



Leadership Development and Practical Application: A Comparison of Pharmacy Students and Pharmacists

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Abstract

Having leadership characteristics is important for a pharmacist to be successful throughout their career. The primary objective of this study was to analyze how pharmacists and pharmacy students developed their leadership skills by comparing the two groups to determine major differences in leadership development. The second objective was to determine how ready new pharmacist graduates are to hold a leadership position. Two different surveys were made specifically for pharmacy students and pharmacists. Surveys were delivered via email to pharmacy students and staff at the University of Findlay. Paper copies of surveys were given to retail pharmacists. When asked how likely it is for a new pharmacy graduate to obtain a leadership position within a community pharmacy setting, 50% of pharmacists and 28.6% of students said it is somewhat likely or very likely. Pharmacists most commonly cited working in a pharmacy (100%) as the source of their leadership development, while only 66.7% of students said that working in a pharmacy gave them their leadership traits. The majority of pharmacists agreed that new pharmacy graduates are likely to hold a leadership position within the field of pharmacy. Pharmacy students may be unaware of the potential to be selected for a leadership position upon graduation. The leadership traits that pharmacy students receive from college curriculum and extracurricular activities should be supplemented with experience working in a pharmacy to further improve their leadership.





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Pharmacy is a field that fits into healthcare in many different ways. From verifying medications to vancomycin dose calculations, there is a broad range of jobs for a pharmacist. One pathway that exists in pharmacy, much like all other careers, is leadership and/or managerial positions. Pharmacists that are placed in these roles usually have significant experience, but at times pharmacists fresh out of school have been put right into leadership positions. For the new graduates that thrive in leadership positions the question has been raised, how do they learn what it takes to lead a pharmacy without having to gain several years of experience? For the new graduates that struggle in their new position, what could they have done differently in the past to improve their chance to excel in a leadership position? This leads to the curiosity of how prepared newly graduated pharmacists are for leadership roles. The objective of this research was to reveal what prepares new and experienced pharmacists the most for a leadership position, and how prepared they are to take on that type of leadership role.

A pharmacist needs to have many different qualities to be effective, but some are more important than others. The top characteristics, according to Thompson, Nuffer, and Brown, include communication, efficiency, professionalism, adaptability, knowledge, and being personable.¹ The development of these traits is an ongoing process, but having a solid foundation can set a pharmacist up for success during their career. Communication can be improved, (both verbal and non-verbal communication), through a combination of curriculum and

practice experience in the job field.¹ The majority of pharmacy interns and supervisors believe that being a clinical leader was the most important job for a pharmacist.² This majority has been growing, as more and more people see the importance of a pharmacist being viewed as not just an expert of medicine, but a leader among their peers.

With its high level of importance, it is valuable to understand how leadership is developed. Preliminary research pointed to the collegiate institutions as having the duty to make sure their students would graduate with appropriate skills to lead in the pharmacy field. According to Bradley-Baker and Murphy, “Colleges and schools of pharmacy have a responsibility to incorporate leadership development opportunities throughout their curriculum in order to provide future practitioners with the knowledge, attitudes, and skills needed to implement positive change.”³ Schools of pharmacy can present these opportunities in several ways from required classes in the curriculum to Advanced Pharmacy Practice Experiences (APPEs). Existence of various opportunities results in the consideration of which method is most efficient for developing leadership among students. Leadership is a vital quality for a pharmacist to have, so knowing how to enhance this characteristic would impact both current and newly licensed pharmacists.

Methods

This study was conducted in Findlay, Ohio with participants consisting of pharmacists at the University of Findlay and





pharmacists in the retail setting. There were at least nine retail settings used in this research from at least six different companies in the Findlay, Ohio area. Two distinct surveys were created, one for pharmacy students and another for pharmacists, that were approved by The University of Findlay Institutional Review Board. Surveys were designed in Google Forms and were delivered to potential participants via email or in person with paper copies. Participants with paper copies were given one week to fill out the survey before it was collected in person.

