

# Academicianhip in Pharmacy: A Qualitative Study

## Eczacılıkta Akademisyenlik: Nitel Bir Çalışma

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### ABSTRACT

An academic pharmacist signifies individuals who engage in research activities within the pharmacy field at higher education institutions like universities, impart education, and contribute to the discipline through original investigations. This study aims to explore the advantages and challenges encountered by academic pharmacists, along with providing insights and recommendations for aspiring academic pharmacists. The cross-sectional study employed a qualitative approach involving face-to-face interactions through semi-structured and in-depth interviews utilizing both 'open-ended' and 'semi-structured' questions. The study population consisted of academic pharmacists working in Turkey. The sample of the study consisted of 10 academic pharmacists who voluntarily agreed to participate in the study. Thematic analysis of the data was carried out through a comprehensive exploration of these interviews. As a result of conducting thematic content analysis on the interview data, a total of four principal themes have emerged: drawbacks, requisite competencies, motivating factors and suggestions. Considering the current proliferation of pharmacy faculties and student enrollments, it is advisable to encourage pharmacy students to contemplate academic pharmacy as a component of their career planning. Furthermore, providing comprehensive information about academic pathways during their undergraduate studies is recommended.

**Keywords:** Academia, Data analysis, Pharmacists, Universities

### ÖZ

Akademisyen eczacı, üniversiteler gibi yükseköğretim kurumlarında eczacılık alanında araştırma faaliyetlerinde bulunan, eğitim veren ve özgün araştırmalarla disipline katkıda bulunan bireyleri ifade etmektedir. Bu çalışma, akademik eczacıların karşılaştığı avantaj ve zorlukları keşfetmenin yanı sıra, gelecek vadeden akademik eczacılar için içgörü ve öneriler sunmayı amaçlamaktadır. Bu kesitsel çalışmada, hem 'açık uçlu' hem de 'yarı yapılandırılmış' soruların kullanıldığı yarı yapılandırılmış ve derinlemesine görüşmeler yoluyla yüz yüze etkileşimleri içeren nitel bir yaklaşım kullanılmıştır. Çalışma evrenini Türkiye'de çalışan akademik eczacılar oluşturmaktadır. Çalışmanın örneklemini ise çalışmaya katılmayı gönüllü olarak kabul eden 10 akademik eczacı oluşturmuştur. Verilerin tematik analizi, bu görüşmelerin kapsamlı bir şekilde incelenmesi yoluyla gerçekleştirilmiştir. Görüşme verileri üzerinde yapılan tematik içerik analizi sonucunda toplam dört ana tema ortaya çıkmıştır: dezavantajlar, gerekli yetkinlikler, motivasyon ve öneriler. Eczacılık fakültelerinin ve öğrenci kayıtlarının mevcut çoğalmasi göz önüne alındığında, eczacılık öğrencilerini kariyer planlamalarının bir parçası olarak akademik eczacılığ düşünmeye yönlendirmek ve lisans eğitimleri sırasında akademik yollar hakkında kapsamlı bilgi verilmesi tavsiye edilmektedir.

