Adapting to Academic Life: Junior Pharmacy Practice Faculty’s Preparation for Academia and Their Intent to Leave

by

April Greene Staton

A dissertation submitted to the Graduate Faculty of Auburn University in partial fulfillment of the requirements for the Degree of Doctor of Philosophy

Auburn, Alabama
May 7, 2017

Keywords: Pharmacy education, preparation for academia, faculty socialization junior faculty, retention, intent to leave

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Approved by

James Groccia, Chair, Professor of Educational Foundations, Leadership and Technology
David DiRamio, Associate Professor of Educational Foundations, Leadership and Technology
Paul Jungnickel, Associate Dean and Professor of Pharmacy Practice
James Witte, Professor of Educational Foundations, Leadership and Technology
Abstract

Pharmacy education has experienced significant changes in the last 20 years. The Doctor of Pharmacy degree became the sole professional degree requiring the addition of a large number of practice faculty. In addition, the number of pharmacy schools has increased by 66% from 81 to 135 and student enrollment has increased 84% from 34,481 to 63,460. These factors contributed to a growing concern for faculty recruitment and retention.

The purpose of this study was to learn more about early career pharmacy practice faculty and their educational preparation for an academic career, acclimation to academic life, socialization opportunities for faculty members and perceptions of work life balance. An online survey consisting of 47 questions was sent to 138 junior pharmacy practice faculty members and 60 usable responses were returned, yielding a 43% response rate.

Results from the survey showed that only 7% of respondents reported having any formal training in teaching before becoming a faculty member. Seventy-one percent reported being successful in meeting their school or college’s research/scholarship requirements. There were 95% who reported having good working relationships with other faculty members suggesting that collegiality was high. Over half (53%) reported feeling overwhelmed by their work load which led them to consider a non-academic pharmacy position and 25% reported they were likely or very likely going to leave academia within five years.
This study provides current data that academic pharmacy administrators can use to attract future students to academic positions, fill their faculty positions, and provide the necessary faculty development and mentoring that is paramount in faculty retention.
Acknowledgments

I wish to express my sincere appreciation to Dr. Groccia, my committee chair. I value the time and energy you devoted to helping me attain this achievement. The patience, encouragement, and suggestions made all the difference in this journey coming to fruition. One of the things I admire the most is the fact that you treat your students like colleagues.

I would also like to thank Dr. DiRamio and Dr. Witte for serving on my committee, but also being great professors. The classes you taught absolutely laid a strong foundation for the goals I want to achieve in higher education. Dr. J. thank you for sharing your vast knowledge of pharmacy education and always taking the time to assist when I had a question. More importantly though, I appreciate the years we have worked together. It has been a joy! I have learned so much from you.

I certainly could not have finished this undertaking without the support of some very close colleagues and friends, Sharon McDonough, Debbie Byrd, Lori Duke, Kathy Kyle, Kristi Kelley, Kelly Hester, Lea Eiland, Lynn Stevenson and Gail Perna. You are such remarkable women and each of you were so encouraging and you always knew what to say at just the right moment. Sometimes just listening made all the difference!

And finally, I have to thank my family, especially Tony and Courtney for years of understanding, support and encouragement. I know this journey has divided my time from you and for that I am so sorry. Thank you for understanding and not giving up on me. Courtney, I dedicate this to you. If I can do this, I am certain you can do anything you set your mind to.
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Chapter 1

Introduction

Over the last 20 years, pharmacy education has experienced significant changes in workplace needs. In 1997 the Bachelor of Science (B.S.) degree for pharmacy was phased out and the Doctor of Pharmacy (Pharm. D.) became the sole professional degree. After 2000, B.S. programs were not allowed to admit new students. The Pharm. D. curriculum differed from the traditional B.S. curriculum in that it was less focused on the distributive aspects of pharmacy care and provided expanded patient and disease-centered care both in didactic and experiential courses. Many schools and colleges of pharmacy had to make significant curricular changes that affected the number of, and need for, faculty with more clinical expertise to deliver a new pharmacy curriculum. “The curriculum delivery model as well as the extent and depth of content are reasons why so many pharmacy practice members are required” (Draugalis, Dipiro, Zeolla, & Schwinghammer, 2006, p.3).

A critical component in the academic pharmacy enterprise is the increasing number of new pharmacy schools. As of July 2015, there were 135 accredited schools of pharmacy (American Association of Colleges of Pharmacy, 2016a). This is 54 more schools than in 2000, constituting a 66% increase in 15 years (J. Holub, personal communication, February 23, 2016). Since this study was conducted, three more schools have been approved (Johnson, Kay, Louis, & Olsen, 2016). Subsequently, the number of students who are enrolled in a pharmacy degree program in the United States has increased tremendously. According to data collected and
published annually by the American Association of Colleges of Pharmacy (AACP), there has been a dramatic increase in enrollments in Pharm. D. programs from 34,481 students in 2000 to 63,460 students in 2015, representing an 84% increase (American Association of Colleges of Pharmacy, 2016b). During the 2014-2015 academic year, there were 13,994 Pharm. D degrees awarded and 61% of those were to females.

Factoring in the number of position vacancies that are created by retirement and recurring vacant faculty positions, it becomes evident that staffing is a huge and constant concern for academic pharmacy administrators. Taking a proactive stance in 2005, AACP leadership formed the Task Force on Faculty Workforce. “The goals of the Task Force were to review the status of the pharmacy faculty workforce and to identify factors that may influence the supply of and demand for pharmacy faculty members” (Beardsley et al., 2008, p.1). This work resulted in “predictions [that] the academy will need approximately 1200 new faculty members over the next 10 years due to the creation of new pharmacy programs, the expansion of existing programs, faculty retirements and recurring vacant positions” (Beardsley et al., 2008, p. 1). The Task Force primarily reported on quantitative factors, i.e. the number of faculty members needed, not qualitative factors such as the quality of the educator. Knapp, Manolakis, Webster, and Olsen (2011) continued research by Beardsley et al. and reported that the percentage of full time equivalent pharmacy faculty positions was expected to increase 13% from 2010 to 2015, not accounting for losses due to retirements.

During 2013-2014, there were 427 vacant faculty positions in academic pharmacy and 44.7% were in the clinical science/practice discipline (American Association of Colleges of Pharmacy, 2015c). A further point of concern to the academy is the fact that of the vacant positions, almost 24% of them had been open for over a year. These data indicate that during the
2013-2014 year, 18.1% of positions were vacant due to retirements and an additional 15.9% of faculty left to take a practice position in the private healthcare sector (American Association of Colleges of Pharmacy, 2015c).

Changes in U.S. pharmacy practice faculty demographics were explored by Raehl (2002). Pharmacy practice was the largest faculty discipline and during the 2000-2001 year, 65% were junior faculty members. Furthermore, 72% of junior faculty had non-tenure track appointments. AACP data from 2014-2015 reflected similar statistics with 71% of first time faculty being in non-tenure track positions (American Association of Colleges of Pharmacy, 2015b). Pharmacy practice also has more women faculty members than other pharmacy disciplines. All these factors have shaped the current landscape of pharmacy education creating a set of interesting problems that must be acknowledged and dealt with.

**Career Paths to Academia**

Adams (2002) detailed recommendations to graduate faculty in preparing graduate students and new faculty for college and university teaching. She suggested that there are five areas that should be addressed: teaching, research, academic life, job search and academic options. Providing exposure and opportunities in each of these areas may help new faculty be more successful when starting an academic career. Benassi and Buskist (2012) contend that Adams’ recommendations from a decade before are still very important and relevant today. In higher education, the traditional model of employing graduate teaching assistants is used to not only provide professional and scholarly experience for the graduate student, but it also serves as support to faculty providing for the instructional mission of the university. This model is not as widely utilized in professional schools of pharmacy.
As noted by Wankat (2002), “most professors have never studied and some have never learned either the extrinsic or intrinsic tasks necessary to function as a professor” (p. 4). He also pointed out that most professors have only been trained in their discipline and most lack training in teaching, time management, teamwork and administrative skills. Therefore, it becomes necessary for faculty to learn these skills through professional development opportunities.

There are three general disciplines of academic pharmacy. The pharmaceutical and biomedical sciences division typically employs Ph.D. trained scientists and researchers who are responsible for pharmacy curricula and research related to pharmacology, pharmaceutics, biochemistry and medicinal chemistry. Social and behavioral sciences is the second area with faculty who have either a Pharm. D. or Ph.D. Faculty are involved in research and teaching related to patient medication use, practice management and health care policy. Pharmacy practice is the third academic discipline. These Pharm. D. trained faculty members typically have clinical practice responsibilities in addition to classroom teaching. They are responsible for delivering portions of pharmacy curricula related to practice models and medication therapy management.

The Pharm. D. curriculum is designed to produce a scientifically and technically competent pharmacist who can provide optimal health care services to patients. Pharmacy programs are often referred to as professional schools rather than graduate schools. A common difference is that a doctor of philosophy program typically requires a bachelor’s degree before admission, whereas professional schools do not always have that requirement. The focus of a professional school is to train students for an entry-level career in a certain area with required application of practical experience in the content area. Raehl’s (2002) research noted that in 2000-2001, 86% of pharmacy practice faculty had a Pharm. D. as their highest degree earned.
Faculty Recruitment and Retention

The rapid expansion of pharmacy programs has increased the demand for pharmacy faculty (Assemi, Hudmon, Sowinski, & Corelli, 2016). In order to prepare the academy for the increased number of faculty needed, schools should consider and implement strategies to maximize student interest in academic careers. Some suggestions include, but are not limited to, exposing students to the academy, expanding scholarship opportunities, expanding Ph.D. programs, considering loan forgiveness for those who enter academia, and considering alternative appointment structures such as job sharing (Beardsley et al., 2008). Attracting more graduates to consider postgraduate training and careers in academia can be challenging when there are more lucrative positions available in retail or clinical pharmacy practice. Difficulty in recruitment can result in academic positions yielding extra workloads that may not be desirable for a new practitioner (Conklin & Desselle, 2007b).

After faculty are hired, the next challenge is retaining them. Since the majority of pharmacy practice faculty have clinical rather than traditional Ph.D. training, it becomes important that resources are dedicated to help ensure new faculty are as prepared as possible to step into teaching, research and even administrative functions which are requirements of faculty positions. Beardsley et al. (2008) also provided a variety of recommendations to influence and increase the supply of faculty members. Recommendations include revising tenure processes, allowing for flexibility for family and personal issues, and the development of more transparent contracts for non-tenured faculty members.
Faculty Socialization

One of the first steps in retaining faculty involves a purposeful process of ensuring that new faculty members are integrated into the organization. Austin (2002) defined faculty socialization as a “process by which a person becomes part of a group, organization or community” (p. 96). Furthermore, she noted that it “involves learning about the culture of the group, including its values, attitudes and expectations” (p.96). This is a key component for a new faculty member at an institution and even more important for a first time faculty member.

The importance of one’s work environment was noted by Zaleznik, Christensen, and Roethlisberger (1958). They discussed elements that were important to employee satisfaction such as the social structure of the unit when relationships were developed among colleagues. Relationships must coexist to effectively deliver content in a curriculum or to work together collectively and collaboratively in shared governance. However, it is often when relationships go beyond the technical aspects of the work that one’s need for association and friendship are satisfied. This connection, or socialization which occurs with new faculty and their organization is one of the important factors influencing faculty attitudes and motivation toward work (Zaleznik et al., 1958).

Reynolds’ (1992) work in socialization and acculturation found that junior faculty members may find it difficult to understand the organizational culture of their new place of employment. Her qualitative study consisted of interviews over a one-year period with junior faculty members. There were cases illustrating a contrast between socialization and acculturation in which junior faculty detailed negative interactions and alienation with colleagues. Other cases described intensive workloads in their early years with notable
imbalances between research and teaching and advising. Isolation affected junior faculty members’ ability to feel like a valuable part of the department. They experienced feelings of unpreparedness for their academic roles and struggled some with simply learning the way of academic life. Although junior faculty members were frustrated by the lack of collegiality, some noted their idealistic perspectives changed to more conventional ones. Other faculty noted their expectations for socialization eventually declined in an effort to fit in with their department.

Kehrer, Kradjan, Beardsley, and Zavod (2008) suggested that a targeted approach to faculty enculturation is critical for pharmacy education, particularly since many faculty are not trained for academia through traditional Ph.D. study. They claim that the process of orientating new faculty to the university and school, as well as orienting them to the expectations of teaching, service and scholarly activities, is vital in ensuring that new faculty members feel connected to the academy and will more likely remain. Kehrer et al.’s (2008) research showed that formal orientations were less common than one would expect.

Faculty Development

Groccia (2010) noted that faculty development in higher education should be supported not only for the professional development it addresses, but also as a means to recruit and develop future generations of educators. As Seldin (2006) noted, professional careers are often begun in new and unfamiliar environments. The excitement associated with accepting a faculty position in higher education is often tempered by the realization that a new and unfamiliar environment exists. Both faculty development and faculty socialization opportunities can assist new faculty in adjusting to academic work expectations. Silvestri, Cox, Buskist and Keeley (2012) advocated for professional development to help new faculty learn to teach well. They researched teacher
preparation experiences in 21 content areas for assistant professors and concluded that training in teaching content positively affected assistant professors’ perceptions regarding preparation for their teaching duties. They further concluded that an investment in teaching training in graduate school could subsequently help new faculty more quickly become productive and efficient in their new faculty positions.

