


The Development of Professional Competencies in Ph.D. Candidates in Psychology: A Thematic Analysis Study

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Abstract

Background: Psychology is one of the important disciplines dealing with mental health. Psychology students develop a set of professional competencies during their studies. The present study sought to explore the experiences of psychology students and assess the development of their professional competencies in the workplace.

Methods: This qualitative study was conducted using a thematic analysis approach. The data were collected through 27 in-depth semi-structured interviews with 24 Ph.D. candidates in psychology who were completing their dissertations and 2 interviews with 2 professors of psychology. The data were analyzed using Braun and Clarke's six-step thematic analysis. The findings revealed the main themes, subthemes, and main categories. Lincoln and Guba's criteria were used to increase the trustworthiness of the findings.

Results: The core theme identified in this study was professional competencies developed during academic studies. Besides, the five subthemes underlying professional competencies were creating and maintaining empathy, building a mutual understanding, enhancing confidentiality, being human and seeing others as human, and getting out of absolutism.

Conclusion: The findings reported in the present study suggested that professional competencies are developed in psychology students during their studies according to their professional and clinical experience. Accordingly, providing adequate experiences can contribute to developing and promoting professional competencies in students.

Keywords: Psychology, Professional competencies, Qualitative research, Students

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Introduction

Psychology is one of the important disciplines related to health sciences. The professional performance of students graduating in psychology affects the mental health of people in the community. Educational psychology programs aim to prepare students and provide them with the knowledge and skills required for their future jobs as therapists and counselors. Psychological education contributes to shaping professional competencies in students. Students also learn and institutionalize the stages of professional socialization, self-direction, and critical thinking in this stage (1). The formation of professional competencies in psychology students is different from other fields because they enter an environment where they play a more active role in shaping their abilities as well as their professional competencies. The educational setting of the field of psychology gives students the ability to work on their autonomy and actively seek learning opportunities to improve their professional competencies (2).

Given the wide range of educational programs in this

field and the active role of the student who changes from a passive learner to an active learner, professional competencies undergo significant changes in this academic program (3). Professional competencies refer to a set of skills, knowledge, and experiences necessary for a profession in the future (4). Acquiring professional competencies is one of the important goals of educational programs and an important part of each person's professional identity (5,6). The formation of professional competencies contributes to the development of the professional identity of an individual.

The development of professional competencies is an important mechanism that affects the attitudes, emotions, and behavior of psychologists at work and beyond (7,8). Psychology is one of the most important fields in health sciences. Psychologists' performance is mostly influenced by the professional competencies they have acquired during their studies. The results of different studies have highlighted different aspects of professional competencies and the influence of different factors. Qualitative research



is a way to understand little-known and context-dependent phenomena. Since there is limited knowledge about the formation of professional competencies in psychology students especially Ph.D. candidates in Iran, the present study aims to investigate the experience of psychology students to reveal the development of their professional competencies in the workplace.

Methods

This qualitative study was conducted with a thematic analysis approach. Understanding psychologists' experience of developing their professional competencies is only possible through detailed descriptions of their experiences and discovering the meaning of events for them in the setting in which they live and work.

In the first step, the researchers recorded their sensitivity to the subject and their assumptions. The first and fourth authors were active in the field of psychology and experienced changes in the formation of professional competencies during the education of psychology students. They were also aware that the process of the development of professional competencies is slightly different in the context of different universities and different educational programs. These assumptions were used in the purposive sampling process in this study.

After formulating the research question, the participants were selected using purposive sampling from among Ph.D. candidates in the four major universities of Tehran, Iran including Shahid Beheshti University, Islamic Azad University, Al-Zahra University, and Iran University of Medical Sciences. The criterion for enrollment in the study was to be a Ph.D. candidate in psychology. A notice was placed in the faculties of psychology to invite the students who met the inclusion criteria to participate in the study. The participants were selected using purposive sampling with maximum variation in terms of gender and age from three universities with different educational approaches.