**Anahtar Sözcükler:** Akademi, Veri analizi, Eczacılar, Üniversiteler

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## INTRODUCTION

The professional scope of pharmacists extends beyond community pharmacy, encompassing a diverse array of domains such as hospital pharmacy within both private and public healthcare facilities, institutional pharmacy within governmental bodies like the Ministry of Health, Turkish Medicines and Medical Devices Agency, and Social Security Institution. Additionally, it extends to industrial pharmacy in sectors including pharmaceuticals, medical devices, food, and cosmetics, as well as pharmaceutical warehousing and academic pharmacy within university settings (Biçer, 2019). The field of pharmacy in Turkey offers several primary career trajectories, including community pharmacy, hospital pharmacy, regulatory and supervisory agency pharmacy, pharmaceutical industry, warehouse management, academic pharmacy, and clinical pharmacy. An academic pharmacist signifies individuals who engage in research activities within the pharmacy field at higher education institutions like universities, impart education, and contribute to the discipline through original investigations. Pharmacists aspiring to pursue an academic career undergo postgraduate programs of their preference. Their placement within a program is determined based on various factors such as their undergraduate grade point average, scores from requisite foreign language examinations, and other pertinent tests (Kırpık & İlcektay, 2020). Pharmacists employed within academic institutions hold a pivotal role in shaping the education of prospective pharmacists. Through the impartation of technical skills, they equip aspiring pharmacy graduates to offer optimal patient care by leveraging the finest available resources. Beyond teaching, faculty members also shoulder administrative and research responsibilities. Thus, a career in pharmacy education assumes an innovative and competitive dimension, not solely confined to systematic exploration, but also encompassing research, pedagogy, practice, and professional growth (Jamshed, Ibrahim, Hassali, & Khalid, 2010). Within academic pharmacy, professionals engage in diverse tasks including delivering lectures, organizing laboratory sessions, securing research funding from both internal and external sources, guiding students at various academic levels in research endeavors, publishing research findings in reputable journals, presenting at seminars, assuming administrative duties, providing consultation, and participating in departmental, university, national, and international committees. Additionally, they may take on roles like facilitating student engagement in professional societies, managing journals, editing and intermittently reviewing journal articles (Ahmad et al., 2015; Halim, 2009). It is widely acknowledged that pharmacists in academic roles are engaged in a range of activities that are both intentional and visible. These activities encompass the training of the next generation of pharmacists, the provision of mentorship, the provision of advice to health institutions, the influencing of government health policies, the undertaking of problem-solving research, and the organisation of health campaigns and advocacy (Alozie & Effiong, 2021). The objective of this study is to comprehensively examine the multifaceted dimensions of academic pharmacy within the Turkish context.

## METHOD

### Ethical Approval

The research obtained approval from the Atatürk University Clinical Research Ethics Board (Approval No: B.30.2.ATA.0.01.00/529).

### Study Design, Sampling and Inclusion Criteria

This cross-sectional study utilised a qualitative approach involving face-to-face interactions through semi-structured and in-depth interviews using both 'open-ended' and 'semi-structured' questions. The study employed purposive sampling as its primary methodology. In instances where participation levels were low, a supplementary snowball sampling technique was introduced. This involved current participants facilitating the recruitment of future subjects from within their own social circles. The focal participants targeted for inclusion were actively engaged academics possessing a minimum of a bachelor's degree in pharmacy. The study population consisted of academic pharmacists working in Turkey. The sample of the study consisted of 10 academic pharmacists (from AP-1 to AP-7) who voluntarily agreed to participate in the study.

### Data Collection

The interview form, which was prepared by utilising the literature, was designed to focus on the advantages and obstacles faced by academics with a pharmacy degree, while at the same time requesting insights and suggestions for future academic pharmacists. The interview form was asked to be evaluated by an external academic pharmacist prior to data collection. The evaluation included minor corrections such as linguistic nuances and terminology and the interview form was finalised. Data collection was carried out by the first author through in-depth interviews on a day and time convenient for the participants. The interviews were conducted between 1 August 2023 and 1 December 2023. Each interview lasted approximately 20-25 minutes.

### Data Analysis

Thematic analysis of the data was carried out through a comprehensive exploration of the interviews, following the procedural framework delineated by Braun and Clarke (Braun & Clarke, 2006). Each interview that was recorded underwent a verbatim transcription, and any grammatical errors were rectified during the process of data extraction. Participant identities remained confidential, and the privacy of their perspectives was safeguarded by means of coding, which was conducted collaboratively by two female researchers (EUD and RE). For efficient data management and organization, Maxqda (Version 22.0.6) software was employed.

The thematic analysis followed a general inductive approach, encompassing multiple distinct stages. The data were meticulously examined and coded, with emergent themes systematically documented, along with pertinent quotations embedded within each thematic category. These identified themes were subsequently classified under appropriate headings that corresponded to the research objectives. To ensure the reliability

of the analytical process, all authors rigorously reviewed the findings and arrived at a consensus regarding the discerned themes.