Strang and Baia (2016) discovered a paucity of published literature for studies of teaching programs for pharmacy education between 2001 and 2015. The literature they found focused more on resident training than faculty development. While resident training can provide an exposure to foundational educational concepts, they found little data to support that residency programs improve teaching behaviors at the faculty level. Their research in pharmacy education found only 21 programs in the U.S. that were specifically designed to improve teaching efficiency for pharmacy residents and faculty. Of those, only one program pertained solely to faculty development, rather than residency training. While the 21 programs provided a variety of opportunities for exposure to academic situations such as participation in experiential components of teaching, course development, creation of a teaching philosophy, only one program measured changes in participant behaviors before and after the program (Strang & Baia, 2016).

Boucher et al. (2006) reflected on the rapid growth of pharmacy programs with regard to the need for faculty development for junior faculty. While ultimate responsibility for faculty accountability in the areas of teaching and scholarship lies with the individual, they point out that the institution should assume some responsibility by providing faculty development opportunities. Faculty commitment, flexibility of faculty development programing and resource commitment by the institution are three key areas that should be in place to maximize success for
faculty development programs. Medina, Garrison, and Brazeau (2010) however, argued that faculty may have difficulty finding time to take advantage of faculty development programs due to their workload and relatively little free time which can be devoted to personal and professional development. They further pressed the issue that while the academy pushes for students to “read, reflect, discuss and network” (Medina et al., 2010, p. 2) often times faculty are not afforded the same opportunities with regard to dedicated time for faculty development.

The American Association of Colleges of Pharmacy (AACP) and The American College of Clinical Pharmacy (ACCP) have both recognized the need for dedicated faculty development in pharmacy education, most often commenting on the needs of new faculty who have insufficient training in teaching skills. In their Position Statement on clinical faculty development, Boyce et al. (2009) noted that faculty development should be a fundamental part of an institution’s culture. Furthermore, the accreditation standards for pharmacy education require schools and colleges to address the need for professional development for both faculty and professional staff (Accreditation Council for Pharmacy Education, 2015).

Scholarship and research are areas in which faculty development needs exist for pharmacy practice faculty. The 2006-2007 Pharmacy Practice Scholarship/Research Faculty Development Task Force of AACP conducted research regarding the perceived barriers to scholarship and research (Robles, Youmans, Byrd, & Polk, 2009). Because pharmacy practice faculty may find it more difficult to pursue scholarship based on clinical practice responsibilities, it is not surprising that having more time to conduct research was the first priority.
Mentoring

Literature also points to key elements that pharmacy education should dedicate time and attention to new faculty. Faculty to faculty mentoring is highly praised as being a successful tool for professional and personal development. “The importance of formal mentorship programs to improve career development and satisfaction has been recognized over a decade” (Jackevicius et al., 2014, p. 1). As defined by the Institute of Medicine (National Academy of Sciences, National Academy of Engineering, & Institute of Medicine, 1998) a mentor is a role model, career advisor, consultant and faculty advisor. An important concept of mentorship is that it is an intentional activity, with conscious efforts in a nurturing relationship (Jackevicius et al., 2014). Unfortunately, higher education institutions including schools and colleges of pharmacy often elect to adopt an informal mentoring program. While there is certainly value associated with an informal program, having a formalized program tends to better involve faculty members early on in their career as well as acclimate them to the culture of their profession sooner, and can actually offer the structures and framework necessary to create the culture of mentoring (Fuller, Maniscalco-Feichtl, & Droege, 2008).

Formal guidelines for mentoring faculty members do not exist for pharmacy education (Metzger et al., 2013). There are three essential elements that Metzger et al. suggested as paramount: 1) programs should pair junior and senior faculty members; 2) they should adopt definitions of scholarship that align with their institution’s culture; and, 3) they should provide resources to senior faculty members on the skills of advising as well as recognizing senior faculty’s contributions in the mentoring process.
As pharmacy schools respond to the need for additional faculty, there is a disproportionate increase in the number of junior faculty members compared to senior faculty members. In addition, new pharmacy programs may lack sufficient senior faculty and administrators to provide adequate mentoring opportunities for junior faculty (MacKinnon, 2003). Due to the increase in demand for pharmacy educators paired with the retirement of senior faculty members, many institutions are considering a triad approach to mentoring (Fuller et al., 2008). This triad incorporates the organization into the mentor and protégé equation. The organization as a whole plays a vital role in the process. It is best to conceptualize this as the organization actively supporting faculty socialization at all levels. By creating organizational cultures that are nurturing, faculty can see the value of the team as a whole, which is an important reason that employees want to stay in an organization. An unintended, yet positive outcome of such an approach is potential new collaborations between departments as junior faculty establish relationships with other members of the organization outside their department.

**Career Choice, Job Satisfaction and Work Life Balance**

Bandura’s self-efficacy theory offers a perspective on understanding career selection and job satisfaction. The self-efficacy theory involves the ability of a person to organize their social, cognitive and behavioral skills (Bandura, 1977). This theory may help one understand about new faculty members and their ability to be confident, and exercise appropriate actions to be successful in academia. Holland (1973) believed that the balance between one’s personality and work environment was an important part of finding job satisfaction. Betz and Hackett (1981) applied Bandura’s theory to the process of career decision making and Betz (2000) further explored self-efficacy with regard to gender related career decisions.
One cannot explore the subject of job satisfaction without quickly discovering the seminal work of Herzberg, Mausner, and Snyderman (1959). Their book *The Motivation to Work* explored the subjective nature of work and one’s attitudes towards their job. Although their research was rooted in industrial organizations, their theories hold merit across other occupations. They posited that intrinsic factors were intangible things such as emotional needs and recognition whereas extrinsic factors were more tangible items such as job security, salary and benefits. Intrinsic factors relate to job satisfaction and extrinsic factors are related to job dissatisfaction. Faculty development programs and mentoring can help build self-confidence, which may lead to improved intrinsic job satisfaction. Extrinsic factors, such as salary and the amount of support from the organization, are items that the institution has some influence over and therefore should rank high in importance.

According to Desselle and Conklin (2010) there has been little empirical investigation of work life issues and work satisfaction in pharmacy education. Furthermore, higher education studies performed two and three decades ago focused on job satisfaction rather than turnover (Crawford & Olsen, 1998; Iiacqua, Schumacher, & Li, 2001; Olsen, 1993). As a result, there is not an abundance of literature related specifically to this researcher’s topic.

Because post-doctoral training of clinical track faculty is focused on clinical training, with less emphasis placed on research and scholarship, faculty may struggle to successfully satisfy their academic roles and responsibilities (Nutescu et al., 2014). Helping ensure the successful transition of new faculty members into the organization can lay the foundations for a successful academic career.
Statement of Problem

To ensure there are sufficient members of practice faculty members to deliver a professional pharmacy curriculum with a large focus on clinical content, faculty recruitment and retention ranks high on the list of issues pharmacy education identifies as a constant and critical concern. The American Association of Colleges of Pharmacy (AACP) recognized the importance of faculty development of pharmacy educators stating that not only does the academy need to ensure that it continues to meet the demand for new faculty members, it should also strive to retain them. A key component in retention is the faculty member’s understanding of the demands of an academic position. Although faculty members have a doctoral pharmacy degree and are almost always a licensed pharmacist, they often have limited training in pedagogy and in meeting the scholarship and service demands expected of university faculty members. This disconnect, which may result in reduced levels of effectiveness, can also lead to dissatisfaction, which in turn can increase faculty attrition.

Conceptual Framework

The following figure illustrates each of the components that factor into the administration of pharmacy education today and form the basis for this research. The increasing number of pharmacy schools has increased the number of students which leads to an increased demand for pharmacy faculty. Having more faculty places greater demands on socialization programs which likely increases the strain on a school or college’s resources, which may in turn have an effect on the challenges associated with faculty retention. The increased number of schools may also affect faculty retention and in turn, place an increased strain on school or colleges resources.
Purpose of Study

This work was conducted primarily due to the lack of data regarding pharmacy practice faculty’s preparation for and adjustment to academic roles and responsibilities. No significant wide scale studies have been published in the last ten years addressing junior pharmacy faculty’s academic socialization opportunities. Due to the vast increase in the number of pharmacy schools and subsequently, the number of pharmacy students, recruiting and retaining quality pharmacy faculty is a key concern for U.S. schools and colleges of pharmacy.

Research Questions

The researcher studied four main themes of academic life for junior pharmacy practice faculty members. First was how prepared faculty felt for their positions in academia. Second,
was how well faculty were adapting or adjusting to their roles and responsibilities, particularly in
the areas of teaching, research and scholarship. Third, the researcher investigated faculty
socialization with survey questions relating to how much collegiality and mentoring were
present. Finally, questions related to work life balance were asked to help determine junior
faculty’s likelihood to remain in or leave academia. The four research questions for this study
are:

1. To what extent are pharmacy practice faculty prepared for their roles and responsibilities
   in academia?

2. To what extent are pharmacy practice faculty adapted into their roles and responsibilities
   in academia?

3. To what extent are pharmacy practice faculty socialized to their roles and responsibilities
   of academia?

4. To what extent are pharmacy practice faculty likely to leave academia?

**Significance of Study**

This study will provide current data that academic pharmacy administrators can use to
attract future students to academic positions, fill their faculty positions, understand work life
issues for practice faculty and provide the necessary faculty development and mentoring which is
paramount in faculty retention.

**Assumptions**

1. Participants surveyed answered questions consistently and honestly.
2. Participants surveyed were representative of the larger population of practice faculty at U.S. schools and colleges of pharmacy.

**Limitations and Delimitations**

Limitations of this study include being dependent on another entity to identify the first time faculty members for the year selected. Errors in that process would affect this research.

The delimitation of this study was the fact that the researcher chose to only study a subset of pharmacy educators, those who were in Pharmacy Practice. The reason for this was that this subset of pharmacy faculty are primarily trained as clinicians, a different process from the way Ph.D. students are trained. This distinction relates to the research and scholarly training that Ph.D. students receive which exposes them more to academic socialization before entering an academic position. Faculty who teach in other areas of pharmacy education likely had a more traditional pathway of graduate study which afforded them more experience in research, scholarship and even teaching.

This study included faculty members generally in the second year of their academic career. The results may be different for faculty members in years four or five who would have more experiences but are still considered junior faculty members.

**Definitions**

For the purpose of this study, the following definitions apply:

**Acculturation** - how one adapts to a culture; adopting its traits as their own. (Reynolds, 1992)

**Enculturation** - the process of acquiring the accepted norms and behaviors of a group or culture. (Reynolds, 1992)
Junior faculty - those who have not yet been promoted from the initial rank which they were hired. In this research, it refers to those with a rank of assistant professor.

New faculty - those who are in their first or second year of an academic appointment.

Preceptor - a clinical teacher who uses his/her practice site for instruction in the “real world” (Nappi, 2010)

Socialization - the process by which one becomes part of a new group or organization. (Austin, 2002)

**Organization of the Study**

This study is organized into five chapters. Chapter 1 is the introduction. This chapter provides background information, discusses the statement of the problem, purpose of the study, research questions, significance of the study, limitations and delimitations, assumptions and definitions of terms used in the study. Chapter 2 is a review of literature on career choice and preparation for academia, faculty socialization, job satisfaction and work life balance. Chapter 3 provides information related to the population and sample, survey instrument, data collection procedures, validity and reliability, and data presentation. Chapter 4 reports the findings in relation to the research questions. Finally, Chapter 5 provides conclusions and discussion based on the findings and recommendations for further study.
Chapter 2

Literature Review

This chapter reviews the literature on career choice and preparation for academia, faculty socialization which includes mentoring and faculty development as well as job satisfaction, and work life balance. It should be noted that the majority of scholarship has been based on studies of undergraduate faculty. Furthermore, of the publications referenced in this project that were pharmacy related, only a small number of those were specifically related to pharmacy practice. As such, at times it may be difficult to draw direct comparisons to the population of this study. The purpose of this study was to provide research on the job market in pharmacy education with particular regard for faculty recruitment, retention and job satisfaction of junior faculty members. The research questions were as follows:

1. To what extent are pharmacy practice faculty prepared for their roles and responsibilities in academia?

2. To what extent are pharmacy practice faculty adapted into their roles and responsibilities in academia?

3. To what extent are pharmacy practice faculty socialized to their roles and responsibilities of academia?

4. To what extent are pharmacy practice faculty likely to leave academia?
Career Choice

There are several theories that attempt to explain why one selects a certain career path. Some of these include Bandura’s work on social learning and self-efficacy theories, Parsons’ trait and factor theory, Holland’s typology theories and Krumboltz’s social learning theories (Lindholm, 2004). In the 1980’s, research began to focus on career choices for women and minorities. According to Lindholm (2004) it was not until the 1990’s and early 2000’s that research was dedicated to specifically address academia as a career choice. As college enrollments began to increase in the 1980’s and 1990’s, colleges began utilizing more teaching assistants to assist with faculty workload and graduate education began to gain more attention as a preparation for academic careers (Austin & Wulff, 2004).

