveness.

Ten and five educators rated the actions in the expert panel and by email, respectively, and one educator rated them through telephone (n=16; 12 of them were interviewed in Step 1 too). In the scoring form of each action, there was a section titled 'Proposed actions,' and the educators could propound other actions not mentioned in the form; however, no other action was proposed by them.

Ethical considerations

This study was approved by the Ethics Committee of Iran University of Medical Sciences (IR.IUMS.REC.1399.659). Before participating in the study, all participants were given sufficient explanation about the purpose and method of the study. In addition, written informed consent was obtained from all participants. Participants were also assured that the data was confidential and that they could leave the study at any time.

Results

The main participants of this study were 12 fieldwork educators (mean age= 39.33 yr) and 14 students (mean age= 23.28 yr). Other demographic characteristics of the participants are reported in Table 1.

Based on the qualitative content analysis, 321 primary codes were extracted. These codes were then classified into 4 major categories and 10 subcategories based on the

similarities and differences of the extracted codes. The obtained categories and subcategories are summarized in Table 2. Thirty-one initial actions were obtained based on the meaning units, codes, and some suggested solutions based on the problems extracted from the data. Then, among the actions proposed based on these categories and subcategories, the number of extracted actions was reduced to 23 action that were prioritized by the fieldwork educators, which are reported in Table 3.

Fieldwork educator

Based on the results of the study, it can be argued that a majority of interviewees considered educators as the most influential factor in the quality of FE. Most actions proposed by the interviewees and experts are associated with Fieldwork educators. These actions are classified into four major categories: *improving clinical teaching skills, enhancing fieldwork management skills, motivating fieldwork educators, and fostering coordination between fieldwork educators.*

Improving clinical teaching skills

The participants believed that promoting the clinical teaching skills of educators (through holding educational workshops) would improve the teaching performance of educators.

"I think what is more important is that educators teach students how to deal with cases in practice and explain everything to them. ... If educators have high skills in clinical training, they are able to transfer knowledge to students and teach them how to deal with clients...." (Student 3).

Enhancing fieldwork management skills

The ability of educators in managing fieldwork is another factor related to educators and emphasized by the participants. Enhancing educators' management skills in coping with challenges, compensating for the lack of fieldwork facilities, dealing with clients and their families, behaving toward personnel and students, and handling all the involved elements can improve the quality of fieldwork education.

How much educators themselves are capable of managing fieldwork, understanding students' conditions and knowing them, and whether they can utilize their Interpersonal relationships in the best possible way to plan efficiently for their clients are all important (Educator 4).

Table 2. Categories and subcategories of promoting strategies of FE

Categories, Factors related to:	Subcategories
Fieldwork educators	Improving clinical teaching skills Enhancing fieldwork management skills Motivating fieldwork educators Fostering coordination between fieldwork educators
Educational Planning	Modifying clinical fieldwork planning Revising curriculums
Students	Empowering students Motivating students
Fieldwork settings	Improving social environment Improving physical environment

Table 3. Prioritized promoting actions for improving FE quality

Actions	Acceptability (Total score)	Feasibility (Total score)	Effectiveness (Total score)
1. Changing clinical observation courses* (maximal use of occupational therapy centers)	30	28	26
2. Holding coordination meetings between educators	29	26	26
3. Including educators' logbooks	29	25	26
4. Holding workshops on 'negotiation' for educators	28	25	26
5. Holding workshops on 'effective communication skills in the workplace' for educators	28	28	26
6. Holding workshops on 'evidence-based practice in fieldwork education' for students	27	27	26
7. Holding workshops on 'various types of clinical education methods in occupational therapy fieldwork' to educators	27	25	25
8. Selecting and using similar clinical fieldwork evaluations for student assessment	26	25	25
9. Introducing motivational content in students' virtual groups	26	26	22
10. Teaching students how to use evidence in clinical practice	26	25	22
11. Designing motivational posters and pamphlets for students	25	23	23
12. Designing educational posters for students	25	23	23
13. Holding one-day seminars on 'philosophy of occupational therapy in clinical fieldwork training'	25	22	22
14. Training educators prior to their clinical training courses	23	21	22
15. Homogenizing logbooks of different fieldwork settings	22	21	22
16. Using the same teacher for both theoretical and clinical training courses	22	20	22
17. Holding visiting meetings as field trip	22	20	22
*In visiting meetings, the educators of a certain setting and their students meet each other in a predetermined setting at a predetermined time in order to gain information on that setting, its clients, and the teaching methods of its educator. In such meetings, scientific information is exchanged between educators and students and the interaction between educators increases. The purpose of the trip is usually observation, to provide students with experiences outside their usual fieldwork.			
18. Employment of occupational therapists in occupational therapy units in hospitals and other occupational therapy centers	21	20	22
19. Holding workshops on 'professional ethics' for educators	20	20	21
20. Giving the responsibility of occupational therapy wards in hospitals and other centers to the professors of occupational therapy departments and giving the role of teacher assistant (TA) to Ph.D. students	19	19	20
21. Modifying and revising curriculums in fieldwork education	19	18	18
22. Making new plans to attract new clients and dismiss old ones	17	17	19
23. Equipping fieldwork settings in hospitals	15	16	20

