

# **Educational Process: International Journal**

ISSN: 2147-0901 | e-ISSN: 2564-8020 | www.edupij.com

# **Educational Process International Journal • Volume 7 • Issue 1 • 2018**

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**To cite this article:** Damar, H.T., Bilik, O., Ayhan, Y. (2018). A Supervisor's Role in Career Planning of Doctoral Students: A Qualitative Descriptive Study. *Educational Process: International Journal, 7*(1), 39-47.

To link to this article: <a href="http://dx.doi.org/10.22521/edupij.2018.71.3">http://dx.doi.org/10.22521/edupij.2018.71.3</a>

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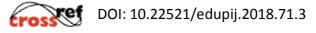
# A Supervisor's Role in Career Planning of Doctoral Students: A Qualitative Descriptive Study

HALE TURHAN DAMAR, OZLEM BILIK and YASEMIN AYHAN

#### Abstract

The aim of this study is to reveal the experiences of doctoral students with their supervisors in planning their careers. A qualitative descriptive study was conducted at an Institute of Health Sciences in Turkey. A total of 16 doctoral students were interviewed in-depth (eight studied nursing, two studied biomechanics, three studied biochemistry, and three studied histology). Five themes were identified from the collected data: Satisfaction with Supervisor, Supervisor = God, Supervisor Inadequacy, Students with No Demands, and National and Institutional Obstacles. The findings of the study suggested that students have to continue their careers as academicians, and are aware that career planning is limited to participating in academic congresses, writing articles, and preparing research projects. The students stated that they do not demand anything from their supervisors with regards to planning their careers. This is related to students and supervisors having insufficient knowledge on this issue, and supervisors inadequate cooperation with the sector/industry.

**Keywords:** doctoral students, supervisors, career planning, qualitative research.



EDUPIJ • ISSN 2147-0901 • e-ISSN 2564-8020
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#### Introduction

A doctoral degree is a significant educational milestone that represents a contribution to science for a country in various ways, including raising future scientists to improve technology (Yükseköğretim Kurulu Başkanlığı [YÖK; Turkish Council of Higher Education], 2016). With the technological developments of the past 10 years, the status of higher education has significantly improved, and the number of students graduating from doctoral programs is increasing. While the rate of people graduating from doctoral programs is 1% in Eastern and Central European countries in 2006, this rate is higher in Western European countries. For example, this rate is found to be 3.4% in Switzerland. In 2009, approximately 213,000 students newly enrolled in doctoral programs across all OECD countries; representing a 38% increase over the 154,000 total of doctoral graduates in 2000 (Auriol, Misu, & Freeman, 2013).

Regarding the future careers of doctoral students, there are various opportunities they can pursue following completion of their formal education. These include options to work as an academic researcher and lecturer (academician), working in government, or the private sector (Austin & Alberts, 2012). They can also enroll in post-doctoral programs to continue their studies. Even though a doctoral degree is regarded as a requirement for academic positions, more than half of doctoral graduates work in different fields due to the reality of limited opportunities in higher education (Barnacle & Dall Alba, 2011). Approximately 40 years ago, the majority doctoral graduates worked in the education sector, where nowadays, people with a doctoral degree are working in various fields (Auriol et al., 2013; Austin & Alberts, 2012). Students studying in the doctoral programs of chemistry and physics attempt to work in the private sector and improve their work placements after graduation, but the doctoral students of health sciences tend to work as faculty researchers or lecturers (Sauermann & Roach, 2012). A study conducted in health sciences in Slovenia indicated that many students studying in doctoral programs chose to work as researchers in the academiceducational sector (Arsenjuk & Vidmar, 2015). Only 7.8% of graduates from doctoral programs in health sciences work in the industrial sector (MIT Global Education and Career Development, 2015). Students who completed their doctoral programs in health sciences should work more in the industrial sector. Doctoral students are the core elements between education and industry, and help promote competition within the industry. Students are positively affected by cooperation between industry and universities. In another study, doctoral students stated that they were very satisfied to work within industry; and that thesis supervisors and doctoral students were both included in this cooperation (Kolmos, Kofoed, & Du, 2010). Enders (2004) suggested that the careers of doctoral students were enhanced in the industry as a result of their close relationship with their supervisor, and that the information transfer took place perfectly (Enders, 2004).