## RESULTS

### Participant Demographics

Table 1 displays the distribution of demographic characteristics among the participants. Notably, 90% of the participants were identified as female. Half of the participants in the study are aged over 35 and possess more than five years of professional experience.

**Table 1:** Demographic Characteristics of Study Participants

Characteristics	Parameters	Frequency (%)
Gender	Male	1 (10)
	Female	9 (90)
Age	≤ 35 years	5 (50)
	> 35 years	5 (50)
Years on profession	≤ 10	5 (50)
	>10	5 (50)

### Thematic Analysis Results

As a result of conducting thematic content analysis on the interview data, a total of four principal themes have emerged: drawbacks, requisite competencies, motivation, and suggestions, as outlined in Table 2.

**Table 2:** Themes and Sub-Themes From Interviews

Themes	Sub-themes
Drawbacks	Sense of professional estrangement
	Excessive workload
Requisite competencies	Aspiration to contribute to education and academia
	Proficiency in English
Motivating factors	Maintaining current knowledge in the field
	Educating prospective colleagues
	Earning societal esteem
Suggestions	Student feedback
	Opting for an proper department
	Exhibiting team collaboration
	Attaining a notable undergraduate cumulative grade point average

### Drawbacks

The majority of pharmacists highlighted workload, challenges in daily planning, a hierarchical organizational structure, extended working hours, and a diminished sense of professional identity as the primary drawbacks associated with the role of pharmacist academics. Furthermore, participants in our study

also highlighted that these experiences play a significant role in shaping their job satisfaction.

### Sense of professional estrangement

Several pharmacists expressed that they were unable to fully integrate their pharmacist identity into their professional lives, leading to a sense of detachment from the role of a pharmacist.

*"I lack the sensation of being a pharmacist in this context. To elucidate, my experience here is akin to that of an academician within a faculty of literature compared to one within a faculty of science. Consequently, I find it challenging to identify myself as a pharmacist within this academic setting."* (AP-10)

### Excessive workload

Every pharmacist emphasized the workload as a significant aspect. Notably, they highlighted that administrative duties consumed a substantial portion of their time.

*"Our workload is overwhelming. Concurrently, there is an extensive array of responsibilities to manage, further compounded by the substantial administrative obligations within the school."* (AP-4)

Also, each of the pharmacists attested to working beyond standard hours, frequently engaging in evening and weekend work. Even during periods of non-work, their thoughts remained preoccupied with work-related matters. Some of pharmacists indicated that they encountered challenges in structuring their daily schedules. They revealed that their days often unfolded with unexpected tasks and responsibilities that were not initially part of their plans.

*"I intend to convey that our working hours extend beyond the conventional eight-to-five timeframe. To be candid, our work often continues well into the evening after five, and we frequently find ourselves engaged in tasks during weekends as well."* (AP-7)

*"When I strive to execute the tasks I've meticulously outlined, I invariably become entangled in entirely different responsibilities. Regrettably, I often find myself unable to fulfill my intended plans, thus perceiving this as a notable drawback."* (AP-5)

### Requisite Competencies

The majority of pharmacists contended that several essential attributes are requisite for excelling as an academician. These include proficient English language skills, an inclination to contribute to both students and the field of science, as well as a commitment to achieving high levels of performance.

### Aspiration to contribute to education and academia

The majority of pharmacists contended that a strong inclination towards contributing to the realms of science and education played a pivotal role in fostering a successful career in academia.

*"If someone believes they can make meaningful contributions to both students and the realm of knowledge, they should certainly consider joining."* (AP-6)

### **Proficiency in English**

Every pharmacist unanimously advocated for a proficient command of the English language as a fundamental requirement for academic pursuits. They recommended that aspiring colleagues make the most of overseas opportunities and prioritize English language acquisition during their years as students.