Motivating fieldwork educators

Educators' low interest in FE, the obligatory role of teaching imposed on them, especially Ph.D. students, in FE, and sometimes the irrelevancy of their areas of interest to those they teach decrease educators' motivation, and consequently, decline the quality of educators' FE.

...The area the OT Department forces the educator to teach should match the area the educator is willing to teach..., the Department forces one to teach NICU, and that person does not like it. ... If the Department supports its educators and motivates them by praising them ..., that would be really great (Educator 6).

Fostering coordination between fieldwork educators

From the interviewees' point of view, low coordination between fieldwork educators, especially in the training centers where two educators teach concurrently, is one of the factors causing confusion among students and lowering the quality of FE.

Before the start of the semester, the heads of groups hold coordination meetings with educators. ... my suggestion is to hold a workshop or a series of thought sessions before the start of clinical training and continue this approach even during clinical training ... (Educator 2).

Educational Planning

Modifying clinical fieldwork planning

A low variety and a small number of clients referring to OT training centers are among factors threatening the quality of FE. Increasing student clinical rotations could be of great help for them to deal with different clients and experience multiple centers.

It is possible to arrange time in a way that we (students) are divided into groups (by fieldwork educators) so that at least we observe both hand therapy and neurology and have multiple educators with various teaching skills and methods (Student 10).

Revising curriculums

According to some participants, the best way of training is that students initially pass the required theoretical courses that are more applicable and relevant to FE, and then, they enter to FE. Moreover, they asserted that course design should be developed in a way that students do not have to pass theoretical courses and clinical fieldwork training concurrently.

I think the design of our courses taught prior to our fieldwork training should be modified and corrected (Student 5).

Students

Empowering students

As noted by some participants, to overcome educational challenges, considering the educational conditions of students and empowering them by holding educational workshops are effective strategies in promoting fieldwork education.

In my opinion,... holding workshops on how to look for and use evidence in clinical practice can be very useful in our fieldwork training. (Student 7).

Motivating students

A majority of educators consider students' low interest and motivation in fieldwork training as a major obstacle in the FE process. Therefore, encouraging students, acknowledging top students, and involving students in clinical training plans can enhance students' interest and motivation, and consequently improve the quality of FE.

The learning environment and the relationship between educators and students are very significant.... Educators have to try to kindle students' interest and motivation ... (Educator 9).

Fieldwork settings

The problems of the social environment of fieldwork settings are the lack of employees in occupational therapy centers (including service personnel, such as secretaries and occupational therapists in hospitals and training centers) and a low variety and a small number of clients in some centers. The issues related to the physical environment of such centers are their small space and the lack of training facilities. Taking certain actions to solve these problems can partly impact on the improvement of the quality of FE in OT.

Social environment

Increasing permanent occupational therapy employees in hospitals and training centers, employing a secretary for receiving clients in OT centers are effective actions for reducing students' and educators' workload in FE.

The best thing to do is to hire workforce (occupational therapists) in hospitals and university-affiliated training centers so that we can attract more clients (Educator 2).

Physical environment

The small space of fieldwork settings, the irregular activity of some occupational therapy training clinics, and the lack of equipment and facilities in some fieldwork settings are among the factors decreasing the quality of FE.

I think the (occupational therapy) Department should initially estimate the physical conditions, like space and minimum facilities, required for each student, and then send students to these centers (Student 1).

Discussion

To improve the quality of FE in OT, actions can be taken in the following areas: fieldwork educators, educational planning, students, and fieldwork settings. Some actions were directly extracted from the participants' opinions,

and others were determined based on the experts' opinions about the problems highlighted by the participants.