Internal and external factors affect how doctoral students studying in health sciences plan their careers. While internal factors include the motivation and experiences of the student with their supervisor, external factors include their workload, source and education. These factors are interrelated and interactive (Boehe, 2016). One of the most significant duties of the supervisors in doctoral programs is to ensure that students maintain their doctoral education. In order to do this, the supervisors should provide both technical and emotional support to their students (Kandiko & Kinchin, 2012). Hobin, Clifford, Dunn, Rich, and Justement (2014) stated that a positive relationship between doctoral students and

their supervisors constitutes the basis for the success of doctoral education and of the careers their students follow post-graduation (Hobin et al., 2014). It is highlighted that the supervisor should provide heterogeneous career planning for their students in helping them plan their careers. However, supervisors are mostly unsuccessful in generating nonacademic career opportunities (Sauermann & Roach, 2012), with academic position options more available to the doctoral students. People with a PhD degree make efforts to find an academic position for themselves since they are not guided in planning a non-academic career, and experience a level of disappointment during this process (Askew et al., 2016). Hobin et al. (2014) suggested that 71% of supervisors were ineffective in guiding doctoral students in their career plans. While the employment rate for doctoral program graduates was 51% through direct applications and the results of networking, the rate of those who found a job on recommendation of their supervisors is just 11.6% (MIT Global Education and Career Development, 2015). After reviewing the literature, data regarding how supervisors contributed to the career planning of students studying in the doctoral programs of health sciences, the guidance of the supervisors, and students' experiences were found to be insufficient. The aim of this current study is to reveal the experiences of doctoral students with their supervisors in planning their careers.

# Methodology

A descriptive qualitative research method was used in this study. This research design was deemed appropriate as this design made it possible to gain deeper insights into the individual experiences of the preceptors (Saldafia, 2010).

Purposeful sampling procedures were used to determine the participants. The criterion for including people in the study was that they had to be doctoral students studying for at least two years (in the thesis period) at an Institute of Health Sciences. A total of 19 students volunteered to participate in the study. Three students were excluded since they were very busy working in the laboratory and did not have sufficient spare time. A total of 16 participants were interviewed (eight studying nursing, two studying biomechanics, three studying biochemistry, and three studying histology). Some of the doctoral students participating in the study worked as a research assistant, some worked part time, and some worked in private or governmental institutions.

Written informed consent was obtained from each of the doctoral students. In addition, approval was also obtained from the Institute of Health Sciences and the ethical committee of the researchers' university. Participants were provided with both verbal and written information about the study, and their informed consent was obtained. Diversity was ensured by selecting participants from different scientific disciplines (nursing, biomechanics, and biochemistry) and different semesters (third, fourth and fifth).

Face-to-face interviews were conducted at an Institute of Health Sciences of a university in Turkey between August and November 2014 using a semi-structured interview format. A semi-structured interview guide was developed by the researcher in consultation with qualitative research methods experts and based on PhD education literature. The interviews were based on the following questions: "What are your expectations of your supervisor in planning your career?" "What is the role of your supervisor in planning your career?" and "What are your experiences and relationship with your supervisor regarding career planning?" The researcher took field notes during the interviews. The interviews lasted for

an average of 30 minutes. Data were collected up until a point of saturation was achieved and no new content was forthcoming.

Students' personal details, definitive statistics and interviews that were audio-recorded were evaluated using content analysis. The researcher who conducted the interviews listened to the data and then afterwards, all of the recorded audio was transcribed. After reading the written interview transcripts over many times, the researcher coded the data into themes.

Another researcher and a research assistant external to the study listened to the audio recordings and compared them to the researcher's coding results. The researchers each read the statements separately in order to provide content integrity throughout the analysis. By determining the important expressions and statements relevant to the objective of the study, meanings were formed. Themes were then arranged after the formation of the meanings. Additionally, analyses by another researcher not party to the study were also conducted in order to determine the reliability of the coding performed by the earlier researchers. Results of both analyses were then compared.

#### Results

Five main themes were determined, based on how the supervisors affected the doctoral students in planning their careers. Themes of the study included the following: 1) Satisfaction with Supervisor, 2) Supervisor = God, 3) Supervisor Inadequacy, 4) Students with No Demands and 5) National and Institutional Obstacles. Results for each theme are described in the following sections.