Many authors (R. A. Carter, 2005; Draugalis et al., 2006; Hagemeier, Murawski, & Popovich, 2013; Lindholm, 2004; MacLaughlin et al., 2009; Sheaffer et al., 2008; Spivey, Chisholm-Burns, Murphy, Rice, & Morelli, 2009) reported that there were several things that seem to be attractive regarding academic careers. Autonomy is highly valued along with intellectual challenge and freedom, flexibility of work setting and work schedule, and the opportunity to blend patient care with academic activities. The Cooperative Institute Research Program (CIRP) at the Higher Education Research Institute (HERI) has conducted research on higher education faculty since 1978. At the time of this research, the most recently published data was the 2013-2014 HERI Faculty Survey. Due to the large number of U.S. faculty, as well as the variety of criteria such as survey response rate, institutional type, and survey respondents’ academic rank, the HERI Faculty Survey results are weighted to provide a normative profile of the American faculty population. When asked how satisfied faculty members were with various
aspects of their jobs, assistant professors reported the highest satisfaction (83%) with autonomy and independence (Eagan et al., 2014).

When considering a position in academia, learning about the school’s culture, mission and vision are extremely important. As MacLaughlin et al. (2009) pointed out, it is critical to ensure that a faculty candidate assesses how collegial faculty members are and what their attitudes appear to be regarding their jobs, their coworkers and the institution. How much of a priority the institution places on new faculty orientation and faculty development, particularly in the area of research and scholarship, are indicators for success that should be assessed.

**Career Preparation for Academia**

Pharmacy education, like other healthcare fields, relies a great deal on clinicians to fill their faculty roles, particularly in pharmacy practice departments. While it is paramount to ensure that the next generation of nurses, physicians, occupational therapists and pharmacists are appropriately trained from a clinical perspective, how they are trained to perform academic responsibilities must be considered.

Golde and Dore (2001) reported findings from a national survey seeking to address how effective doctoral programs were at preparing students to become faculty members. Because the Ph.D. is considered a research degree, the majority of the training that a student receives is in the area of conducting research. In fact, 65% of the enrolled students that Golde and Dore surveyed felt their graduate program was preparing them to conduct research. Only 36% of those students agreed that their program was preparing them to teach lecture courses and 13% indicated they felt prepared for service on departmental and university committees. According to the HERI findings, only 39% of assistant professors agreed to a great extent the training they received in
graduate school prepared them well for their role as a faculty member (Eagan et al., 2014). Prentice-Dunn (2012) reported that new faculty may struggle with the appreciable amount of time service entails because of little pre-exposure before assuming a faculty position. As a result of graduate preparation that focuses primarily for careers in research, Draugalis and Plaza (2007) advocated a formalized approach for pharmacy faculty to help mentor their students particularly in the areas of teaching and service.

Rice, Sorcinelli, and Austin (2000) discussed the value of the graduate school experience regarding observation, listening and interacting with faculty members as a way to help train and prepare them for academia. Graduate teaching assistants for example, have the opportunity to learn from their professor on teaching mechanics. Having involvement in even small parts of classroom management can provide a foundation of confidence for future teaching responsibilities. Professional pharmacy education, as a rule does not offer this type of graduate student training.

MacKinnon (2003) mentioned that while fellowships may provide some socialization to higher education as well as some exposure to teaching, this may not be the case as often with clinical residencies. “In contrast, the experiences clinical faculty receive from post graduate residencies more often prepare them for roles as clinicians rather than researchers and educators” (p. 56).

An increased emphasis on faculty pursuit of scholarship has occurred over the last 50 years (Smesny et al., 2007). The health sciences academic environment has evolved significantly. As a result, many pharmacy practice faculty are expected to maintain patient care, teaching, and other experiential obligations, in addition to satisfying scholarship requirements.
Faculty in clinical health sciences are typically trained as practitioners and often have little to no experience training in teaching or research, “yet are promoted and tenured according to prevailing academic norms” (Jungnickel, 1997, p. 34). In his seminal work *Scholarship Reconsidered* (1990) Boyer addressed the faculty reward system and made compelling arguments for the need to redefine the views of the professoriate for a more realistic understanding of academic scholarship. His work suggested the importance of teaching as the primary task of higher education and, with such, the need for faculty to be more creative in defining how they are spending their time and what is considered scholarship.

Although pharmacy schools and colleges do a very good job preparing students for the traditional job market in pharmacy, much more needs to be done to encourage students to pursue faculty positions, especially given the fact that the pharmacy job market is more competitive outside the area of academic pharmacy (Patry & Eiland, 2007). While the job market for academia has changed somewhat since Patry and Eiland’s work in 2007, it is important to continue marketing academia as a viable career choice.

**Mentoring**

Mentoring has its origins in Greek mythology dating back to Homer’s epic, *The Odyssey*. From a societal perspective, the concept of mentoring began to gain momentum during the mid-1700’s in England (Nayab, n.d.). In the United States, after World War II, business management ideas and practices began exploring options of providing necessary employee training and development opportunities for a new workforce. Mentoring continued to gain momentum in the business sector during the 1960’s and 1970’s, and began making its way into higher education with works such as *Seasons of a Man’s Life* (D. J. Levinson, Darrow, Klein, Levinson, &
McKee, 1978) and Dalton, Thompson, and Price's (1977) work in organizational theory regarding the four stages of contribution. They contend mentoring begins at stage one of career development with the newcomer being mentored and then surfaces again in stage three, when the former newcomer is then responsible for assuming a mentoring role. Kram (1985) defined mentoring as a relationship between a young adult and one more experienced who gives career advice. She also advocated the importance of developing networking relationships. Haggard, Dougherty, Turban, and Wilbanks (2011) examined the publications related to mentoring from a scholarly perspective and found that there have been evolutions in mentoring over the last 30 years. Bryant-Shanklin and Brumage (2011) noted that mentoring in the educational sector has changed dramatically in recent years with downsizing, reorganization and general uncertainty affecting higher education. They suggested the definition of mentoring has now expanded to include relationships beyond the parameters of the university. Other changes at some institutions include having mentors assist with not only the traditional topic of teaching, but also research. This could prove most beneficial for pharmacy practice faculty, as many junior faculty have reported the need for support with research (O. Carter, Nathisuwan, Stoddard, & Munger, 2003; Conklin & Desselle, 2007c; Fuller et al., 2008; Glover & Armayor, 2004; Sorcinelli, 1992; Spivey et al., 2009).

In the academic setting a mentoring relationship pairs an accomplished, often senior faculty member with a new junior faculty member (Sands, Parson, & Duane, 1991). Mentoring a junior faculty member can have a combination of any very specific goals, such as providing insights to the culture of the organization, suggestions on teaching techniques, and guidance for scholarship and research projects. This combination of career development and personal development provides a more holistic approach for the mentee. Sands et al. (1991) agreed that
when mentoring exists, the climate of the organization is reflected positively as one that values the members of the organization. In turn, this may have a positive impact on faculty members’ job satisfaction (Falzarano & Zipp, 2012), professional development (Zeind et al., 2005) and faculty retention (Kosoko-Lasaki, Sonnino, & Voytko, 2006).

Mentoring should also be specific to an academic area. For example, Smith (2010) contended that faculty in health disciplines have responsibilities in teaching, patient care, citizenship and scholarship. Since most new faculty in pharmacy practice often have limited pedagogical experience, a mentor should provide advice on educational concepts and techniques. Typically, a new faculty member feels most comfortable about his or her clinical skills and knowledge as a pharmacist, but a mentor can be invaluable in assisting them establish their academic practice.

As Smith stated, “involvement in department, college and university governance is an important requirement for all faculty; however, it is often completely overlooked in the mentoring process until a problem surfaces” (p. 208). Citizenship is further addressed as “it is the mentor who introduces the protégé to the prevailing culture of the profession, its standards of practice and system of beliefs” (Haines, 2003, p. 203).

Mentoring offers a way to learn about the expectations of an academic position. The most likely beneficial area for a mentee in pharmacy practice is having a mentor who is able to provide guidance with regard to research and scholarship. Whether it is simply providing suggestions for research ideas or offering to partner with them on research, having a mentor with experience in this area is key to minimizing the stress and anxiety that scholarship and research may cause a junior faculty member.
The mentor-mentee relationship is not a static one; as the needs of the mentee change over time, so should mentoring. When a junior faculty member is new to academia, he or she may need technical help learning to prioritize responsibilities and manage time as they become accustomed to their role of academia. The mentor may be consulted periodically to advise on organizational issues when questions or issues arise. Finally, the mentor provides advocacy for the mentee. This can be through various venues such committee assignments, workload and even promotion and tenure.

Benefits of Mentoring

Some of the more obvious benefits to mentoring relationships include easing stress associated with a new, and perhaps unfamiliar environment, having a colleague to guide one through logistical issues that arise and even having someone to consult with when one faces discouragement or has good news to share (Falzarano & Zipp, 2012). Chung & Kowalski's (2012) research demonstrated a positive relationship among mentoring quality and job satisfaction along with a negative relationship among job stress and mentoring quality.

Zeind et al. (2005) studied a five-year project of 93 new faculty members and 73 seasoned faculty members and found that there was a dramatic increase in the number of mentoring pairs who participated from year to year. They used programmatic feedback for yearly program enhancement in addition to using feedback to enhance other areas of their faculty development initiatives. The researchers credited the tremendous support provided by the college in terms of monetary support, workload credit and the value they realized in the program as primary reasons for its continued success. “The faculty mentoring program has also proven to be an effective recruiting tool for new faculty members” (Zeind et al., 2005, p. 11).
A study of 51 mentor-protégé pairs formed between 2009-2012 found very similar positive results in that “over 90% of the protégés enrolled…reported that their mentors developed their abilities and provided support, knowledge and guidance which helped them become more successful” (Jackevicius et al., 2014, p. 5). This supported research by W. Levinson, Kaufman, Clark, and Tolle (1991) which found that junior faculty who had mentors reported higher rates of publication, greater self-confidence and a higher level of career satisfaction than those without mentors.

**Gender Differences**

There are differences in mentoring connections between men and women. From their study performed in the 1987-1988 academic year, Sands et al. (1991) identified some interesting findings related to gender. Males and females were more likely to be mentored by men primarily due to the lower number of females employed in higher education. Levinson (1996) further identified that when women were in the mentor identification process they typically were drawn to those individuals who were successful and powerful in the organization, which by and large were males.

Having a mentor is a predictor of career satisfaction in academic medicine, yet women are more likely not to have a mentor. “Women and minority faculty are seriously under-represented in university and academic healthcare institutions. The role of mentoring has been identified as one of the significant factors in addressing this underrepresentation” (Kosoko-Lasaki, Sonnino, & Voytko, 2006, p. 1449). In addition, women are less likely to self-identify mentors on their own.
Faculty Socialization

One of the important elements of ensuring that junior faculty are successful in their career is how much attention the organization places on supporting new faculty. Being a newcomer in academia provides its own amount of stressors for a new faculty member. Graduate school prepares faculty for some of the technical aspects of an academic position but new faculty are often disillusioned by the difference in graduate school socialization and a “real” academic job. Notably, new faculty members are hired often because they have expertise in a discipline, yet, once they arrive on campus, occupy low status and are considered amateurs in rank at the institution (Dinham, 1999).

Fink (1984) suggested that there are several important factors needed to develop good college teachers such as providing a supportive atmosphere, providing feedback on performance and assisting faculty in their development of teaching skills. Collegiality plays a profound role in helping new faculty members learn the particulars of the department, school or university. Boice’s (1992) work found that even though faculty placed great value on the ability to work autonomously in academia, new faculty still relied on their colleagues to help them improve as teachers and researchers. Similarly, MacKinnon (2003) concluded that as a result of the nature of their respective educational programs, “clinicians from the fields of medicine, nursing, pharmacy and allied health may lack an overall socialized knowledge of the academic environment from a faculty perspective when assuming teaching positions” (p. 56).

Boice (1992) also found that during the first year of employment, many faculty members felt isolated with little support from colleagues who were not interested in getting to know or help new faculty members, and even left out of the decision making loop in faculty matters.
Faculty expressed feelings of depression about their own productivity and reported that initial plans for collaboration were sometimes abandoned and that careers could be handicapped without more social support. During their second year in academia, with continued lack of support, new faculty started to hold colleagues responsible not only for the lack of a friendly work environment, but also for the absence of a positive teaching or research culture. Eventually, junior faculty began to shift their attention to other new faculty to look for friends and collaborators when they had little help from veteran faculty members in the department.

Boice (1991) determined there were certain skills and habits that successful new faculty employed. His research found that there were faculty whom he designated as quick starters who were more successful as faculty members than others. Quick starters sought advice about teaching from colleagues, displayed low levels of complaints about colleagues and they had a documented balance of teaching and scholarship. He found that those who were more successful started first with the basics of comfort and efficiency before moving to the process or product. These first factor issues were described as basic foundations in teaching and writing. Preparation for teaching focused more on being comfortable in the classroom. A first factor goal for scholarship would be to get in the habit of writing on a regular basis and becoming more comfortable with it. After the first factor issues are addressed then the faculty can devote time to improvement of the product or process. His research found that new faculty who addressed the first factor issues were more successful than those who did not.