The data were collected through semi-structured interviews after obtaining permission from relevant authorities. The first and second authors conducted the interviews using an interview guide. The interview guide had three main sections including initial questions, middle questions, and final questions. The interviews began with initial questions that were open-ended questions like "How do you define yourself professionally?" and "How did you develop your professional competencies?" The middle questions were the main part of the interview, which changed as the data collection process progressed. Examples of these questions were: "What were the most important resources that helped you shape your professional competencies?", "Who helped you along the way?" or "How did you develop your professional skills?" The interview ended with the final question: "Is there anything you would like to add?" The interview questions

were modified as the data collection process progressed and relevant categories emerged. Thus, new questions were asked to clarify various aspects of the emerging categories. The interviews were conducted in a place where the interviewee was comfortable. A total of 27 interviews were conducted with 24 Ph.D. candidates in psychology who were completing their dissertations and 2 interviews with 2 professors of psychology. Table 1 displays the participants' demographic characteristics. The sampling ended as the collected data were saturated. The core theme, main categories, and subcategories emerged with 25 interviews. Two additional interviews were conducted with 2 professors to survey their opinions about the development of professional competencies in students.

The collected data were analyzed using Braun and Clarke's (2006) six-step thematic analysis. The first step was to get familiar with the data. The first author listened to all the interviews several times and then transcribed them. The second step was generating initial themes. All members of the research team participated in the coding procedures. The interviews were first conducted by the first author under the supervision of professors. The coded

Table 1. The participants' demographic data

Code	Age	Gender	Work experience	Marital status
1	28	Male	Yes	Single
2	32	Female	Yes	Married
3	27	Female	No	Single
4	35	Female	Yes	Married
5	31	Male	Yes	Married
6	28	Female	No	Single
7	27	Female	No	Single
8	32	Male	Yes	Single
9	30	Male	Yes	Married
10	38	Female	Yes	Married
11	29	Female	Yes	Married
12	33	Female	Yes	Single
13	27	Male	Yes	Single
14	31	Female	Yes	Single
15	35	Female	Yes	Married
16	32	Female	Yes	Single
17	28	Female	Yes	Single
18	33	Female	Yes	Single
19	31	Male	Yes	Single
20	28	Female	Yes	Single
21	34	Female	Yes	Married
22	37	Male	Yes	Married
23	33	Female	Yes	Married
24	29	Female	Yes	Single
25 (Professor)	48	Female	Yes	Married
26 (Professor)	50	Male	Yes	Married

themes were checked by all members of the research team. After the interview, each participant was asked to check the coded themes. In the third step, the relevant themes or patterns were searched. From the first interview, similar codes were grouped to form primary categories. As the interviews progressed, the categories and subcategories became more specific and their characteristics became clearer. In this step, the researchers looked for patterns by connecting related categories. Primary themes were identified in this step. In the fifth step, the main themes were identified. After reviewing the primary themes, the main themes were selected based on their importance and their relationship with the phenomenon in question. The selected themes were named in the sixth step. Sampling was stopped when the collected data were saturated. Afterward, the characteristics of all themes and subthemes were determined. Written informed consent was obtained from all participants. All data were analyzed and reported anonymously.

The criteria proposed by Lincoln and Guba (9) were used to check the trustworthiness of the findings. The interview guide was designed using experts' opinions. Then, it was tested in the initial interviews. The data collection and analysis were performed based on the opinions of the subject-matter experts and the members of the research team. The interviewer attended a training course on how to conduct in-depth interviews to better explore the phenomenon in question. All the useful data extracted from the interviews were shared with the interviewees to resolve any possible inconsistency and ambiguity. Finally, to enhance the transferability of the findings, all the procedures taken to collect and analyze the data were described in detail. The objectives of the study and the research procedure were explained to the participants. The interviews were recorded with the participants' permission. Informed written consent

was obtained from all participants. To observe the confidentiality of the data, a code was used instead of each participant's name.

Results

The participants' mean age was 32.54 ± 5.73 years. A total of 23 students (88%) had work experience. Moreover, 18 participants (69%) were female and 14 participants (53%) were single. Three students were interviewed twice. Each interview lasted 47 to 63 minutes. The focus of the study was on the development of professional competencies (creating and maintaining empathy, building a mutual understanding, enhancing confidentiality, being human and seeing others as human, and getting out of absolutism) in psychology students. The core theme, subthemes, and categories extracted in this study are presented in Table 2.