*“Proficiency in a foreign language holds immense significance. I strongly advise them to enhance their foreign language abilities. If feasible, taking part in exchange programs during their student years is invaluable. I consistently advocate for them to pursue opportunities to study abroad.”* (AP-10)

### **Motivating Factors**

A significant number of pharmacists emphasized that professional contentment and motivation were notably influenced by various factors. These encompassed remaining current in their field, educating prospective colleagues, earning societal esteem and receiving feedback from students.

### **Maintaining current knowledge in the field**

All pharmacists unanimously acknowledged the necessity of staying current within their respective fields, expressing contentment with the dynamic nature that academic work entails.

*“As a notable advantage, our environment fosters continual growth and self-improvement. It presents an ongoing opportunity for personal advancement—a dynamic journey that leads to a dynamic life.”* (AP-8)

*“To engage in continuous learning. In the realm of pharmacy, my motivation stems not solely from traditional medicine and its necessities, but also from exploring diverse avenues that can offer assistance.”* (AP-1)

### **Educating prospective colleagues**

The majority of pharmacists asserted that participating in the training and development of their colleagues significantly heightened their motivation levels.

*“For me, it holds tremendous significance to hold a pharmacist degree within an academic institution, enabling me to impart education to upcoming pharmacists who will seek guidance and instruction, possessing a profound understanding of their requirements.”* (AP-2)

### **Earning societal esteem**

Some of pharmacists contended that their distinct position within society, along with the recognition they received from society, contributed to an augmented sense of motivation in their work.

*“Being perceived as an academician holds considerable advantages in the eyes of society. Irrespective of the context or location, the status of being an academician carries weight. Honestly, it brings me immense satisfaction.”* (AP-2)

### **Student feedback**

A minority of pharmacists highlighted that the feedback they

received from students served as a motivational factor in their academic pursuits.

*“The feedback I receive from students is particularly gratifying. Their feedback brings me a profound sense of happiness.”* (AP-2)

### **Suggestions**

A considerable portion of pharmacists provided recommendations for their peers contemplating an academic path. These suggestions encompassed maintaining a high academic performance throughout their studies, carefully selecting a department that aligns with their strengths and fostering a collaborative team spirit.

### **Opting for an proper department**

Every pharmacist concurred that individuals contemplating a transition into academia should exercise caution in selecting the field that aligns best with their capabilities and inclinations.

*“When deciding on a specialization, it’s likely that he/she will have been exposed to all these fields during their fifth year at the faculty. I strongly advise them to opt for the area that resonates most with them, the one that brings them the greatest joy, and where they believe they can make the most meaningful contributions.”* (AP-6)

### **Exhibiting team collaboration**

The majority of pharmacists underscored the significance of fostering a strong sense of teamwork and collaboration within the academic environment.

*“I suggest that they seek to collaborate with a team that values a strong sense of camaraderie and teamwork. In essence, it’s essential to work alongside individuals who possess a pronounced inclination towards collaboration and a shared spirit.”* (AP-9)

### **Attaining a notable undergraduate cumulative grade point average**

A notable proportion of pharmacists offered guidance to individuals aspiring to pursue an academic career, suggesting that maintaining high academic performance throughout university is crucial.

*“Foremost, I suggest prioritizing the maintenance of high academic grades during their student years. This entails showing a genuine interest in their coursework.”* (AP-7)

*“A vision, a purpose. Embarking on this journey without a clear goal isn’t advisable.”* (AP-4)

## **DISCUSSION and CONCLUSION**

In this research endeavor, our aim revolved around comprehensively exploring the various dimensions of academic pharmacy. Within our qualitative investigation, we delineated four overarching themes, each containing sub-themes: drawbacks, essential competencies, motivating factors, and recommendations.