Finkelstein, Seal, and Schuster (1998) added important findings to the body of research related to new faculty in higher education. Noting the changes in academic life particularly after the release of Boyer’s *Scholarship Reconsidered*, they reported on data from the 1993 National Study of Postsecondary Faculty to provide a profile of new faculty in higher education. New
faculty reported lower satisfaction in job security (70% compared to 86% reported by senior faculty). When comparing actual to desired distribution of work effort, new faculty wanted to decrease teaching, service, and administration and increase research, professional growth and consulting. Almost 50% of new faculty who participated in their research were concerned that the pressures to increase faculty workload had worsened.

The New Faculty Project conducted by the National Center of Postsecondary Teaching, Learning and Assessment reported key findings regarding time allocation, stress, job expectations and performance evaluation of new faculty members (Menges, 1999). This research noted five problematic issues for new faculty: high anxiety, pressure regarding obligations that compete for their time and energy, a sense of isolation, work stress that affected them outside of the workplace, and disparity with compensation and advancement.

The American College of Clinical Pharmacy (ACCP) Position Statement on clinical faculty development (Boyce et al., 2009) suggested that colleges and schools provide formalized orientation programs for new faculty. Such programs should include introductions to the culture of the institution as well as opportunities for new faculty to develop their teaching abilities, scholarship and research skills, and service opportunities.

Faculty Development

While new faculty may be very prepared clinically, they may struggle to find an appropriate balance between teaching and scholarship and research. Having faculty development programs designed to aid junior faculty with classroom management skills, teaching techniques, time management and course design can be of great value. In 2001, MacKinnon surveyed full time pharmacy faculty members in all 80 U.S. schools and colleges of pharmacy. Interestingly,
54% of respondents reported there were no programs for newly hired faculty and 48% reported no faculty development programs for all pharmacy faculty. An overwhelming 89% of those surveyed reported that they had not completed a formal faculty development program while 58% also noted no participation in informal faculty development programs (MacKinnon, 2003).

AACP previously identified the need for faculty development of new faculty members and created the Teachers Seminar in 1984 (MacKinnon, 2003). This one-day faculty development program was designed in conjunction with the AACP Annual Meeting and it is still in existence today. Based on AACP data from 2005-2016, the Teachers Seminar attendance has been between 11%- 22% of Annual Meeting attendance with a median of 15% Seminar attendance (B.A. Gustis, personal communication, September 27, 2016). The Seminar is not solely designed for and attended by junior faculty who may have the most immediate need for faculty development programming.

Likewise, the American College of Clinical Pharmacy (ACCP) also recognized a need for faculty development for its membership and created the Teaching and Learning Certificate program in 2006. The mission of the program is to “assist in the recruitment, motivation, and preparation of educators” (American Association of Colleges of Pharmacy, n.d.) The 28 hour course consists of a teaching and learning primer and modules on the implementation of teaching and learning strategies and student learning assessment. The certificate also contains a variety of elective courses on topics such as interprofessional education, exam construction, course design and providing feedback in clinical settings. Participants must assemble a teaching portfolio as well as recruit a mentor who can provide portfolio guidance and feedback. Program requirements allow up to two years to complete the curriculum. Since 2009, there have been 188 graduates of the Teaching and Learning Certificate program (American Association of Colleges of Pharmacy,
n.d.). Due to the limited length of the program and the extended time allowed to complete it, one can argue that the program does not provide the intensive faculty development needed for junior faculty members.

At the school or college level, how faculty development programs are structured varies by institution. As Lancaster, Stein, MacLean, Van Amburgh, and Persky (2014) noted, there are faculty development learning communities, committees, and faculty development centers. Faculty development learning communities may be designed to be cohort or topic based. Because learning communities may be more structured and intensive, it may be the best way to directly benefit new faculty as well as enhance relationships between faculty members, particularly at the department level. Faculty committees reside more often at the school or college level and may be more responsive to the department’s needs by providing subject matter where it is more directly needed. It is at the institutional level where faculty development centers typically exist and they may be better funded than learning communities or committees. A style of faculty development which may be very desirable for pharmacy education is that of a collaborative model with other health sciences schools. As funding for faculty support may be limited, an innovative approach of collaboration could be effectively employed. Sicat and colleagues established an interprofessional faculty learning community with a vision of sharing resources and providing faculty development to a larger audience (Sicat et al., 2014). This approach can assist in other non-intended results such as the value a faculty member may receive from being part of a professional community and the strengthening of interprofessional clinical collaboration.

It may be difficult to provide a comprehensive faculty development program that address the needs of all constituents such as women and minorities, new faculty, mid-career and senior
faculty (Guglielmo et al., 2011; Lancaster et al., 2014; MacKinnon, 2003; Raehl, 2002; Seldin, 2006). In addition, patient care responsibilities of clinical faculty members may prevent their appropriate allocation of time for faculty development opportunities which may in turn foster a disconnection with the academic environment (MacKinnon, 2003).

Smesny et al. (2007) noted that due to the different types of scholarship (discovery, integration, application and teaching) that Boyer advocated in *Scholarship Reconsidered*, there was a lack of appropriate promotion and or tenure guidelines for health sciences faculty who were providing clinical services. Placing more importance on broadening the acceptable types of scholarship is an important topic for faculty development not only to help faculty consider alternative forms of scholarship, but also to promote a change in institutional culture as it relates to assessment of scholarship.

Research by Robles et al. (2009) found that when pharmacy practice respondents were asked for scholarship programming suggestions, three items tied for first priority: grant writing courses; keys for successful funding; and how to write and answer a research question. Younger faculty, those under the age of 35, reported a higher value on the need for programming on how to write and answer a research question, which could indicate a feeling of being less prepared for the scholarship requirements of academia. When asked about the differences between how important scholarship is versus how important it should be, 41% of those who responded stated that scholarship expectations are overemphasized, meaning that they believe scholarship is considered more important than it should be. That constitutes more than one third of practice faculty, a significant number who “may not be motivated to participate in [scholarship programming] especially if they believe they have insufficient time” (p. 8). This scenario could potentially lead to faculty members who are not as successful as they need to be to meet
scholarship requirements for academia. Robles et al. (2009) recommended schools and colleges should establish clear expectations for scholarship when hiring faculty, reiterate scholarly requirements to existing faculty and provide resources and support for faculty to be successful with regard to scholarship and research.

Faculty development highlighting more novel collaborative approaches to teaching, service and research such as those recommended by Galal et al. (2014) could provide opportunities for efficient use to clinical faculty’s time. Community-engaged scholarship pairs academic resources with community needs to solve public problems. Faculty members and students providing clinical services and medication interventions, can address community needs as well as attain data which can be used to address scholarly requirements.

**Job Satisfaction, Work Life Balance and Intent to Leave**

Most of the publications pertaining to job satisfaction, work life balance and intent to leave academia center around research on undergraduate faculty. While there are certainly similarities, it can be argued that clinical faculty likely have unique challenges which may not be addressed accordingly.

The lack of clear boundaries separating work and personal lives also affects work life balance for new faculty. Nair and Gaither (1999) noted that the typical pharmacy faculty member regularly works 40 plus hours per week, including nights, weekends, on campus and at home. Their vacations tend to coincide with work conferences and friends are often colleagues. These factors may allow work to become all-consuming resulting in role conflicts. Nair and Gaither’s research found that having insufficient time to complete one’s work and having job
demands that interfere with family and personal activities resulted in high levels of stress. Role conflicts were significantly associated with high levels of stress.

Menges (1999) reported five problematic features of junior faculty life: high anxiety; struggles with obligations that compete for time and energy; a sense of isolation; stress that often affects their personal life; and a dissonance between the tasks that they spend a larger amount of time on (teaching) and the ones they are measured against (research and scholarship). For pharmacy practice faculty members, this can be exacerbated by their reporting structure where clinical faculty members may be evaluated by not only their academic supervisors such as a department head or chair but also an administrator from their practice site, such as a pharmacy or medical director. The two administrators may not share the same opinion regarding the allocation of time for clinical and academic responsibilities (Nutescu et al., 2014).

As Latif and Grillo (2001) stated, a major factor in retention is job satisfaction and a major factor influencing turnover is quality of academic life. In addition, they pointed out that the role of teaching in pharmacy curriculums was changing from primarily lecture-based to a problem-based, learning-centered approach. As such, programs that use a problem-based learning style of teaching likely need to employ more faculty in general. Combining that with the increasing number of pharmacy schools demonstrates the need for additional faculty as well as pedagogical training for faculty. Latif and Grillo (2001) surveyed faculty who were assistant professors during the 1999-2000 academic year to study faculty satisfaction in the areas of teaching, research and service. Sixty-five percent (65%) of respondents identified themselves in pharmacy practice. Using a five- point scale with one equaling very dissatisfied and five equaling very satisfied, Latif and Grillo (2001) found a mean overall faculty satisfaction of 3.20, which was only slightly above a neutral response. Junior faculty were most satisfied in the
teaching domain (3.41), less satisfied with service domain (3.15) and least satisfied with the
research domain (2.93). The lowest mean score for all survey items was “The release time
offered by the institution for research” which was 2.60 on the five-point scale. This was
consistent with the trend seen by others (O. Carter et al., 2003; Conklin & Desselle, 2007c;
Glover & Armayor, 2004) that research is the area that pharmacy practice faculty struggle with.

Although most of the research on job satisfaction and turnover in pharmacy education has
not been separated by pharmacy discipline, O. Carter et al. (2003) reported that pharmacy
practice had a higher turnover percentage than faculty in basic sciences. Thus, pharmacy
practice administrators likely spend more time dealing with turnover. They cite challenges of
faculty successfully integrating the three required aspects of academia (teaching, service and
research), job stress typically associated with workload, the need to secure extramural funding,
and promotion and tenure as the most common reasons for faculty turnover.

Nutescu et al. (2014) found that clinical faculty members often struggle to adequately
balance their clinical and academic responsibilities. Almost 70% of clinical practice faculty
reported having insufficient time to adequately fulfill their academic/scholarly activities. In
addition, there can be a difference in estimation of effort expectations and actual protected time
for faculty to fulfill their academic responsibilities. As noted by Glover & Deziel-Evans, 2002;
Latif & Grillo, 2001; Raehl, 2002; and Robles et al., 2009, the evolving environment of
pharmacy education has produced threats to a balanced academic career. Faculty responsibilities
have increased while often times institutional resources have decreased. The addition of new
and expanding pharmacy programs, the increase in accreditation standards, and emphasis on
experiential training have combined to threatened a balance of clinical and academic
responsibilities.
Research by several authors (Barnes, Agago, & Coombs, 1998; Johnsrud & Heck, 1994; Johnsrud & Rosser, 2002; Smart, 1990) suggested intention to leave is determined by many factors such as demographics (academic rank, gender and age), perceived quality of work life, state of campus governance, amount of department socialization and the lack of time to stay current in one’s field. Rosser (2004) studied post-secondary faculty members’ intent to leave academia and suggested that “faculty members with higher levels of satisfaction are less likely to leave their institution or their career” (p. 305).

The 2005 HERI Faculty Survey provided the basis of work by Ryan, Healy, and Sullivan (2012) where they found several reasons for intent to leave which included perceived lack of support, perceived lack of fit, stress of raising a family, and dissatisfaction with certain elements of the job. In addition, they reported that faculty in the disciplines of business, engineering, agriculture and medical fields were more likely to leave academia and suggested that greater employment opportunities as well as attractive compensation as possible reasons for this attrition.
Chapter 3

Methods

The purpose of this descriptive study was to learn more about early career pharmacy practice faculty and their educational preparation for their academic career, socialization opportunities for faculty members and their perceptions of work life balance. The results of this study provide valuable information to academic pharmacy administrators who are able to influence policies and procedures regarding recruitment and retention of pharmacy practice faculty members.

Research Questions

1. To what extent are pharmacy practice faculty prepared for their roles and responsibilities in academia?

2. To what extent are pharmacy practice faculty adapted into their roles and responsibilities in academia?

3. To what extent are pharmacy practice faculty socialized to their roles and responsibilities of academia?

4. To what extent are pharmacy practice faculty likely to leave academia?
Methods

In order to gain information regarding faculty’s preparation for academia, academic socialization and their perceptions of work life balance, pharmacy practice faculty were asked to complete an electronic survey. Electronic surveying allows for a cost efficient format for the researcher as well as providing the participant the opportunity to answer at a more convenient time (Dillman, Smyth, & Christian, 2014). In addition, because email is fast becoming the official means of communication in the higher education landscape, researchers are relying more on electronic surveys. As a result, there are numerous benefits favoring the use of electronic surveying such as the ability to quickly reach a large number of people and have immediate results.

Population and Sample

The population is junior pharmacy practice faculty members at U.S. schools and colleges of pharmacy. For the purposes of this study, junior faculty refers to faculty who have not yet been promoted in academic rank since their initial appointment. Traditionally, one is considered a junior faculty member for the first 5-7 years of their academic position. Knowing about this population’s preparation for academia, along with their perceptions of collegiality, teaching, service, and research, as well as work life balance, informs academic pharmacy administrators regarding recruitment and retention of the next generation of faculty members.