Satisfaction With Supervisor

Doctoral students stated that their supervisors helped them make careers plans such as participating in academic symposiums and congresses and with conducting research. They also implied that they were very satisfied with the help from their supervisor.

My supervisor always helps me perform activities such as participating in academic congresses and symposiums. I had their help especially with the issue of communicating the topics related to my doctoral thesis to the public and guiding me in what I can do in the time to come.

I am very lucky because I am the first and only doctoral student of my supervisor. He/she really pays attention to me.

Students expressed that they experienced effective communication with their supervisors. They emphasized that effective communication encouraged them as doctoral students to make plans for after their graduation.

I can freely express myself to my supervisor. We have great communication and talk about my future.

As soon as I started my doctoral program, my supervisor asked me what I wanted for my future.

My supervisor believes that I can do whatever I plan to do and encourages me... My supervisor has never said 'no' to me. He/she told me I could try and experience whatever I wanted.

Supervisor = God

The students expressed that some supervisors did not pay attention to students' ideas in the planning of the students' careers. Some students stated that they experienced certain demands from their supervisors that were unrelated to their career planning or doctoral programs.

My supervisor is like a God in my eyes; we do whatever our supervisor wishes. Therefore, only my supervisor thinks about my career. It is not possible for us to ask or tell something to our supervisor.

We perform too many unnecessary tasks just because our supervisor wants us to.

My supervisor always asks me whether I did this or that. Thus, I feel burned out. I ask myself: 'Is this the doctoral program and career I was dreaming about?'

Supervisor Inadequacy

Students implied that their supervisors consider PhD programs only in the academic context, and that they do not regard career planning as their duty while providing supervision in addition to PhD education. Their supervisors were not felt to be competent in providing details about the employment opportunities in the industry since they were not in joint projects with the industry, and the competency of the supervisor and the students was at the same level.

Our supervisors neglect our careers following graduation. They consider the doctoral degree as only an academic degree.

The supervisor and the student should conduct joint projects, and the supervisor should help find the necessary monetary aid. However, since our supervisors do not take part in the industry, we cannot either.

There is no such thing as career planning among the duties of the supervisors. Therefore, they neglect this.

They do not really care about what we will do after we graduate. The supervisor should be the key in planning our careers.

A doctoral supervisor should be the bridge between education and the career of doctoral students, but this is unfortunately not the case.

Students and the supervisors are on the same level in planning careers. Supervisors should be one step further.

Students With No Demands

Some doctoral students stated that career planning is not only the duty of the supervisor but also the responsibility of the student. They suggested that students should demand that their supervisors guide them in planning their careers.

Career planning is not only the duty of the supervisor; students should demand it and be willing to participate in the planning.

I do not know whether it is due to the education we are provided or the system, but we plan to be academic lecturers after we obtain our doctoral degrees.

Students should demand it from their supervisors; this is the students' responsibility. Supervisors have too many duties and responsibilities.

National and Institutional Obstacles

Doctoral students working as academicians stated that the country and the institutions have a limited number of opportunities. They reported that supervisors cannot pay attention to career planning since they have too many students.

Plans in the country and higher education are not broad enough or sufficient; the Council of Higher Education fails to guide us to different fields.

Supervisors have difficulty in paying attention to us since they have too many students. Considering the number of students, it is impossible for supervisors to meet with us to talk about our career plans.

Supervisors may not know what to do; training should be provided for them.

I am very happy to work in the clinic, but I cannot find any opportunities or aid if I plan to conduct research or a project; therefore, we are inclined to work in academia.

#### Discussion

Although the number of people holding a doctoral degree has increased, the majority work as lecturers or researchers following their graduation. However, non-academic sectors and sectors cooperating with the industry need people with a doctoral degree. Students' preferences following their doctoral programs differ due to various reasons such as their own ideas and whether or not their supervisor supported them (Fuhrmann, Halme, Sullivan, & Lindstaedt, 2011; O'Meara, Knudsen, & Jones, 2013). This current study revealed the role of the doctoral supervisor in planning the careers of students studying in doctoral programmes in health sciences and how the supervisors affected the students. Students participating in the study expressed that their supervisors supported academic education throughout their doctoral programs, but failed to direct students towards other sectors. They are also reported that doctoral students should be demanding regarding their career plans, that some supervisors are oppressive and demand non-academic tasks from their students, and that there are deficiencies at the national and institutional level.

