

# Impact of an Academic Pharmacy Elective on Student Interest in a Career in Academia

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## BACKGROUND

- According to the American Association of Colleges of Pharmacy, recruitment and retention of qualified faculty members is a key challenge for schools and colleges of pharmacy today.<sup>1</sup>
- PHRM 572, Academic Pharmacy, is offered at the Jefferson College of Pharmacy as an elective course
- This course introduces the student to the three components of academic pharmacy: teaching, service, and scholarship
- Components of the course include:
  - Developing a teaching philosophy
  - Creating a classroom experience
  - Participating in peer evaluation of teaching
  - Reflecting on personal learning styles and strengths relative to academia
- Prior research assessing both student interest in careers in academia and a student's likelihood of pursuing a career in academic pharmacy using assessments or reflections at the completion of academic pharmacy courses includes:
  - Baia P, Strang A.<sup>2</sup>
    - 56.3% of students commented on their desire to teach in post-course reflection papers. Of these, two groups emerged: students who always had a passion to teach and those who did not know that this was an option.
  - Spooner JJ, Kennedy DR.<sup>3</sup>
    - In post-course reflections, almost 70% of students responded that they were either likely or very likely to pursue a career in academic pharmacy.

## OBJECTIVE

To determine the impact of an academic pharmacy elective on student interest in pursuing academic careers.

## METHODS

- Student interest in careers in academia was measured using a 7-item paper survey that was administered on the first and last days of class in PHRM 572, Academic Pharmacy during the Spring 2014, 2015, and 2016 semesters.
- Pre- and post-course quantitative survey data was compared to determine the impact of course attendance on interest in academia and qualitative data was assessed
- A paired t-test (right tailed) was applied to analyze survey data from item #3 to assess for an increase in related interest subsequent to course participation
- ANOVA was utilized to assess annual survey data, with the year which the survey was conducted as a between-subjects factor

## Pre-and Post-course Survey

1. Why did you take this course? (circle/check all that apply)

a. It fit my schedule  
b. It was the number of credits I needed to complete my elective requirement  
c. I have some interest in academia as a potential career  
d. I really do not know...  
e. Other (please identify) \_\_\_\_\_

2. To date, how have you obtained information relative to careers in academia? (circle/check all that apply)

a. lecture in another course  
b. discussion with advisor  
c. professional organization  
d. internet resource  
e. Other (please identify) \_\_\_\_\_

3. On a scale of 1-10, how likely are you to seriously consider a career in academic pharmacy. 1=I have not given it any thought to 10=I have given it lots of thought and it is high on my list of career options

\_\_\_\_\_

4. What reasons may cause you to pursue a career in academic pharmacy? (list as many as you think are appropriate)

\_\_\_\_\_

5. If you have no intentions of pursuing a career in academic pharmacy, please list as many reasons 'why not' as apply.

\_\_\_\_\_

6. What do you think are the main responsibilities of an individual with a career in academic pharmacy? (list as many as you think appropriate)

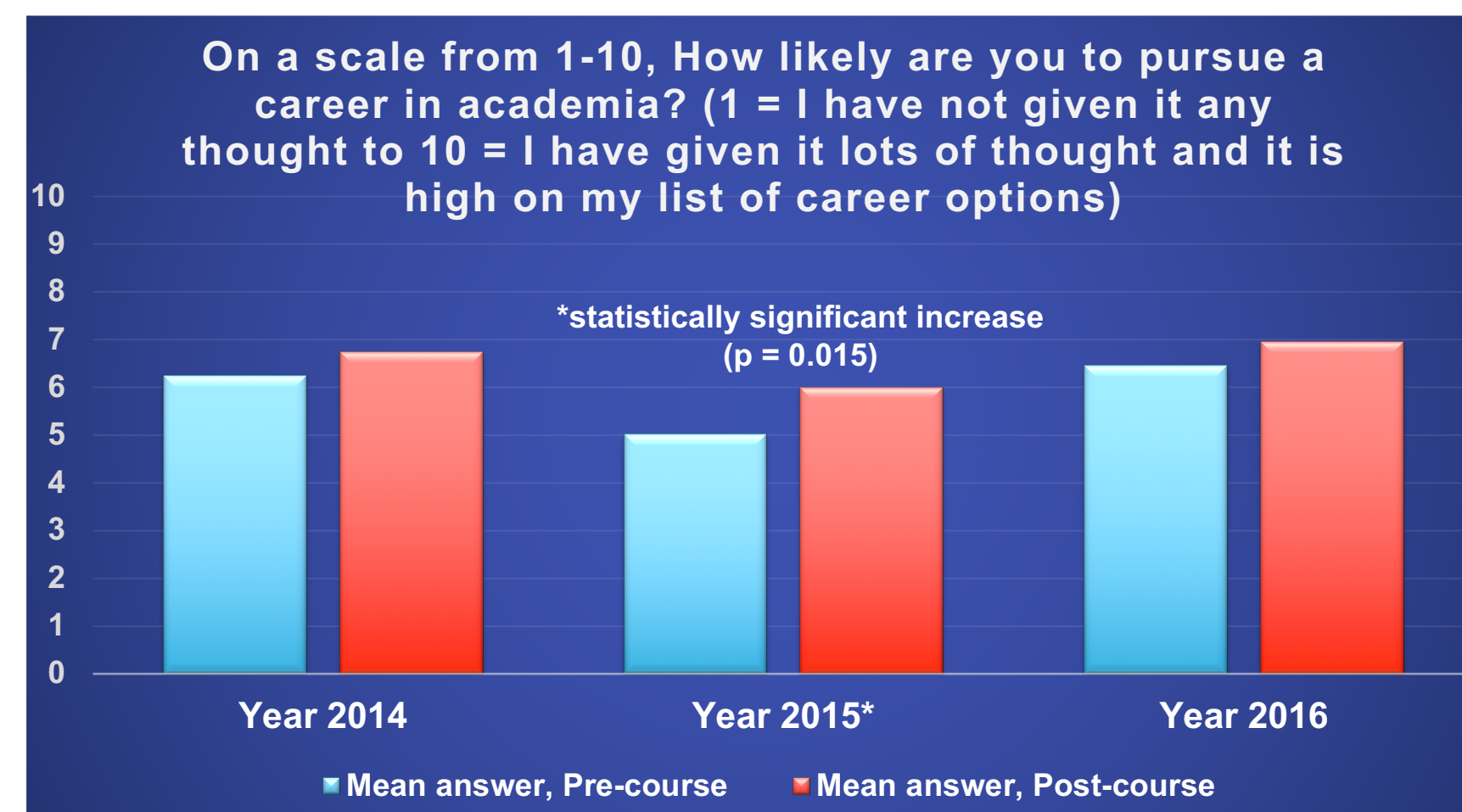
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7. What do you think are the top attributes of an individual with a career in academic pharmacy? (list as many as you think are appropriate)