The sample for this study is 138 pharmacy practice faculty who began their academic positions at schools or colleges of pharmacy during the 2014-2015 academic year. The American Association of Colleges of Pharmacy (AACP) collects data annually from U.S. schools and colleges pharmacy. The researcher contacted AACP’s Office of Institutional Review
and Effectiveness to obtain a list which included the name, institution, and email address for first
time pharmacy practice faculty members in the 2014-2015 academic year.

**Instrumentation**

A review of literature discovered a 2012 dissertation that created a tool to measure
physician assistant faculty members’ intent to stay in academia (Graham, 2012). After reviewing
the similarities between physician assistant and pharmacy education programs, the researcher
contacted the author and acquired permission to use the instrument in a modified version for
pharmacy education. (K. Graham, personal communication, August 5, 2014).

Changes to the original instrument were made as follows: “pharmacy” or “pharmacist”
replaced the “physician assistant” references as appropriate. Questions not relevant to pharmacy
education were deleted and any questions not relevant to this study were deleted. After edits to
include questions specific to this research, seven demographic questions were added which
included academic rank, tenure status, U.S. geographic region where employed, gender, number
of years as a pharmacist before becoming a faculty member, and primary responsibilities related
to teaching, research and clinical practice. Key strategies were employed in the survey design
such has the use of section headings to ensure that the respondent focused their attention on the
context of the question as determined by the researcher (Dillman et al., 2014). The sections had
questions about their faculty’s preparation for an academic career, teaching, collegiality,
research, scholarship, service and work life balance. There were a total of 47 survey questions
with both quantitative and qualitative responses. Based on survey statistics, most participants
took less than ten minutes to complete the survey.
Validity and Reliability

Validity is the extent to which the instrument measures what it is designed to measure (Patten, 2009). In order to address concerns about instrument validity, the researcher identified five pharmacy practice faculty members to serve as an expert panel (See Appendix A). These faculty members had 15-33 years of academic experience. The researcher contacted each of them to inquire if they would be willing to serve as an expert panelist and be able to do so in the requested time period. After the five faculty members confirmed their ability to serve, they were contacted in October 2015 and provided with the link to the electronic survey generated using Qualtrics software, Version 2015, (Qualtrics, Provo, UT) along with a form to document responses to the following questions:

Is the question written clearly/concisely?

Are the response choices adequate/appropriate?

Is the question relevant to the research questions?

All five panelists agreed the instrument was valid. Based on their responses, the researcher and advisor incorporated suggestions, making minor edits to improve a few questions’ clarity. After changes were incorporated, the researcher sent the survey to two junior pharmacy practice faculty members who were not in the sample to get their feedback. Their suggestions were also taken into consideration with a few final minor wording adjustments being made to the survey.

Reliability refers “to the consistency of the research and the extent to which studies can be replicated” (Wiersma & Jurs, 2009, p. 9). Because this research utilized questionnaire data,
internal consistency should be addressed. Internal consistency refers to the assumption that items measuring the same construct should correlate. Cronbach’s alpha is the most widely used measure of internal consistency (Kimberlin & Winterstein, 2008).

**Data Collection and Presentation**

The 138 identified pharmacy practice faculty members were emailed the survey on February 16, 2016. The email contained the IRB approved information letter (See Appendix B) which explained the project and a link to the survey. Participation was voluntary and there were no monetary or other incentives provided to encourage participation. The survey was conducted February 16-March 18, 2016 using Qualtrics, LLC (Provo, UT, 2016). It was important to the researcher to conduct the research early in the academic term with the hope that faculty recipients would have more available time before end of the term responsibilities increased. Personalized reminders were sent to those who had not completed the survey by February 22, 2016, March 2, 2016 and March 10, 2016. Dillman et al. (2014) suggested that participants are more likely to dismiss completion reminders if they are sent to recipients via bulk email addresses. As a result, the researcher customized the email notifications to address them personally. In an attempt to gain as large a response rate as possible, careful consideration was given to the day of the week and time that survey reminders were sent. Reminders were released so they would arrive in the respondents’ electronic inbox in the early morning hours, during the work week, with the hope that respondents would complete the survey before being involved in other demands during the workday.
The researcher conducted a nonexperimental research study utilizing a survey research method. The process of data collection was more efficiently accomplished using a survey instrument since the participants were geographically scattered throughout the U.S.

Table 3.1 shows which survey questions correspond to the research questions for this study.

Table 3.1

Instrument Categories

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Category</th>
<th>Research Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-7</td>
<td>Demographic</td>
<td></td>
</tr>
<tr>
<td>8-15</td>
<td>Preparation/calling for academia</td>
<td>To what extent are pharmacy practice faculty prepared for their roles and responsibilities in academia?</td>
</tr>
<tr>
<td>16-19, 21, 23</td>
<td>Teaching</td>
<td>To what extent are pharmacy practice faculty adapted to their roles and responsibilities in academia?</td>
</tr>
<tr>
<td>22, 24, 25, 27-33</td>
<td>Collegiality/mentoring</td>
<td>To what extent are pharmacy practice faculty socialized into their roles and responsibilities in academia?</td>
</tr>
<tr>
<td>34-37</td>
<td>Research/service</td>
<td>To what extent are pharmacy practice faculty adapted to their roles and responsibilities of academia?</td>
</tr>
<tr>
<td>20, 26, 38-46</td>
<td>Work life balance/intent to leave</td>
<td>To what extent are pharmacy practice faculty likely to leave academia?</td>
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A complete copy of the survey is available in Appendix C.
Chapter 4

Findings

Based on changes in pharmacy education over the last two decades, faculty recruitment and retention are areas that schools and colleges of pharmacy must continually address. Because post-doctoral training of clinical faculty is more focused on clinical training with less emphasis placed on research and scholarship, junior faculty may struggle to satisfy their academic responsibilities (Nutescu et al., 2014). Faculty socialization opportunities for mentoring and faculty development programs that target junior faculty’s professional development needs are strategies which may improve work life balance and intent to stay in academia.

Purpose of the Study

This work is being conducted primarily due to the lack of data regarding pharmacy practice faculty’s preparation for academic careers. No significant wide scale studies have been published in the last ten years that have addressed junior faculty’s academic socialization opportunities. Due to the vast increase in the number of pharmacy schools and subsequently, the number of pharmacy students, recruiting and retaining quality pharmacy faculty is a key problem that concerns pharmacy deans and department chairs.

Research Questions

1. To what extent are pharmacy practice faculty prepared for their roles and responsibilities in academia?
2. To what extent are pharmacy practice faculty adapted into their roles and responsibilities in academia?

3. To what extent are pharmacy practice faculty socialized to their roles and responsibilities of academia?

4. To what extent are pharmacy practice faculty likely to leave academia?

**Demographic Results**

The survey was sent to 138 pharmacy practice faculty members who were identified by the American Association of Colleges of Pharmacy as first-time faculty members during the 2014-2015 academic year. There were 62 responses, however, upon review, one person completed less than 50% of the survey and one respondent denoted that he or she was no longer employed in academia. Therefore, the sample consisted of 60 usable responses yielding a 43% return rate. As expected, the largest majority (95%) of faculty members who participated in the survey were assistant professors. Table 4.1 outlines survey participants by academic rank.

Table 4.1

*Survey Participants by Academic Rank*

<table>
<thead>
<tr>
<th>Current Academic Rank</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>57</td>
<td>95.00</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>1</td>
<td>1.67</td>
</tr>
<tr>
<td>Instructor</td>
<td>1</td>
<td>1.67</td>
</tr>
<tr>
<td>Other *</td>
<td>1</td>
<td>1.67</td>
</tr>
</tbody>
</table>

(*Respondent answered “Administrator”)

Non-tenure track appointments were reported by almost 77% of the sample. This was slightly more than AACP’s First Time Faculty Statistics report of 70% non-tenure track faculty for all faculty, not just pharmacy practice (American Association of Colleges of Pharmacy, 2015a). Gender differences were noted from the same First Time Faculty Statistics report as
well, with 55% female versus 68% females who participated in this research study (see Tables 4.2 and 4.3).

Table 4.2
Survey Participants by Tenure Status

<table>
<thead>
<tr>
<th>Current Tenure Status</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure Track</td>
<td>14</td>
<td>23.33</td>
</tr>
<tr>
<td>Non-tenure Track</td>
<td>46</td>
<td>76.67</td>
</tr>
</tbody>
</table>

Table 4.3
Survey Participants by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>19</td>
<td>31.67</td>
</tr>
<tr>
<td>Female</td>
<td>41</td>
<td>68.33</td>
</tr>
</tbody>
</table>

There was a consistent distribution of survey participants among five geographic regions of the United States, as noted in Table 4.4. This demonstrates that the study should be generalizable to all regions of the United States.

Table 4.4
Survey Participants by Region Where Employed

<table>
<thead>
<tr>
<th>U.S. Region Where Employed</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain Pacific (AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY,)</td>
<td>13</td>
<td>21.66</td>
</tr>
<tr>
<td>Midwest (IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI)</td>
<td>13</td>
<td>21.66</td>
</tr>
<tr>
<td>Central (AL, AR, KY, LA, MS, OK, TN, TX)</td>
<td>12</td>
<td>20.00</td>
</tr>
<tr>
<td>Southeastern (DE, DC, FL, GA, MD, NC, PR, SC, VA, WV)</td>
<td>12</td>
<td>20.00</td>
</tr>
<tr>
<td>Northeastern (CT, ME, MA, NH, NJ, NY, PA, RI, VT)</td>
<td>10</td>
<td>16.66</td>
</tr>
</tbody>
</table>
Since most faculty have one or two years of residency training before becoming a faculty member, it was not surprising that the mode for years of practice before becoming a faculty member was 2. The mean years of practice was 4.75 which was higher due to one survey participant who had been in a related career for 25 years before becoming a faculty member (see Table 4.5). Clinical practice accounted for 55.9% of the participant’s primary area of responsibility. See Table 4.6. This is consistent with AACP’s First Time Faculty Statistics which reported 59.7% of faculty associating themselves with the Pharmacy Practice discipline (American Association of Colleges of Pharmacy, 2014).

Table 4.5

Survey Participants Years of Practice Before Becoming a Faculty Member

<table>
<thead>
<tr>
<th>Years of Practice Before Becoming a Faculty Member</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.75</td>
</tr>
<tr>
<td>Median</td>
<td>2.50</td>
</tr>
<tr>
<td>Mode</td>
<td>2.00</td>
</tr>
<tr>
<td>Range</td>
<td>1-25</td>
</tr>
</tbody>
</table>

Table 4.6

Survey Participants’ Primary Area of Responsibility

<table>
<thead>
<tr>
<th>Primary Area of Responsibility</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Practice</td>
<td>33</td>
<td>55.93</td>
</tr>
<tr>
<td>Research</td>
<td>3</td>
<td>5.08</td>
</tr>
<tr>
<td>Teaching</td>
<td>18</td>
<td>30.50</td>
</tr>
<tr>
<td>Other **</td>
<td>5</td>
<td>8.47</td>
</tr>
</tbody>
</table>

(** 4 Respondents answered “Administrator” and 1 did not answer)

Research Question Data

Research Question 1: To what extent are pharmacy practice faculty prepared for their roles and responsibilities in academia?
There were eight survey questions related to faculty’s preparation for academia. The primary purpose of this research question was to gain insight into experiences prior to becoming a faculty member to address the question of how prepared they were for an academic position. Forty-five percent (45%) agreed or strongly agreed that when in pharmacy school, they knew they wanted to become a faculty member (see Table 4.7). Interestingly only 38% faculty members denoted they had academic rotations as a student or resident (see Table 4.8).

Table 4.7

Preparation for Academia

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>1. When I was in pharmacy school/graduate school, I knew that I wanted to become a faculty member.</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>2. Before becoming a pharmacy faculty member, I was encouraged to consider a career in academia.</td>
<td>39</td>
<td>65</td>
</tr>
<tr>
<td>3. When I first became a faculty member, I thought most of my time would be spent teaching.</td>
<td>23</td>
<td>38</td>
</tr>
<tr>
<td>4. I had formal training in teaching (such as courses in education or a teaching fellowship) before becoming a faculty member.</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>
Table 4.8

*Academic Rotations*

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>5. Did you have any academic rotations as a student or a resident?</td>
<td>23</td>
<td>38</td>
</tr>
</tbody>
</table>

When asked whether post graduate training inspired them to consider an academic career, 65% agreed or strongly agreed. Only 7% respondents agreed or strongly agreed to having any formal training in teaching before becoming a faculty member. However, 92% of respondents indicated they had some or much experience precepting students before becoming a faculty member as shown in Table 4.9. This is not surprising as precepting students is typically a requirement of residents. Precepting students often focuses more on the provision of clinical training and development of professional skills. In many cases, preceptors model skills and provide a synthesis of didactic information so that students are able to refine their critical thinking skills to make optimal patient care decisions.
Table 4.9

**Experience Precepting**

<table>
<thead>
<tr>
<th>Question</th>
<th>Some or Much</th>
<th>Little or None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>6. I had experience precepting students before becoming a faculty member.</td>
<td>55</td>
<td>92</td>
</tr>
</tbody>
</table>

It appears that post graduate training had a positive influence on study participants in inspiring them to consider an academic career, with 65% agreeing or strongly agreeing. Mentors and residency program directors were the most frequently cited to encourage academia as a career option (see Tables 4.10 and 4.11).