Solidarity is an effective tool in socializing the students and determining their identities (Löfström & Pyhaltö, 2012). The doctoral students interviewed implied that supervisors fail to help students plan their careers and explained that underlying reasons include the non-participation of supervisors in the industry, a lack of standard supervisory training provided to supervisors, and supervisors only paying attention to doctoral thesis work and just not interested in non-academic career opportunities. In Sauermann and Roach's study (2012), which was similar to the current study, students reported that their supervisors are unsuccessful in guiding them in conducting a non-academic project or establishing or working within a company even when some students plan to pursue a non-academic career (Sauermann & Roach, 2012).

In addition to the negative impressions of supervisors, they may also positively impact on their students when helping with career planning. The findings of Lunsford's study (2012), which resemble those of the current study, indicated that students were satisfied with their supervisors while planning their careers and expected their supervisors to help them not only plan their future, but also to find the necessary funding as well as participate in academic congresses and symposiums (Lunsford, 2012). Students were satisfied with their supervisors while planning their careers and during their education, but this level of satisfaction regressed as the years passed.

Students in this study reported that supervisors who talk like they are giving orders and act without considering the careers of the students made a negative impression. The relationship between the supervisors and the students is key in planning students' careers (Fuhrmann et al., 2011; O'Meara et al., 2013). A good relationship between supervisor and student leaves a positive impact on the students. If this relationship is negative, students are likewise negatively affected while searching for funding and aids for their theses and planning their careers following the doctoral programs (Breuninger, Pull, & Pferdmenges, 2012; Gratrix & Barrett, 2017). Students also stated that their supervisors should be more encouraging, share their knowledge and experiences, have the ability to listen and provide feedback and be sincere and thoughtful. Moreover, supervisors should use supportive communication. A failure in the relationship and communication between students and supervisors may negatively affect the students' studies (Denicolo, 2004; Zhao et al., 2007).

The doctoral students who participated in the current study stated that students should be more demanding in planning their careers. Student willingness may also affect their career preferences in both the academic field and non-academic sectors. In a study conducted by Sauermann and Roach (2012), only a few students stated that they were ready to work in the private sector.

Students in the study conducted by Ghadirian, Sayarifard, Majdzadeh, Rajabi, and Yunesian (2014), which is similar to the current study, expressed that their supervisors were lacking in terms of knowledge and communication during their doctoral studies, and that they failed to direct their students towards non-academic fields (Ghadirian et al., 2014). They also suggested that their education should be well supported in order to improve their abilities. Doctoral students emphasize that they are not provided with the education, including courses for technical skills, to be competent in planning their careers (Gibbs & Griffin, 2013). Insufficiencies experienced in finding funds for working in the industry may arise from the obstacles supervisors encounter during the doctoral programs. Such problems are among those faced by academia and in developing countries (Carr, Lhussier, & Chandler, 2010).

## **Conclusion**

This study demonstrated that supervisors evaluate the career plans of doctoral students only on an academic dimension and neglect students' plans for their future. In addition, not only should supervisors make an effort to help students plan their careers, but the students should also demand this help from their supervisors. Institutional policies and the national academic system in Turkey were also found to affect doctoral students' plans for non-academic careers. While interpreting the outcomes of the study, the doctoral students' inclination to work as academicians should not be ignored since the unemployment rate is

high in Turkey, and thus they plan to be employed without experiencing this issue. The outcomes of this study in examining what doctoral students of health sciences experience while planning their careers with their supervisors may contribute to doctoral programs.

#### Limitations

Since the sample covers only students from health sciences, outcomes cannot be generalized for all doctoral students. Conducting further studies that include the students of social sciences and educational sciences may enrich the literature of this field. The fact that the literature covers a limited amount of studies examining the interactions between the doctoral students and their supervisors made it difficult to write a discussion.

## **Acknowledgements**

The authors express their grateful thanks and appreciation to the individuals who participated in this study.

# **Funding**

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

#### **Notes**

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