The questions on both surveys were all presented as multiple choice questions. For some questions, participants had an option to write in their own answer. This was an option on all of the questions where more than one answer could be chosen (select all that apply). This was done by creating select all that apply style of questions for participants to select as many responses they thought pertained to their leadership development. All other questions consisted of a Likert scale format that gave five options to choose from.

Participant inclusion criteria consisted of pharmacy students in an accredited college of pharmacy program and pharmacists in any stage of their career. The student population that was surveyed was the current pharmacy students at The University of Findlay, while the pharmacist population consisted of both professors of The University of Findlay and registered pharmacists in the community setting of Findlay, Ohio.



Knowledge Check: True or False?
The survey questions used to collect data consisted of extended response style questions.

Answer: False

Results

There were a total of 42 surveys submitted by pharmacy students. The breakdown in the number of participants by class year is listed in Table 1. There were 18 pharmacists that submitted surveys for this research. The breakdown in the years of experience for pharmacist participants is listed in Table 1. For the answers to each question there is a breakdown of how many students and pharmacists selected the specific options presented. Percentages of students and pharmacists that selected each answer choice for each question also accompanies each possible answer in Figures 1, 2, 3 and 4.

Data analysis yielded important statistics that showed differences between student and pharmacist answers. 50% of pharmacists said it is somewhat likely or very likely that a new graduate would get a leadership position in a pharmacy within one year of graduating from pharmacy school. This differed from what current pharmacy students thought about obtaining a leadership position upon graduation. 28.6% of students





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said it would be somewhat likely or very likely for a new graduate to get a leadership position in a pharmacy within one year of graduation. Along with this, pharmacists have also seen multiple new graduates get placed in a managerial role in their careers. 66.7% of pharmacists throughout their careers have seen three or more new graduates elevated to a leadership role in a pharmacy.

Other important statistics portray how pharmacists and current students have developed their leadership skills they currently possess. When asked where their

leadership skills came from, every pharmacist said working in a pharmacy. While only 7.1% (1 person) of pharmacists selected college curriculum as a source for the majority of leadership development. The students were presented these questions in the exact same format as pharmacists, but had differing numbers in this area of the research. 35.7% of pharmacy students said a majority of their leadership skills have developed from college curriculum. It is worthy to note that 35.7% of pharmacy students that participated did not have a job in a pharmacy. All other data is shown in a chart below for each question and answer.

Table 1. Survey Participants by Career Standing and Experience Level

Survey Responses from Active Pharmacy Student's by Year				
P1: 6 people	P2: 5 people	P3: 6 people	P4: 6 People	P5: 19 people
Survey Responses from Active Pharmacists by Experience				
0-5 years: 2 people	6-10 years: 3 people	11-15 years: 3 people	16-20 years: 4 people	Over 20 years: 6 people



Figure 1. Leadership Position Likelihood, Pharmacist Perspective

How likely is it for a newly graduated pharmacist to obtain a leadership position in a pharmacy within a year of graduation?

18 responses

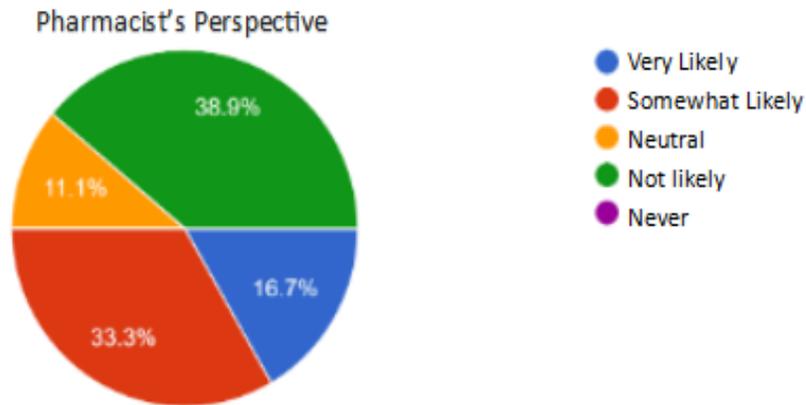


Figure 2. Leadership Position Likelihood, Student Perspective

How likely is it for newly graduated pharmacists to obtain a leadership position in a pharmacy within one year of graduation?