Table 4.10

**Post Graduate Training**

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
<th>I Already Knew I Wanted a Career in Academia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>7. Post graduate training (residencies/fellowships) inspired me to consider an academic career.</td>
<td>39</td>
<td>65</td>
<td>12</td>
</tr>
</tbody>
</table>
Table 4.11

Encouraged to Consider Academia

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Who encouraged you to consider a career in academia?</td>
<td></td>
</tr>
<tr>
<td>Faculty members</td>
<td>18</td>
</tr>
<tr>
<td>Mentors</td>
<td>21</td>
</tr>
<tr>
<td>Preceptors</td>
<td>5</td>
</tr>
<tr>
<td>Residency/fellowship directors</td>
<td>21</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
</tbody>
</table>

Research Question 2: To what extent have pharmacy practice faculty adjusted to their roles and responsibilities of academia?

There were 10 survey questions that applied to the second research question. Research Question 2 aimed to identify how adapted or adjusted new faculty were to their roles in academia. The categories of questions related to teaching, expectations for promotion and tenure, as well as one’s identity as a faculty member. Seventy-three percent (73%) of respondents agreed or strongly agreed that they found teaching more challenging than being a full time clinical pharmacist. In addition, 54% agreed or strongly agreed that there had been times in the classroom in the last year that they felt they lacked enough experience to be an effective faculty member (see Table 4.12).

Table 4.12

Faculty Identity and Teaching

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>1. My primary identity is that of a faculty member rather than a clinical pharmacist.</td>
<td>38</td>
<td>63</td>
</tr>
</tbody>
</table>
2. I find teaching more challenging than being a full time clinical pharmacist.  

<table>
<thead>
<tr>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>44</td>
<td>73</td>
</tr>
</tbody>
</table>

3. I prefer to focus on teaching rather than other functions of academia.  

<table>
<thead>
<tr>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>37</td>
<td>62</td>
</tr>
</tbody>
</table>

4. I consistently receive positive feedback on my teaching.  

<table>
<thead>
<tr>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>53</td>
<td>88</td>
</tr>
</tbody>
</table>

5. There have been times in the classroom during the past year when I felt I did not have enough experience to be an effective faculty member.  

<table>
<thead>
<tr>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>32</td>
<td>54</td>
</tr>
</tbody>
</table>

6. I appreciate the opportunity to personally interact with students.  

<table>
<thead>
<tr>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

Relating to promotion, 73% agreed or strongly agreed that the expectations for promotion and tenure, if applicable, were clear to them and 71% indicated that they agreed or strongly agreed that they had been successful so far meeting their school or college’s requirements for research/scholarship (see Table 4.13).

Table 4.13

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>7. The expectations for my promotion (and tenure, if applicable) are clear to me.</td>
<td>44</td>
<td>73</td>
</tr>
</tbody>
</table>
8. I have been successful so far meeting my school/college’s requirements for research/scholarship. | 42 | 71 | 17 | 29 |

9. Service on school/university committees is a time consuming part of my job as a faculty member. | 40 | 67 | 20 | 33 |

10. I enjoy the non-teaching tasks that are part of my job as a faculty member. | 46 | 77 | 12 | 23 |

Research Question 3: To what extent are pharmacy practice faculty socialized into their roles and responsibilities of academia?

There were 10 survey questions that addressed this research question. The researcher was interested in learning about collegiality and socialization occurring for this group of junior faculty members. There were 93% of respondents who agreed or strongly agreed that they had good working relationships with fellow faculty members. Related to teaching support, 77% agreed or strongly agreed that they received adequate support for teaching from their colleagues. Fewer (53%) denoted receiving adequate support from the school or college to produce scholarly work (see Table 4.14).
### Table 4.14

**Collegiality**

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>1. I have good working relationships with my fellow faculty members.</td>
<td>56</td>
<td>93</td>
</tr>
<tr>
<td>2. I feel that I am not only a part of the pharmacy program but also a member of a wider academic community at my university.</td>
<td>36</td>
<td>60</td>
</tr>
<tr>
<td>3. I receive adequate support for teaching from colleagues at my school/college.</td>
<td>46</td>
<td>77</td>
</tr>
<tr>
<td>4. My department chair/head supports me as a valued colleague.</td>
<td>50</td>
<td>83</td>
</tr>
<tr>
<td>5. I receive adequate support from my school/college to produce scholarly work.</td>
<td>32</td>
<td>53</td>
</tr>
<tr>
<td>6. I understand the culture and campus climate at my university.</td>
<td>48</td>
<td>80</td>
</tr>
</tbody>
</table>

There were 25 respondents who listed one or more types of support they received to assist them in the production of scholarly work. These data are shown in Table 4.15.
Table 4.15

Types of Support Provided to Produce Scholarly Work

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Please describe the support you received to produce scholarly work.</td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td>16</td>
</tr>
<tr>
<td>Faculty development, workshop, conferences</td>
<td>11</td>
</tr>
<tr>
<td>Financial</td>
<td>7</td>
</tr>
<tr>
<td>Mentoring</td>
<td>6</td>
</tr>
<tr>
<td>Protected time</td>
<td>10</td>
</tr>
<tr>
<td>Statistical/technology support</td>
<td>8</td>
</tr>
</tbody>
</table>

Only slightly more than half, 53%, stated that they had a mentor who helped them to understand the institutional culture of their university. Almost two-thirds (65%) of respondents indicated that they had a mentor within their school or college who helped them understand their role as a faculty member (see Table 4.16).

Table 4.16

Mentoring

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>8. I have a mentor who helps me understand the institutional culture of my university.</td>
<td>32</td>
<td>53</td>
</tr>
<tr>
<td>9. I have a mentor within my school/college who helps me understand my faculty role.</td>
<td>39</td>
<td>65</td>
</tr>
<tr>
<td>10. I have a mentor outside my school/college who helps me understand my faculty role.</td>
<td>22</td>
<td>37</td>
</tr>
</tbody>
</table>
Research Question 4: To what extent are pharmacy practice faculty likely to leave academia?

There were 11 survey questions which were related to workload, work life balance and intent to leave academia. Sixty-three percent (63%) agreed or strongly agreed that before their faculty position, they did not have a true sense of what the responsibilities of a faculty member were. While it is encouraging that 82% of faculty indicated that they had fellow faculty member who motivated them to stay in academia, 53% agreed or strongly agreed that they were overwhelmed by their workload and 42% agreed or strongly agreed that their faculty workload had made them seriously consider a non-academic pharmacy position (see Table 4.17).

Table 4.17
Workload and Work Life balance

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree/Strongly Agree</th>
<th>Disagree/Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>1. My teaching workload has been impacted by factors outside my control.</td>
<td>48</td>
<td>80</td>
</tr>
<tr>
<td>2. The relationships I have with fellow faculty members motivate me to stay in academia.</td>
<td>49</td>
<td>82</td>
</tr>
<tr>
<td>3. I appreciate the variety of my work as a faculty member.</td>
<td>57</td>
<td>95</td>
</tr>
<tr>
<td>4. I have flexibility in determining my work schedule.</td>
<td>55</td>
<td>92</td>
</tr>
<tr>
<td>5. My faculty workload has made me seriously consider a non-academic pharmacy position.</td>
<td>25</td>
<td>42</td>
</tr>
</tbody>
</table>
6. I am overwhelmed by my workload.

7. This career allows me to achieve balance between my work and my personal life.

8. Before this position, I did not have a true sense of what the responsibilities of a faculty member were.

When asked about the time spent per week on faculty related activities, respondents most often reported 10 hours and a mean of 24 hours per week. While that may not seem like a large amount of time per week, it should be noted that clinical faculty also have responsibilities at the practice site and for many, those clinical expectations must continue even when the faculty member has academic responsibilities. Table 4.18 contains these data.

Table 4.18

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Average number of hours spent per week on faculty related activities.</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>24</td>
</tr>
<tr>
<td>Median</td>
<td>20</td>
</tr>
<tr>
<td>Mode</td>
<td>10</td>
</tr>
<tr>
<td>Range</td>
<td>2-70</td>
</tr>
</tbody>
</table>

When asked how likely they were to leave academia in the next five years, 25% reported they were likely or very likely to leave (see Table 4.19). Workload was the most frequently cited reason to consider leaving academia, as noted in Table 4.20.
Table 4.19

Likelihood of Leaving Academia

<table>
<thead>
<tr>
<th>Question</th>
<th>Likely/Very Likely</th>
<th>Unlikely/Very Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Percentage</td>
</tr>
<tr>
<td>10. How likely are you to leave academia in the next five years?</td>
<td>15</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 4.20

Reasons for Leaving Academia

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Reasons you would consider leaving academia.</td>
<td></td>
</tr>
<tr>
<td>Workload</td>
<td>6</td>
</tr>
<tr>
<td>Desire clinical practice</td>
<td>4</td>
</tr>
<tr>
<td>Work environment (morale, leadership, attitude)</td>
<td>4</td>
</tr>
<tr>
<td>Dislike of research or teaching</td>
<td>3</td>
</tr>
<tr>
<td>Relocation (no faculty position available)</td>
<td>1</td>
</tr>
</tbody>
</table>

Reliability

A reliability analysis of 29 questions (α=.60) was conducted on the respondent’s perception of their preparation for academia, acclimation and socialization into their roles and responsibilities and to what extent are they likely to leave academia within five years.

Calculating the value by research question yielded lower results, in part by the small number of survey items per research question and number of survey responses. However, the value for research question 3, the extent to which pharmacy practice faculty are socialized into their roles and responsibilities of academia yielded a good value of (α=.83).
Chapter 5
Conclusions and Recommendations

Introduction

This research was conducted to gain insights to pharmacy practice faculty’s preparation for a career in academia, job socialization after being hired into an academic position and their intent to leave academia. Because of the increasing number of schools and colleges of pharmacy and subsequent number of pharmacy students, the work demands on pharmacy faculty continues to increase. Recruitment and retention of pharmacy faculty is a constant concern facing the academy.

Research Questions

1. To what extent are pharmacy practice faculty prepared for their roles and responsibilities in academia?

2. To what extent are pharmacy practice faculty adapted into their roles and responsibilities in academia?

3. To what extent are pharmacy practice faculty socialized to their roles and responsibilities of academia?

4. To what extent are pharmacy practice faculty likely to leave academia?
Conclusions

Research Question One

The first research question sought to gain insights from junior faculty about their preparation for academia. The most striking finding regarded the question “I had formal training in teaching (such as courses in education or a teaching fellowship) before becoming a faculty member” to which only 7% of the sample agreed or strongly agreed. This strongly supports the need for more opportunities for future faculty members to have training in pedagogy. Faculty with more expertise in this area at the onset of their academic appointments could potentially bypass some of the entry-level academic socialization obstacles and have quicker success becoming more acclimated to their roles and responsibilities in the area of teaching. This supports the point that Strang and Baia (2016) discussed regarding the increasing need of accountability for teaching effectiveness including understanding of learning theory, instructional design and educational assessment. These data also support the findings from Sheaffer et al. (2008) regarding the importance of exposure to didactic related activities when students or residents were considering an academic pharmacy position. Only 38% of the sample reported having any academic rotations as a student or resident.

Interestingly, 45% of the sample responded that while in pharmacy/graduate school they knew they wanted to become a faculty member. When asked whether post graduate training inspired them to consider an academic career, 65% of survey respondents agreed or strongly agreed. Residency directors, mentors and faculty members were most cited as those who encouraged faculty members to consider an academic career. According to the American Society of Health-System Pharmacists (ASHP), a national professional pharmacy organization
sponsoring the leading career placement service for pharmacists, there were 4330 residency positions for Post Graduate Year 1 (PGY1) and Post Graduate Year 2 (PGY2) candidates offered by 2094 U.S. residency programs during the 2016 match period (American Society of Health-System Pharmacists, 2016). Filling the 3332 PGY1 positions represents approximately 23% of the 2016 pharmacy graduates. Positions are available in a variety of practice settings such as community pharmacy, health system administration, critical care, pediatrics and oncology, yet there are no purely academic residencies offered. Residents may get a brief exposure to academic pharmacy if their program is connected with a school or college of pharmacy offering academic rotations. These experiences are typically short in duration, lasting from a few days to a few weeks at best.

*Research Question Two*

The second research question aimed to discover how much junior faculty members had adapted or became acclimated to their faculty roles and responsibilities, particularly in the areas of teaching, research and scholarship. The results from the survey which addressed this research question report that 88% of faculty reported they consistently receive positive feedback on teaching. Seventy-three percent (73%) of faculty reported that guidelines for promotion and tenure, if applicable, were clear to them. These results are slightly greater than the 67% reported in the HERI 2013-2014 Faculty Survey which assessed perceptions of faculty across all academic disciplines. A large percentage (77%) also reported enjoying the non-teaching tasks that were part of their job as a faculty member. Sixty-three percent (63%) of respondents indicated their primary identity was that of a faculty member rather than clinical pharmacist.
This research uncovered other important findings; while 88% indicated they consistently received positive feedback on their teaching, over half (54%) of the sample agreed or strongly agreed with the question “There have been times in the classroom during the last year that I felt I did not have enough experience to be an effective faculty member.” Possible reasons for this include a lack of exposure to classroom teaching before and during the first year of their faculty appointment and/or a lack of training in pedagogy supporting the findings of Benassi and Buskist (2012), Raehl (2002) and Wankat (2002).