Existing literature has highlighted that an escalation in the workload experienced by academic pharmacists can potentially undermine the quality of their job performance and overall job satisfaction (Aziri, 2011; Desselle, Darbshire, & Clubbs, 2020; Kennedy et al., 2022; Rosser, 2004). A study conducted in India revealed that the heightened workload among academics detrimentally impacted their teaching effectiveness and research engagements. (Ahmad et al., 2015) Furthermore, an excessive workload has been shown to negatively influence the satisfaction levels of academicians (Urbina-Garcia, 2020). Moreover, a notable rise in self-reported stress levels was observed among academic pharmacists, as documented in a recent study (Barnett, Lindfelt, Doroudgar, Chan, & Ip, 2022). In our investigation, the majority of surveyed pharmacists identified workload as a significant drawback within the academic realm.

Considering that many academic pharmacists commence their careers as pharmacists, it's noted that numerous educators enter their educational roles carrying with them their experiences from the pharmacy profession. Consequently, it's posited that a number of academic pharmacists might harbor a nuanced or intricate sense of professional identity, which could potentially influence their pedagogical activities. In a qualitative exploration of academic pharmacists in South Africa, it was discerned that while participants acknowledged the academic facet of their identity, identifying themselves as pharmacists took precedence. Notably, two participants tended to underscore their roles as educators. In contrast, another participant, perceiving their role in academia to be a balanced amalgamation of teaching and research, expressed a stronger inclination towards research. Some other participants exhibited hesitancy in identifying solely as pharmacists or academics. One participant's professional identity was predominantly shaped around the roles of teacher and mentor, emphasizing their deep passion for the pharmacy field and their commitment to imparting this enthusiasm to students while supporting their professional growth. Conversely, another participant described themselves as "a pharmacist at heart," but ultimately recognized their central role as an educator within the pharmacy realm. A participant in the early stages of their academic career identified primarily as a lecturer, with their scholarly focus predominantly on research. They expressed an aspiration to eventually label themselves as researchers after completing their PhD. This participant emphasized the awareness of the significance of their pharmacist identity in their academic pursuits (Burton, Boschmans, & Hoelson, 2013). Similarly, findings from our own study echo this sentiment, as participants conveyed a sense of detachment from their pharmacist identity.

The aspect most frequently highlighted in the realm of organizational commitment pertains to organizational support. Investigations across various professions have unveiled a reciprocal relationship, wherein employees tend to develop a sense of commitment towards an organization when they perceive that the organization is similarly dedicated to their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986). According to a study conducted by Arslan et al. with female pharmacists, it was stated that the professional satisfaction of academic

pharmacists was very high (Arslan, Çoban, & Şar, 2020). Teaching assumes a particularly pivotal role within this context. Despite the considerable time investment, teaching has been noted to bring immense satisfaction to academic pharmacists due to the gratifying outcomes achieved through their students' progress (Conklin & Desselle, 2007). Similarly, within our own study, participants pointed out that the feedback they received from students and the intrinsic fulfillment derived from teaching served as motivating factors.

Engaging with graduates, tracking their professional journeys, and observing students from an evolving vantage point have been highlighted as sources of enjoyment (Draugalis, DiPiro, Zeolla, & Schwinghammer, 2006). In alignment with this, our study unveiled that a significant portion of pharmacists expressed happiness in the context of training colleagues.

Research has indicated that a considerable portion of academics across various types of institutions would opt for an academic career once more if given the opportunity to choose again (Lindholm, Astin, Sax, & Korn, 2002). In parallel with these findings, all the pharmacists in our study affirmed that they would opt for an academic career again if presented with another chance, and interestingly, they also expressed a willingness to choose community pharmacy as an alternative path.

Furthermore, pharmacists cited distinct rationales for their motivation to engage in research. Some highlighted their belief in the necessity of research to furnish evidence for potential transformations in pharmacy practice, as well as to identify services with prospective economic benefits. According to Armour and et al. another motivating factor is the expectation to engage in activities beyond their routine responsibilities (Armour, Brilliant, & Krass, 2007). Similarly, within our study, several pharmacists underlined that their daily routines presented both advantages and disadvantages. Additionally, they articulated a sense of contentment derived from contributing to the realm of science.