Numerous studies have found that improvements in the quality of fieldwork education entail the enhancement of the quality of educators' clinical training (1, 9, 13, and 15). Holding workshops on empowering educators in the areas of clinical education, professional ethics, and efficient communication with students and clients are effective strategies in empowering educators and preparing them to start their clinical training. Increasing coordination between educators and improving their skills in showing students how to use theoretical concepts in practice and teaching them how to use evidence in clinical training enhance the performance of fieldwork educators in clinical training and subsequently, the quality of clinical training. In their study, Cheraghi et al. (2010) declare that one of the most prominent factors in the process of fieldwork education is educators' skills in transferring theoretical knowledge to practical knowledge, and their personality traits have a crucial role in educators' skills (15). Kirke et al. (2007) regarded promoting educators' performance and training skillful educators as key factors in having clinical training with high quality (16). Saeedi et al. (2019) identified improving the quality of educators' clinical training as one of the most fundamental factors in increasing nursing students' motivation. In their study, they introduced conducting teacher training workshops for educators and assigning the same professors to both theatrical and clinical courses as effective strategies to enhance the quality of educators' fieldwork training (9). In another study, Ghadami et al. emphasized the importance of improving the communication skills of professors and recommended holding workshops on this topic (17).

Another strategy to improve the quality of educators' performance in clinical training is to modify educational planning. Making changes to planning for clinical training and making revisions to educational curriculums are the factors contributing to the quality of clinical training. In their study, Rezai et al. (2015) underscored the necessity of reviewing and changing occupational therapy curriculums in Iran. Although Rezai et al. came to this conclusion in 2015, there has been no change no revisions to occupational therapy curriculums (18). In effect, modifications in curriculums have still been considered as one of the essential actions for improving the quality of educators' fieldwork education. Hooper et al. (2011) propose a model called Model Curriculum and highlight the use of this model for making revisions in occupational therapy curriculums (19). Clinical rotations in occupational therapy fieldwork education are an indispensable part of occupational therapy planning around the world (18). Similarly, in the current study, the participants requested to have a maximum rotation in order to have experience with multiple training centers. Furthermore, the fieldworks educators gave the highest ratings to this promoting action.

McBrein (2006) regards fieldwork education as a kind of education occurring in fieldwork sites and declares such an educational environment provides an opportunity for clinical students to obtain the required knowledge, apply that knowledge, get prepared to enter the professional

world and improve their clinical qualification (20). Although Sim et al. (2016) assert that the dissimilarities of clinical training centers in the developing countries, such as Iran, provide many learning opportunities, minimum facilities and equipment for clinical training are required to have clinical training with high quality (21).

The comprehensive support of occupational therapy departments from their fieldwork educators and the provision of minimum facilities and conditions for educators by universities are the measures that can improve the quality of occupational therapy educators' fieldwork education.

Kirke et al. (2007) argue the imperative for closer collaboration between universities and educators is one of the most effective ways to have high-quality clinical training (16, 21). Saeedi et al. (2019) identified encouraging educators, acknowledging studious educators, and forming a committee to improve the quality of educators' clinical training as motivating factors for nursing educators (9).

As a proper action, empowering students through educational workshops, for instance, on how to use evidence in clinical practice, can increase students' self-esteem and subsequently their interest in clinical training. In their study, Myers et al. (2017) put emphasis on the importance of comprehensive, contextually relevant, and collaborative training approaches for practitioners in the Evidence-Based Practice (EBP) (22). In their study, Cameron et al. (2005) declared a minority of registered occupational therapists in the United States utilized the EBP in the intervention planning process. They deemed employing the EBP in fieldwork education and explicating the importance of this issue to students and educators as essential elements for promoting occupational therapy as much as other healthcare fields of study (23).

In addition to increasing students' certain skills and preparing them to join fieldwork training, acknowledging diligent and committed students can be effective in motivating all students and improving their performance in clinical training. This would augment fieldwork educators' motivation, and in turn, enhance the quality of their fieldwork education more than ever before. Emotions, such as pleasure, interest, and happiness, which are achieved through appropriate educational and welfare facilities, enhance students' motivation and increase academic and educational activities (24).

On the whole, using promoting actions associated with fieldwork educators, educational planning, students, and fieldwork settings can lead to the improvement of the quality of educators' clinical training and, ultimately, the quality of fieldwork education.

One of the limitations of this study was that this study was qualitative and was done among occupational therapists of Iran University of Medical Sciences, so its findings should be generalized with caution. The strength of this study was the diversity of the participants with different experiences in the field of occupational therapy fieldwork education. It is suggested that a similar study be conducted with the participation of all members of the rehabilitation team, such as physiotherapy, auditory, and speech therapy for the interdisciplinary applications of the findings in rehabilitation education.

Conclusion

The actions to improve fieldwork education quality in fieldwork educators are available in different areas including, Fieldwork educators, Educational Planning, Students, and Fieldwork settings. The findings of this study (23 actions) can be used as a guideline for officials, planners, and professors of occupational therapy to design quality of fieldwork education improvement programs for occupational therapy fieldwork educators.

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Ethics approval and consent to participate

This study was approved by the Ethics Committee of Iran University of Medical Sciences (IR.IUMS.REC.1399.659). All participants signed informed consent.

Conflict of Interests

The authors declare that they have no competing interests.

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