Research Question Three

The third research question was designed to secure an understanding of how socialized junior faculty members are to their roles and responsibilities of academia. The importance of a new faculty member adjusting to academic life should not be minimized. New faculty may struggle with unclear expectations (Boice, 1992), may feel isolated from colleagues (Boice, 1992; Fink, 1984) and may suffer from a lack of teaching skills (Boice, 1992). These issues along with the personal stress that exists when one accepts a new position may inhibit the new faculty member from a smooth transition into an academic career. Therefore, it is important for schools and colleges to provide socialization opportunities that will help new faculty become acclimated to the roles and responsibilities of their new positions. Faculty socialization opportunities studied in this research included collegiality, mentoring and faculty development and support. Opportunities for professional development of junior faculty members are paramount in helping them to become enculturated into the school or college, as well as becoming successful in their faculty roles and responsibilities as suggested by Rice et al., (2000), Sorcinelli (2000) and Taylor and Berry (2008). An overwhelming majority (93%) reported having good working relationships with fellow faculty members. These findings are much
higher than the HERI 2013-2014 Faculty Survey results which found that 78% of assistant professors were very satisfied or satisfied with professional relationships with other faculty (Eagan et al., 2014). Reynolds (1992), Austin (2002) and Austin and Wulff (2004) pointed out the importance of collegial relationships as a means of helping ensure junior faculty members were successful in their faculty positions. In addition, a majority of faculty reported having a mentor who helps them understand their faculty role.

Only slightly more than half (53%) of respondents agreed or strongly agreed to receiving adequate support from their school/college to produce scholarly work. It was surprising to learn that Financial Support was ranked in the top three types of reported support since, in general, pharmacy practice faculty do not receive large start up packages like those associated with research faculty. The amount of financial support was not captured in this research. Although this research was specifically related to support for scholarly work, the 2013-2014 HERI Faculty Survey results yielded slightly higher results (62%) for assistant professors when asked if there was adequate support for faculty development, of which the production of scholarly work is assumedly a part of (Eagan et al., 2014).

**Research Question Four**

The final research question is perhaps the most important for long term implications. Intent to leave academia presents a host of issues for administrators such as the immediate concerns of replacing instructors for courses taught, likely increased workload of those faculty who remain, and potential difficulty attracting faculty candidates if the school has frequent turnover. Add in the strain on time, human and financial resources that the recruiting process
commands and one can see that faculty retention is a very important issue for academic pharmacy administrators.

Vroom’s (1964) expectancy theory suggests that behavior results from conscious choices based on the information one has. Motivation becomes a factor in the process which in turn affects performance. Data from this research showed that 63% of respondents did not have a true sense of faculty member responsibilities before assuming the position. This point speaks to the need for the academy to promote a better understanding of faculty positions, not only from a recruitment perspective, but also to better help those who plan to enter the academy to do so with more realistic expectations of faculty roles and responsibilities. Having a match between job expectations and the actual job functions is critical.

Appreciating the variety of work and having flexibility in determining work schedules were ranked high for survey participants which aligns with the work of Draugalis et al. (2006) and Sheaffer et al. (2008). In addition, respondents also agreed or strongly agreed that relationships with fellow faculty members were motivating factors to stay in academia. Collegiality as noted by Conklin & Desselle (2007a), (2007c), and Latif & Grillo (2001) and Peirce et al. (2012) is another important factor that schools and colleges should promote to help increase faculty retention. This research shows favorable data with regard to pharmacy collegiality at the time of this research.

Regarding work life balance, 58% of respondents reported their academic career allowed them to achieve balance between work and personal life. This represents a much higher percentage compared to the 26% of assistant professors who reported to a great extent achieving healthy balance between personal and professional life in the HERI study (Eagan et al., 2014).
Data from the survey showed that 80% of respondents reported that teaching workload was impacted by factors outside their control. While it cannot be assumed that the impact was only negative, the fact that faculty who in general appreciate autonomy and flexibility have little control over their workload can be a cause for concern. Of those, 42% stated that workload has made them seriously consider a non-academic pharmacy position. Several authors (O. Carter et al., 2003; Olsen, 1993; Shin, Dula, Mehta, Rodis, & Pruchnicki, 2015; Wilborn et al., 2013) noted workload as a factor of concern to faculty.

When asked about the likelihood of leaving academia in the next five years, 25% reported they were likely or very likely to leave with workload being cited most often as a reason to consider leaving academia. This is more than the 20.7% reported by Conklin and Desselle (2007b), although their research consisted of faculty in all three disciplines of pharmacy education, not exclusively pharmacy practice. Excessive workload and desire for a change were tied for the top two reasons faculty considered leaving.

While the decision to leave a job may be a multi-faceted decision, based on the survey findings of this research there are likely several themes which could be reasons depending on the individual. An overview of factors contributing to intent to leave is seen in Table 5.1 below.

Table 5.1

<table>
<thead>
<tr>
<th>Factors Contributing to Intent to Leave</th>
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<tbody>
<tr>
<td>93% Did not have formal training in teaching before becoming a faculty member.</td>
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<tr>
<td>63% Did not have a true sense of faculty responsibilities before taking position.</td>
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<tr>
<td>62% Did not have academic rotations as a student or resident.</td>
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<tr>
<td>54% Felt inexperienced in the classroom during the past year.</td>
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<tr>
<td>47% Felt overwhelmed by his or her faculty workload.</td>
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<tr>
<td>47% Did not feel adequately supported to produce scholarly work.</td>
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</table>
**Recommendations for Future Research**

After completing this research, there were areas identified which could be enhanced with future research:

1. Tailor survey questions to more closely align with the HERI Faculty Survey, such as specifically asking about overall job satisfaction.
2. Duplicate this research project with junior pharmacy practice faculty who have been in their academic appointment for four to five years.
3. Duplicate this research project with pharmacy practice faculty who have been promoted (and tenured if applicable) for a comparative study of the research provided here for junior faculty members.

In addition, future researchers could enhance the survey questions to improve reliability. It would also be prudent to have the survey assessed by someone with expertise in survey methodology to review questionnaire construction and survey quality.

**Recommendations to the Academy**

Based on the research of this project, the following are recommendations which could potentially impact the future of pharmacy education by providing opportunities to enhance the current faculty recruitment and retention processes that exist today. Figure 2 illustrates six areas with important themes for schools and colleges to consider as part of their recruitment and retention plans. The academy should continue to take the necessary steps to market academia as a profession to students who possess the desire to teach and strive to hire those with exposure to academia. The academy should offer competitive salaries as well as provide opportunities for junior faculty members to become acclimated to academic life by offering various faculty
socialization opportunities. Providing faculty development to junior faculty members during their early career can lay the foundation for them to be successful educators as well as mentors for the next generation of faculty members.

Figure 2: Recommendations to the Academy
Preparation for Academia

The development of an additional type of Post Graduate Year 2 (PGY2) residency program type with a purely academic focus could provide much needed exposure to and experience in academia so that program graduates would be more prepared for roles and responsibilities of faculty members. The advantages of an academic residency program include the provision of more in depth pedagogical training for the resident and teaching support for the school or college provided by the resident.

As Latif and Grillo (2001) suggested, during the faculty candidate interview process, “pharmacy schools can strive to find candidates who, not only have the ability, experience and motivation to perform, but also have a value system that is compatible with the institution” (p. 142). To help ensure this, the expectations of teaching, research and service should clearly be stated during the interview process so that a candidate can fully understand the expectations. Having detailed, realistic job descriptions are one way to achieve this. An important recommendation is for the development of a concentrated academic residency which can provide in depth opportunities for potential faculty members to focus on pedagogy as well as gain experience in faculty responsibilities in the areas of teaching, research and service. For the academic institution, this arrangement could supply personnel who could function in a role similar to that of graduate teaching assistants in Ph.D. programs, a strategy not widely utilized in pharmacy education.

A policy statement was approved by the 2016 American Association of Colleges of Pharmacy’s House of Delegates promoting innovation and excellence in graduate training to help prepare graduate students and post-doctoral trainees for academic careers (Johnson et al., 2016).
Since policy statements represent the official position of the Association they are presumably also representative majority view of the members of the House of Delegates. As such, it can be inferred that policy statement items likely are addressed in some fashion at the school or college level. Having items of importance in regard to preparation for academic and continued success of junior faculty is important for the future of pharmacy education.

The academy should consider partnering with universities to offer and be supportive of pharmacy faculty seeking further training such as a Master of Education in Health Professions which focuses on training clinicians to teach in health related fields. Medical practice has been supporting programs such as those at the University of Chicago and Johns Hopkins University to provide pedagogical training to help clinical faculty be better instructors. Programs such as these can provide a foundation in areas such as instruction, curriculum development and design, assessment, and program evaluation (Johns Hopkins University, 2017). Not only could this help faculty be more prepared for their academic responsibilities, it could also assist in elevating the overall educational mission as suggested by (Tekian & Harris, 2012).

**Faculty Socialization**

If AACP can continue to financially sustain the Teachers Seminar at their Annual Meeting, changes could be implemented to have educational tracks which can be geared toward needs of new and junior faculty members. Additionally, resources may need to be allocated to help improve new and junior faculty attendance. Having incentives in place to encourage new faculty participation and provide programming tracks based on the varied faculty development needs of faculty is a suggestion.
Advocating for the continued expanding roles of scholarship beyond the traditional roles is needed to help clinical faculty balance their academic responsibilities. Doing so could help faculty they have a more realistic opportunity to be successful with scholarly activities which would likely reduce some of the work life stress that often plagues junior faculty members (Nutescu et al., 2014). Another recommendation is for the continued enhancement of faculty development programming that can help meet professional growth needs of junior faculty. Junior faculty members who are learning to perform their academic duties by trial and error could benefit from academic development programs on time management, research project planning and management, improving instructional skills as well as career development programming (Guglielmo et al., 2011; Seldin, 2006; Taylor & Berry, 2008).

**Work Life Balance**

Committing resources to maintaining a workplace where faculty can prosper without overwhelming concerns regarding workload should be a priority. Because pharmacy practice faculty may have a sense of stress with regard to the necessary continuance of patient care in addition to carrying out their academic responsibilities, perhaps more creative ways to job share could be employed. For example, having one or more faculty members providing clinical services using a team approach could provide more constant patient care with the responsibility spread between one or more faculty members. This could allow for more off-service time for faculty to maintain teaching, service and research responsibilities.

**Summary**

Due to a change in the entry-level professional pharmacy degree in 2000, the substantial increase in both the number of schools of pharmacy and the number of students enrolled in
pharmacy education, recruitment and retention of sufficient numbers of pharmacy practice faculty members has become a critical issue for academic pharmacy administrators. This research provides an overview of junior pharmacy practice faculty members’ perceptions of preparation for academia, faculty roles and responsibilities for teaching, research and service, collegiality, work life balance and intent to leave academia.

Results of showed that although 45% of participants reported knowing they wanted to become a faculty member, 63% responded that they did not have a true sense of the responsibilities before their appointment. Only 7% of participants had previous experience teaching. This research also reported a majority of junior faculty knew the expectations for promotion and tenure if applicable and were successful to date. Collegiality was very positively reported along with support from one’s department chair, variety and flexibility of work. However, workload was most commonly cited as a reason to consider leaving academia with 25% reporting to likely or very likely leave academia within five years.

Recommendations were provided to help academic pharmacy administrators make improvements which could minimize anxiety and stress felt by new academics. By addressing the areas of concern identified in this study, academic pharmacy administrators could help improve junior faculty members’ work life balance and decrease their intent to leave the academy.
References


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Zaleznik, A., Christensen, C. R., & Roethlisberger, F. J. (1958). *The motivation, productivity and satisfaction of workers.* Boston, MA: Harvard University, Division of Research, Graduate School of Business Administration.

Appendix A: Expert Panel
Rondall E. Allen, B.S., Pharm.D.
Dean and Professor
School of Pharmacy and Health Professions
University of Maryland Eastern Shore
Somerset Hall, Suite 122
Princess Anne, MD 21853  reallen@umes.edu  Office phone 410-651-8350

Debbie C. Byrd, PharmD, MBA, BCPS
Dean and Professor
Bill Gatton College of Pharmacy
PO Box 70414
Johnson City, TN 37614-1704 BYRDDC1@mail.etsu.edu  Office phone 423-439-2068

Craig Cox, PharmD, FCCP, BCPS
Associate Professor of Pharmacy Practice
Vice Chair of Experiential Programs
Texas Tech University
3601 4th St Stop 8162
Lubbock TX 79430-8162  Craig.cox@ttuhsc.edu  Office phone 806-743-4200 ext. 267

Lori Duke, Pharm.D.
Professor and Assistant Dean for Experience Programs
UGA College of Pharmacy
RC Wilson Building, Room 152
250 West Green Street
Athens, GA  30602-2351  LJDuke@uga.edu  Office phone 706-542-5315

Philip M. Hritcko, Pharm.D., CACP, RPh.  (Note- although contacted, Dr. Hritecko was unable to participate)
Assistant Dean for Experiential Education &Associate Clinical Professor
University of Connecticut School of Pharmacy
69 North Eagleville Road Unit 3092
Storrs, Connecticut 06269-3092  Philip.Hritcko@uconn.edu  Office phone 860-486-1592
Paul W. Jungnickel, Ph.D., R.Ph.