Creating and maintaining empathy

The participants stated that one of the important competencies (skills) formed during work as a psychologist is the ability to create and maintain empathy. Psychologists often face various cases, patients, and clients who need counseling. Thus, they gradually develop a sense of empathy. The data showed that the students who had worked in counseling centers and clinics before and during their studies developed a sense of empathy and considered it a part of their competencies. Indeed, when they defined themselves, they expressed a sense of empathy as an important part of themselves. One of the participants stated:

“I have empathy. I mean one of the effective skills that formed in me from the very first beginning was a sense of empathy. I had the same sense before but later on, I learned that the main requirement for my success in my profession is a sense of empathy. People have the right. I know that everyone is in a sea of trouble because my

Table 2. The core theme, subthemes, and categories

Core category	Subthemes	Categories
Professional competencies developed during academic studies	Creating and maintaining empathy	Empathy as a core competency Empathy in individual life The formation of empathy in psychology Applying empathy in action The effect of creating empathy in individual life
	Building a mutual understanding	Getting to know the client The evolution of interpersonal understanding Respect for individual values Ability to demonstrate mutual understanding
	Enhancing confidentiality	Gaining experience in confidentiality Negative experiences of lack of confidentiality Becoming a confidante
	Being human and seeing others as human	Adjustment of expectations from clients A humanistic look at clients Accepting the limitations of being human
	Getting out of absolutism	Getting out of absolutism Accepting individual differences Having a relativistic view of people and events

clients and experience had taught me to see people this way so that I can understand them” (Participant 21).

Building a mutual understanding

The participants in this study stated the ability to understand people and create this feeling in the other person that you understand them is one of the important competencies that plays a vital role in creating and shaping the ability to understand other people. Mutual understanding is a basic competency that enables a psychologist to show his/her understanding while understanding the feelings and issues of the other person. It also involves respecting the values and maintaining the human and social position of that person in a way that does not harm the person’s dignity while assuring that this feeling has been formed in the other party:

“We deal with different people. Although psychological services in Iran are mostly used by the better-off class, different groups show an interest in using these services. I remember being in a counseling school where this ability of mine was challenged and developed. I had to show those mothers that I understood what their problems were and they had to understand that I understood them because my success depended on that. It was an important step. From there, I developed the ability to show respect to the other party and show them that I understand them and their issues” (Participant 9).

Enhancing confidentiality

The third basic competency formed during the career of psychologists is confidentiality. The psychology students stated that they were not aware of the importance of confidentiality when starting their work as psychologists, but over time they realized how important this skill is and how important it is in their future careers. The competency to maintain confidentiality is very important in psychology and it can become a problem when faced with clients and their families. Acquiring confidentiality is one of the most difficult steps in the formation of a psychologist’s professional competencies:

“The parents of one of my clients asked me about his problem. I was new to the job, and I still didn’t know exactly what the problem was. I told them I guessed what might be the problem. Then, my client stopped visiting me and I got into trouble in the clinic too” (Participant 11).

Being human and seeing others as human

The participants stated that one of the important professional competencies that psychology students learn in the clinical setting is to look at clients as human beings with a set of abilities and limitations. The ability to look at others as human beings and to have a humane look at them is a requirement of a psychologist’s work. This competency gives the psychologist the ability not to judge people and also to have realistic expectations:

“One of the most important aspects of our profession is to know that the client is a human being and that a person may make mistakes, may get sick, and most importantly, people are different. A psychologist should be able to see everyone as a human with these characteristics” (Participant 13).

Getting out of absolutism

According to psychology students, absolutism means that a person defines right and wrong for every event and knows only one way to do things. The participants also stated that a psychologist should analyze the events from his/her point of view and not accept the different aspects of the issues so that anyone can see and interpret a problem differently from others. According to the participants, one of the problems that can make their work difficult for a psychologist is absolutism and seeing things as either white or black. Working as a psychologist and developing professional competencies lead to a departure from this kind of relativistic view.

“People analyze situations in different ways, which means you can’t have a white or black view. This helped me to interact properly with my clients. If we take everything from either a white or black view, we cannot sympathize with the clients” (Participant 21).

Discussion

The present study examined the development of professional competencies in psychology students. The results showed that the professional competencies of psychology students are developed gradually at different stages. Students’ professional competencies are formed over time, especially at higher academic levels when students start their careers in a professional setting and work with clients. These competencies include creating and maintaining empathy, building a mutual understanding, enhancing confidentiality, being human and seeing others as human, and getting out of absolutism. A review of the literature showed that less attention has been paid to the development of professional competencies in psychology students, especially Ph.D. candidates. The findings of the present study shed light on the development of the professional competencies of Ph.D. students in psychology in Iran. The results indicated that studying at the university and taking theoretical courses is less effective than working in a real environment and dealing with clients in shaping the professional competencies of Ph.D. candidates in psychology.