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## RESULTS

- Survey responses from a total of 55 students were evaluated (2014: n = 16; 2015: n = 19; 2016: n = 20) (*Responses from 7 students were not included due to incomplete or ambiguous data*)



- There was a significant increase in the scores measuring an individual's interest in pursuing an academic career path for the combined years 2014-2016. Pre-course mean = 5.85; Post-course mean = 6.55; p = 0.013
- After course completion, 76.3% of students maintained or increased their interest in pursuing a career in academia (21.8% maintained and 54.5% increased).
- Based on the repeated measures ANOVA, there was a significant effect of course attendance on the scores measuring an individual's interest in pursuing an academic career path (p = 0.029)
- The most commonly identified reasons to pursue a career in academia included love for teaching (n = 23, pre-course; n = 24, post-course) and altruism (n = 19, pre-course; n = 27, post-course).

## What do you think are the top attributes of an individual with a career in academic pharmacy?†

	2014		2015		2016	
	Pre	Post	Pre	Post	Pre	Post
Caring/empathetic/compassionate	11	5	2	2	7	5
Strong communication skills	11	6	8	9	8	8
Personable/charismatic/ friendly	9	3	9	6	8	6
Strong knowledge base	8	3	5	3	1	3
Patient	8	3	3	2	4	6
Ambitious/driven	4	8	2	4	5	5

†Numbers indicate number of students providing response

## If you have no intentions of pursuing a career in academic pharmacy, please list as many reasons 'why not' as apply.‡

	2014		2015		2016	
	Pre	Post	Pre	Post	Pre	Post
Dislike giving presentations	2	1	2	3	2	2
Time investment to pursue the career (e.g., residency training)	2	3	1	1	2	2
Work hours	1	3	1	1	0	1
Financial concerns	0	2	1	0	0	1
Research/publishing expectations	0	1	1	2	0	2

‡Numbers indicate number of students providing response

## IMPLICATIONS

- There is a significant increase in student interest in pursuing a career in academia from the beginning to the conclusion of an elective focusing on academic pharmacy careers.
- The increased interest in pursuing a career in academia can be coupled with an individual's engagement (as measured through attendance) in the academic pharmacy elective course.
- In order to cultivate the next generation of pharmacy educators, it appears key to provide students with opportunities to learn more about academia as a career option.
- It is important to understand the motivations and perceived barriers towards pursuing a career in academia, in order to further cultivate the interest.
- Limitation: a lack of information on the degree to which participants may want to pursue involvement in academia. Post-graduation career choices were not captured.

## REFERENCES

- Vacant Budgeted and Lost Faculty Positions – Academic Year 2016-17. American Association of Colleges of Pharmacy Website. <https://www.aacp.org/sites/default/files/2018-04/IRB%20No%2021%20-%20Faculty%20Vacancies%20and%20Lost%20Positions.pdf>. Accessed June 21, 2018.
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- Spooner JJ, Kennedy DR. An elective course to foster interest in academic pharmacy career opportunities. *Am J Pharm Educ*. 2017;81(1):13. doi: 10.5688/ajpe81113.

†Research was conducted while author was a Jefferson College of Pharmacy Pharm.D. student