Every pharmacist engaged in the academic sphere underscored the critical importance of possessing a solid command of the English language for a productive academic career. Consequently, pharmacy students aspiring to venture into academia should focus on enhancing their foreign language proficiency. In addition, in another study, it was reported that pharmacists active in academia suggested that volunteering in areas related to students' interests can significantly contribute to gaining valuable experience (Kırpık & İlcektay, 2020). In our study, without exception, every pharmacist emphasized the fundamental nature of this competence.

According to Lent's perspective, gaining exposure to diverse career pathways allows students to gauge their performance in various domains, fostering an understanding of where their strengths may lie, thereby facilitating the development of interests in fields where they can excel (Lent, Brown, & Hackett, 2002). Research demonstrates that students encounter limited opportunities to explore their professional identities and interact with pharmacist role models, thus indicating missed prospects within the curriculum (Mylrea, Sen Gupta, & Glass,

2017). A study conducted by Harding and Taylor highlighted the pivotal role of pharmacist academics as significant role models in shaping students' professional socialization. The presence of pharmacists during students' education was shown to evoke a sense of deep respect (Harding, 2006). Regrettably, students often remain unaware of the research endeavors or scholarly publications of faculty members. Moreover, comprehending the various career stages of faculty members—ranging from lecture hours and counseling sessions to exam preparations, individual tutoring, curriculum development, promotional activities, article composition, grant applications, mentorship, and content creation—can prove challenging for many students. Consequently, it becomes crucial to acquaint students with academic life prior to their graduation. Those with a penchant for academia should be guided towards this path (Draugalis et al., 2006). Given the prevailing state of academic personnel within pharmacy, it's recognized that there exists a demand for academic staff in newly established faculties and universities (Kılıçdağı & Özçelikay, 2018). Furthermore, the establishment of numerous pharmacy faculties, the dearth of requisite infrastructure and the paucity of an adequate number of pharmacist lecturers in these faculties are frequently highlighted by professional stakeholders, particularly the Turkish Pharmacists Association (All Pharmacy Employers' Association, 2014; Turkish Pharmacists Association, 2019). Additionally, the extant literature suggests that, in the absence of intervention, the surplus of pharmacy graduates in Turkey will become a significant issue in the near future (Kırpık & Yılmaz, 2018; Uzun, Özçelikay, & Gülpınar, 2017). In this context, it is postulated that directing pharmacy students to consider academic pharmacy as part of their career planning will augment the number of lecturers in pharmacy faculties and assist to some extent in alleviating the employment problem of pharmacists. Echoing this sentiment, our study emphasized the significance of affording students contemplating academic careers the opportunity to explore various sectors, particularly during their undergraduate years. This exploration assists them in identifying the field where they can make valuable contributions and where they derive personal satisfaction.

In summary, our study unveiled a parallel between academic pharmacy and academia in other disciplines, yet it was notable that the pharmacist identity takes a somewhat subdued role. Considering the current proliferation of pharmacy faculties and student enrollments, it is advisable to encourage pharmacy students to contemplate academic pharmacy as a component of their career planning. Furthermore, providing comprehensive information about academic pathways during their undergraduate studies is recommended. This holistic approach can contribute to a well-informed and purposeful decision-making process regarding academic careers.

This study exhibits several limitations. Primarily, the limited number of participants in this study curtails the broad applicability of the findings. Additionally, since participants conveyed their experiences through self-reporting, there exists the potential for certain findings to be overemphasized, and data might be influenced by inherent biases. Moreover, the

qualitative nature of the study renders it challenging to assign precise meanings or significance to certain outcomes. However, it is essential to recognize that the study was intentionally designed to encompass a diverse range of experiences and perspectives from academic pharmacists within a specific region of Turkey. In terms of future research, statistical studies with larger samples investigating the relative importance of the experiences and perspectives highlighted in this study are strongly recommended.

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