Professional competency refers to a multidimensional concept that has received special attention in psychology. The formation of professional competencies is a requirement for professional performance, which directly affects the psychologist’s performance. Following the data in this study, the professional competencies of Ph.D. candidates in psychology are formed in a professional

environment by acquiring and applying them. Becoming an expert is one of the factors affecting the development of professional competencies as highlighted in other studies. Various studies have addressed the role of changing position from a beginner to an expert in the formation of professional competencies. For example, Reddy and Shaw (10) stated that the transition from being a beginner to an elite is an important component of the formation of professional competencies. Other studies conducted in other fields have shown that transition from the beginner level to expertise is a step or essential component of the formation of professional competencies (11-13). Furthermore, studies in different professions such as medicine, teaching, and nursing have shown that with time, a person's professional competencies are formed after entering the profession (14-16).

The participants stated that self-knowledge, self-confidence, and reflection on one's performance played a role in shaping students' professional competencies by supervising or receiving supervision while doing the work. Reflection on oneself and one's role has been highlighted as an important part of forming professional competencies (17,18). The role of being a supervisor and receiving supervision is also one of the effective factors in shaping the professional competencies of psychology students in postgraduate studies. Moreover, serving as a researcher and teacher is part of the professional competencies of psychology students.

Following previous studies in the literature, the present study showed that professional competencies in psychology students are developed in the practical work environment. A study conducted by Gazzola et al in Canada showed that the factors affecting the formation of professional competencies include the experience of providing services to clients, the positive effects of formal education, giving and receiving supervision, the importance of role models and mentors, the resonance between personal and professional values, entering a professional environment, and creating a feeling of being an expert. In addition, the factors hindering the formation of professional competencies were exposure to negative attitudes toward the profession, feeling disillusioned with the profession, disappointment with formal education, and facing intrapersonal conflicts (19). These results were largely consistent with the model revealed in the present study. However, it seems that the current study has focused less on the obstacles to the formation of professional competencies. The results showed that the formation of professional competencies takes place in the practical work environment. Priest et al also showed that enhancing the attitude through cooperation and teamwork improves the formation of professional competencies and acceptance of professional roles and responsibilities. Besides, the most important component in shaping students' professional competencies is the

client-oriented nature of their profession (20). Park showed that internships, research projects, and previous work experience are important factors in forming the professional competencies of psychology students, as was confirmed in the present study. However, the present study did not highlight the role of conducting research projects. This disparity could be attributed to differences in the research sample that included American undergraduate psychology students (21).

Di Stefano et al identified similar professional competencies in psychology students in Italy. Their findings indicated that responsibility, education, interpretation, paying attention, listening, speaking correctly, and empathy were professional competencies that were formed during academic studies (22). However, the authors did not specify the formation pattern of these competencies. In some countries and educational programs, Ph.D. students in psychology are mostly researchers. Thus, professional research competencies are mostly formed at the doctoral level. Hillbrink and Jucks conducted a study on German Ph.D. students in psychology and found that the students considered themselves mainly researchers. Their role as lecturers was overshadowed by their role as researchers. The professional competencies of a psychological researcher were prominent (23).

The present study opened a new window to the development of professional competencies for psychology students. However, this study was conducted with some limitations. One of the most important limitations was the variety of universities involved in teaching psychology. Even in one city, universities with different educational programs offer courses in psychology. An attempt was made to reduce this limitation by selecting students with maximum variation from different universities in Tehran. However, more reliable results can be obtained by conducting similar studies on different educational programs. The second limitation of this study was the lack of similar studies to compare the results. Thus, the researchers reviewed more relevant studies in the field.

The most important strength of the present study was its focus on the development of professional competencies in Ph.D. candidates in psychology in the cultural, social, and educational context of Iran. To this end, the students' lived experiences were explored with a humanistic and naturalistic approach. The other strength of this study was access to first-hand resources and the development of a model to account for the formation of professional competencies in psychology students. The weakness of the present study was its failure to address the obstacles to the formation of these professional competencies. Thus, future studies can focus on these obstacles.

Conclusion

The results of the present study showed that the

development of professional competencies for psychology students follows a continuous model. In this model, students acquire professional competencies including creating and maintaining empathy, building a mutual understanding, enhancing confidentiality, being human and seeing others as human, and getting out of absolutism. Professional competencies are mainly developed in work environments when students deal with clients. Psychology students learn the knowledge required for their profession in an academic environment. Professional competencies are acquired through teamwork and client management. Following the results of this study, providing the context for psychology students to acquire adequate experiences can contribute to the development of professional competencies.

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Competing Interests

The authors reported no conflict of interest in this study.

Ethical Approval

The protocol for this research project was approved by the Research Ethics Committee of the Faculty of Psychology and Educational Sciences (IR.UT.PSYEDU.REC.1401.013).

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