Professor and Associate Dean for Academic and Student Affairs
Auburn University Harrison School of Pharmacy
National President, Rho Chi Pharmacy Honor Society
2316 Walker Building
Auburn, AL 36849-5501 jungnpw@auburn.edu Office phone 334-844-8348
Appendix B: IRB Approval Form and Participant Letter
1. **PROJECT PERSONNEL & TRAINING**

**PRINCIPAL INVESTIGATOR (PI):**

- **Name:** April Staton  
- **Title:** Graduate Student  
- **Dept./School:**  
- **EFLT/Education:**  

- **Address:** 1202 E Walker Building  
- **Phone:** 334-844-4195  
- **AU Email:** statoag@auburn.edu  
- **Dept. Head:** Sheri Downer

**FACULTY ADVISOR (if applicable):**

- **Name:** James Groccia  
- **Title:** Professor  
- **Dept./School:**  
- **EFLT/Education:**  

- **Address:** 4084 Haley Center, Auburn University, AL 36849  
- **Phone:** 334-844-5038  
- **AU Email:** groccja@auburn.edu

**KEY PERSONNEL:** List Key Personnel (other than PI and FA). Additional personnel may be listed in an attachment.

<table>
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<th>Name</th>
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<th>Responsibilities</th>
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**KEY PERSONNEL TRAINING:** Have all Key Personnel completed CITI Human Research Training (including elective modules related to this research) within the last 3 years?  
- [ ] YES  
- [ ] NO

**TRAINING CERTIFICATES:** Please attach CITI completion certificates for all Key Personnel.

2. **PROJECT INFORMATION**

- **Title:** Pharmacy Faculty’s Preparation for an Academic Career

- **Source of Funding:**  
  - [ ] Investigator  
  - [ ] Internal  
  - [ ] External

- **List External Agency & Grant Number:** n/a

- **List any contractors, sub-contractors, or other entities associate with this project:** n/a

- **List any other IRBs associated with this project (including those involved with reviewing, deferring, or determinations):** n/a
3. **PROJECT SUMMARY**
   
a. Does the research involve any special populations?
   
   [ ] YES [ √ ] NO
   Minors (under age 19)

   [ ] YES [ √ ] NO
   Pregnant women, fetuses, or any products of conception

   [ ] YES [ √ ] NO
   Prisoners or Ward

   [ ] YES [ √ ] NO
   Individuals with compromised autonomy and/or decisional capacity

b. Does the research pose more than minimal risk to participants?  [ ] YES [ √ ] NO

   Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. 42 CFR 46.102(i)

c. Does the study involve any of the following?
   
   [ ] YES [ √ ] NO
   Procedures subject to FDA Regulation Ex. Drugs, biological products, medical devices, etc.

   [ ] YES [ √ ] NO
   Use of school records of identifiable students or information from instructors about specific students

   [ ] YES [ √ ] NO
   Protected health or medical information when there is a direct or indirect link that could identify the participant

   [ ] YES [ √ ] NO
   Collection of sensitive aspects of the participant’s own behavior, such as illegal conduct, drug use, sexual behavior or use of alcohol

   [ ] YES [ √ ] NO
   Deception of participants

   *If you checked “YES” to any response in Question #3 STOP. It is likely that your study does not meet the “EXEMPT” requirements. Please complete a PROTOCOL FORM for Expedited or Full Board Review.*

   *You may contact IRB Administration for more information. (Phone: 334-844-5966 or Email: IRBAdmin@auburn.edu)*

4. **PROJECT DESCRIPTION**
   
a. **Subject Population** (Describe, include age, special population characteristics, etc.)

   Faculty who began an academic career in the 2013-2014 academic year in the area of Pharmacy Practice in a school or college of Pharmacy in the United States. There is no certain age or gender requirement to be included in this study. Participants would completed at least one graduate degree (PharmD and/or PhD) to be eligible to be a faculty member.

b. **Describe, step by step, all procedures and methods that will be used to consent participants.**

   [ ] N/A (Existing data will be used)

   An information letter will proceed an electronic survey to subjects. It will provide study information and notify the subject that if he or she elects to take the survey, they are consenting to study participation.
c. Brief summary of project. (Include the research question(s) and a brief description of the methodology, including recruitment and how data will be collected and protected.)

The participants' contact information will be secured from the American Association of Colleges of Pharmacy (AACP). Pharmacy accreditation standards require schools and colleges to provide annual reports (published by AACP) with a variety of information including new faculty information. I spoke with the membership coordinator at the AACP annual meeting to determine if any/what type of information would be available to me as a member of the organization. The coordinator can provide an excel spreadsheet with faculty name, email and his/her school or college of pharmacy.

The researcher will survey faculty members who took an academic position during the 2013-2014 academic year. Attached is a pdf version of the Qualtrics survey. Survey responses will be secure as Qualtrics is password protected.

d. Waivers. Check any waivers that apply and describe how the project meets the criteria for the waiver.

- Waiver of Consent (Including existing de-identified data)
- Waiver of Documentation of Consent (Use of Information Letter)
- Waiver of Parental Permission (for college students)

See attached.

e. Attachments. Please attach Informed Consents, Information Letters, data collection instrument(s), advertisements/recruiting materials, or permission letters/site authorizations as appropriate.

<table>
<thead>
<tr>
<th>Signature of Investigator</th>
<th>April G. Staton</th>
<th>Date</th>
<th>1/11/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature of Faculty Advisor</td>
<td>James E. Groccia</td>
<td>Date</td>
<td>1/14/16</td>
</tr>
<tr>
<td>Signature of Department Head</td>
<td>Sherida Downer</td>
<td>Date</td>
<td>1/14/2016</td>
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</table>
INFORMATION LETTER
for a Research Study entitled
"Pharmacy Faculty's Preparation for an Academic Career"

You are invited to participate in a research study to investigate pharmacy faculty's preparation for an academic career. The study is being conducted by April Staton, a graduate student in the College of Education under the direction of Dr. James Grocchia, a professor in the Auburn University Department of Educational Foundations, Leadership and Technology. You are invited to participate because you are a pharmacy practice faculty member and are age 19 or older.

If you decide to participate in this research study, you will be asked to answer questions in an anonymous Qualtrics survey. Your total time commitment will be approximately 10-15 minutes.

There are no foreseeable risks associated with participating in this study. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any time by closing your browser window. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate will not jeopardize your future relations with the Department of EFLT and Auburn University.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by keeping survey results de-identified and password protected. Information collected through your participation may be used to fulfill an educational requirement, be published in a professional journal, and/or presented at a professional meeting.

If you have questions about this study please contact April Staton via email at april@auburn.edu. If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334)-844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

[Signature]
Investigator's signature

[Date]

April G. Staton
Printed Name
Appendix C: Survey Questions
1 What is your current academic rank?

- Professor (1)
- Associate Professor (2)
- Assistant Professor (3)
- Instructor (4)
- Lecturer (5)
- Other, please list below (6) ____________________

2 What is your current tenure status?

- Tenure Track (1)
- Non-tenure Track (2)
- Already Tenured (3)

3 In which region of the US do you work?

- New England (CT, ME, MA, NH, RI, VT) (1)
- Middle Atlantic (NY, NJ, PA) (2)
- South Atlantic (DE, DC, FL, GA, MD, NC, PR, SC, VA, WV) (3)
- East North Central (IN, IL, MI, OH, WI) (4)
- East South Central (AL, KY, MS, TN) (5)
- West North Central (IA, KS, MN, MO, NE, ND, SD) (6)
- West South Central (AR, LA, OK, TX) (9)
- Mountain (AZ, CO, ID, NM, MT, UT, NV, WY) (7)
- Pacific (AK, CA, HI, OR, WA) (8)

4 How many years did you practice pharmacy before assuming your role as a faculty member? Please include your time as a resident or fellow as well.

5 In your faculty role what is your primary (greatest percentage) responsibility?

- Teaching (1)
- Research (2)
- Clinical Practice (3)
- Other, please list below (4) ____________________
6 What PERCENTAGE of your budgeted faculty position is devoted to a clinical practice? Please DO NOT include any volunteer or other paid jobs you may have.

7 Please select your gender.
- Male (1)
- Female (2)

8 When I was in pharmacy school/graduate school, I knew that I wanted to become a faculty member.
- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

9 Did you have any academic rotations as a student or a resident?
- Yes (1)
- No (2)

10 Before becoming a pharmacy faculty member, I was encouraged to consider a career in academia.
- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

11 Post graduate training (residencies/fellowships) inspired me to consider an academic career.
- Strongly Agree (34)
- Agree (35)
- Disagree (36)
- Strongly Disagree (37)
- I already knew I wanted a career in academia (38)
The following question was displayed if the respondent answered “Agree” or “Strongly Agree” to question 10.

12 Who encouraged you to consider a career in academia? Please provide their position (no names please) such as residency director, mentor, another faculty member, etc. Please list all that apply.

13 I had formal training in teaching (such as courses in education or a teaching fellowship) before becoming a faculty member. Please DO NOT consider a teaching certificate from your residency.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

14 I had experience precepting students before becoming a faculty member.

- Much (9)
- Some (10)
- Little (11)
- None (12)

15 When I first became a faculty member, I thought most of my time would be spent teaching.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

16 I prefer to focus on teaching rather than other functions of academia (e.g. research, scholarship, committee work, administrative functions, etc).

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)
17 I appreciate the opportunity to personally interact with students.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

18 I consistently receive positive student feedback on my teaching.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

19 I find teaching more challenging than being a full time clinical pharmacist.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

20 My teaching workload has been impacted by factors outside my control such as new accreditation standards, changes in program faculty, curricular changes, advances in medicine, etc.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

21 There have been times in the classroom during the past year when I felt I DID NOT have enough experience to be an effective faculty member.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)
22 I have good working relationships with my fellow faculty members.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

23 My primary identity is that of a faculty member rather than a clinical pharmacist.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

24 I feel that I am not only a part of the pharmacy program but also a member of a wider academic community at my university.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

25 I receive adequate support for teaching from colleagues at my school/college.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

26 The relationships I have with fellow faculty members motivate me to stay in academia.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)
27 My department chair/head supports me as a valued colleague.
- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

28 I receive adequate support from my school/college to produce scholarly work.
- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

The following question was displayed if the respondent answered “Agree” or “Strongly Agree” to question 28.

29 Please describe the support you received. Some examples may include being allocated workload time to devote to scholarship, having others willing to collaborate with you, having statistical or study design support, etc.

30 I understand the culture and campus climate at my university.
- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

31 I have a mentor who helps me understand the institutional culture of my university.
- Yes (1)
- No (2)
32 I have a mentor within my school/college who helps me understand my faculty role.
- Yes (1)
- No (2)

33 I have a mentor outside my school/college who helps me understand my faculty role.
- Yes (1)
- No (2)

34 The expectations for my promotion (and tenure if applicable) are clear to me.
- Strongly Agree (1)
- Agree (2)
- Disagree (4)
- Strongly Disagree (5)

35 I have been successful so far in meeting my school/college's requirements for research/scholarly work.
- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

36 Service on school/university committees is a time consuming part of my job as a faculty member.
- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

37 I enjoy the non-teaching tasks that are a part of my job as a faculty member.
- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)
38 How many hours on average do you spend per week on faculty related activities?

39 I appreciate the variety of my work as a faculty member.
   - Strongly Agree (1)
   - Agree (2)
   - Disagree (3)
   - Strongly Disagree (4)

40 I have flexibility in determining my work schedule.
   - Strongly Agree (1)
   - Agree (2)
   - Disagree (3)
   - Strongly Disagree (4)

41 My faculty workload has made me seriously consider a non-academic pharmacy position.
   - Strongly Agree (1)
   - Agree (2)
   - Disagree (3)
   - Strongly Disagree (4)

42 I am overwhelmed by my faculty workload.
   - Strongly Agree (1)
   - Agree (2)
   - Disagree (3)
   - Strongly Disagree (4)

43 This career allows me to achieve balance between my work and my personal life.
   - Strongly Agree (1)
   - Agree (2)
   - Disagree (3)
   - Strongly Disagree (4)
44 Before this position, I DID NOT have a true sense of what the responsibilities of a faculty member were.

☐ Strongly Agree (1)
☐ Agree (2)
☐ Disagree (3)
☐ Strongly Disagree (4)

45 How likely are you to leave academia in the next five years?

☐ Very Likely (1)
☐ Likely (2)
☐ Unlikely (3)
☐ Very Unlikely (4)

*The following question was displayed if the respondent answered “Very Likely” or “Likely” to question 45.*

46 What would be the reason(s) for you to consider leaving academia?

47 Please leave any additional comments you have.