42 responses

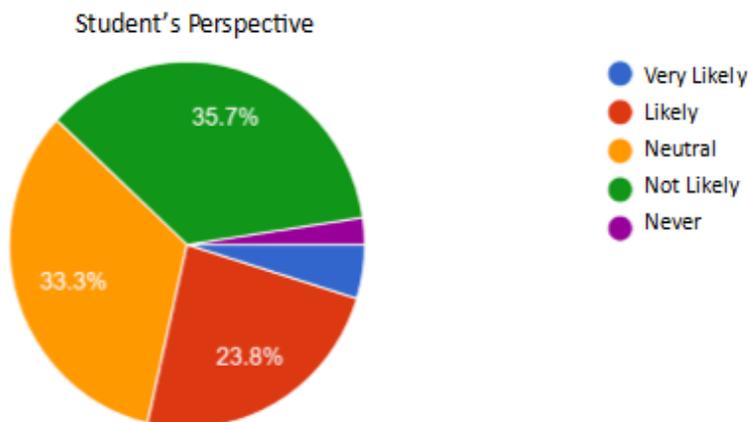




Figure 3. Leadership Skill Development, Pharmacist’s Perspective

The majority of my leadership skills have come from: Select all that apply

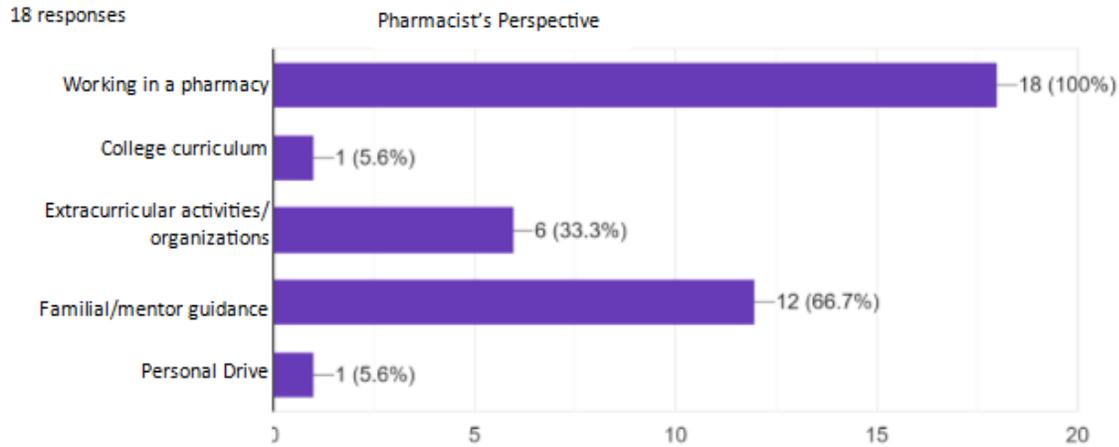
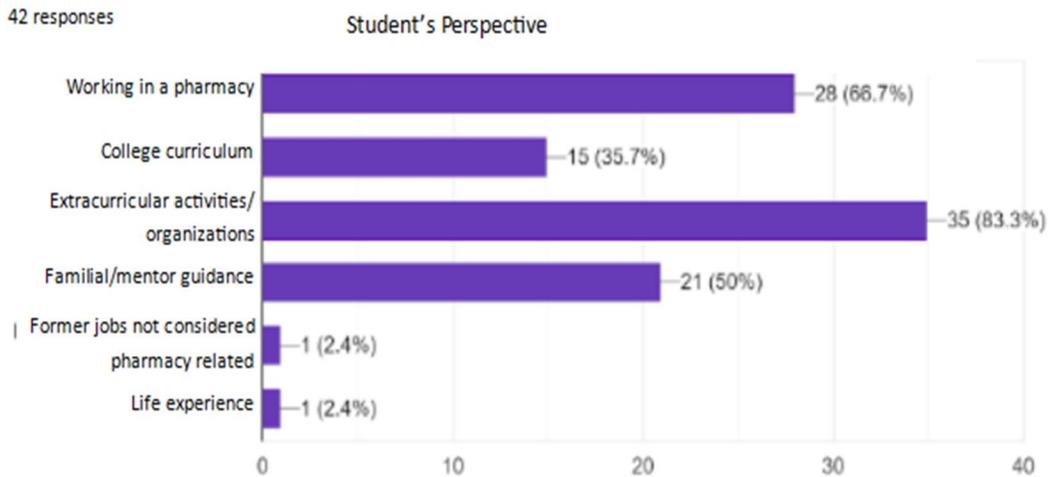


Figure 4. Leadership Skills Development, Student’s Perspective

The majority of my leadership skills have come from: Select all that apply





Conclusion

One major difference between pharmacists and pharmacy students is how likely they believe that newly graduated pharmacists are to obtain a leadership position. Pharmacists that have experience believe that a newly graduated pharmacist is likely to obtain a leadership position. This could be due to multiple different reasons. The first is from actually seeing newly graduated pharmacists obtaining leadership positions. This would be a very good indicator that would show differences between how pharmacists and students view the pharmacy field. Hiring and promotion to leadership positions is something that a pharmacy student would not experience unless they were actually working and directly involved in those scenarios. The second possible reason why pharmacists have this belief is because of how students are trained in college. Pharmacists with experience have seen potential changes within the pharmacy field, and one of those changes could be how students grow as leaders in college. College is always changing, and the way that students develop their leadership skills has changed and grown over time.

There is a disconnect between practicing pharmacists and pharmacy students about where leadership traits are developed. Both groups agree that they are developed by experience, but that experience differs slightly between the two groups. While pharmacists mainly got leadership experience from working in a pharmacy,

students developed their leadership mainly from experiences in extracurricular activities, but partially from working in a pharmacy and college curriculum. This difference in leadership development could be due to multiple factors, including changes in college curriculum and emphasis on extracurricular involvement, or from students having limited experience working in a pharmacy. With more time spent in a pharmacy and holding leadership positions within their place of employment, pharmacy students would gain leadership skills that current practicing pharmacists already have.

The change in leadership development could lead to positive progression in the field of pharmacy. These changes could be positive because students would be able to take the leadership skills they learned in college curricula and extracurricular activities and supplement them with skills and traits they learn from working in a pharmacy as an intern and eventually a pharmacist. The more experience someone has in a leadership position, the better a leader they become. When a student graduates from college and holds their first leadership position, they are not going to be a fully developed leader yet. However, if they have previous experience in the college setting, they will at least have a base that they can continue to build up as they work as a pharmacist.

Strengths of the research included the comparison of thoughts between students and current practicing pharmacists,





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the broad range of retail companies from which data was gathered, and a varying amount of experience levels from students to pharmacists. Weaknesses of the study included the small number of participants and participants being located in one geographical area. Future research within this area of pharmacy could pertain to how encouraged students are to obtain an internship or technician position while in college. Another area that can be researched in the future is looking deeper at what aspects of a student's life developed leadership skills best for them to become successful pharmacists. This study offers preliminary data and statistics on the area of leadership within pharmacy. While clinical knowledge is important, the impact of great leadership will continue to further the field of pharmacy and thus cannot be ignored.



Knowledge Check:

Which of the following are top characteristics for a pharmacist to have in order to be effective?

- A. Communication
- B. Professionalism
- C. Selfishness
- D. Efficiency

Answer: A,B,D





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