

ABSTRACT

Objectives: To characterize the benefits of obtaining an MBA degree on the career of a pharmacist, and describe respondents' perceptions of pharmacy and MBA degrees on entry level and current positions.

Methods: This was a cross-sectional survey of pharmacy graduates from the University at Buffalo (UB) who attained a MBA degree. Thirty-item electronic survey was developed through collaboration with the UB School of Management. The survey utilized Likert scale, sliding scale, and multiple answer questions. Wilcoxon signed-rank tests assessed differences in means and chi-square for differences in proportions.

Results: A total of 68/115 pharmacists responded to the survey (59% response rate). There was a diversity of respondents: 41% completed both degrees between 1965-1989, 29% between 1990-1999, and 31% after 2000. Following completion of pharmacy and MBA degrees, respondents' entry level setting included pharmaceutical industry (28%) followed by chain pharmacies (21%). There was an increase in utilization of the MBA degree from the respondents' entry level to their current positions (29% vs. 49%, $p < 0.001$). The MBA degree was increasingly helpful in obtaining respondents' current position as compared to their entry level (48% vs. 27%, $p \leq 0.0001$), with a pharmacy degree being more helpful in entry level attainment. Irrespective of entry level or subsequent position, 85% of respondents believed earning both degrees helped in career advancement ($p = 0.77$) and 80% of respondents would recommend earning an MBA in addition to a pharmacy degree ($p = 0.6$).

Implications: Attainment of an MBA degree was perceived to be useful in the progression of the career of a pharmacist.

BACKGROUND

- Increased enrollment in professional degree programs has made the job market for pharmacy graduates increasingly competitive in the last decade
- More Schools of Pharmacy are now implementing dual degree programs into professional curriculums to make graduates more competitive in a saturated job market
- At the University at Buffalo, SUNY the BS Pharm/MBA program was approved in 1972, taking a total of 160 Hours, 30 hours for the MBA
- The combined dual degree program was renewed in 1997, in its current 5-year format
- Over 115 students were in the Pharmacy/MBA dual degree program to date

OBJECTIVE

- To characterize the benefits of obtaining an MBA degree on the career of a pharmacist, and describe respondents' perceptions of pharmacy and MBA degrees on entry level and current positions.

METHODS

Study Design:

- Cross-sectional, single center, electronic survey
- Survey was administered using the secure online application, Qualtrics (Qualtrics, LLC, Provo, UT) and administered during a 6 week period (January 2015 to February 2015)

Inclusion:

- Graduation from the University at Buffalo (UB) with a pharmacy degree (PharmD or BS Pharm)
- Attainment of a MBA either at UB or an alternative accredited institution either prior to or after the pharmacy degree

Data Collection:

- A Thirty-item electronic survey was developed through collaboration with the UB School of Management
- The survey utilized Likert scale, sliding scale, and multiple answer questions.
- Survey was pilot tested before dissemination

Data Analysis:

- Descriptive statistics were used to analyze the data
- Wilcoxon signed-rank and paired t-test assessed differences in means and chi-square for differences in proportions

CONCLUSIONS

- Pharmacy/MBA graduates utilized more of his or her business degree as their career develops
- A dual Pharmacy/MBA degree was helpful in acquiring the graduate's current job
- Pharmacy/MBA graduates on average take 15 years to attain their current job
- Pharmacy/MBA graduates command on average \$61,738 more in adjusted salary from his or her entry level to current position
- Pharmacy/MBA graduates earn an adjusted salary in current job higher than the national average in 2015
- Attitudes and perceptions of Pharmacy/MBA graduates are remain positive
- Pharmacy/MBA graduates earn positions in diverse pharmacy settings

Table 1: Baseline Demographics of Pharmacy/MBA Graduates

Total Participants	N = 68/115 (59% Response Rate)
Age	47.6 ± 13.8
Female	19 (28)
Male	49 (72)
Year graduated Pharmacy School, mean ± SD	1991 ± 15.2
Year graduated Management School, mean ± SD	1995 ± 11.4
Institution that attained MBA	
University at Buffalo, SUNY	47 (69)
Other	21 (31)
Earn MBA concurrently in pharmacy school?	
Yes, while in pharmacy school	40 (59)
No, at other time	28 (41)
Completed post-graduate training?	
No	52 (76)
Yes, residency	10 (15)
Yes, fellowship	4 (6)
Yes, other	2 (3)
Current position is my entry level position?	
Yes	21 (31)
No	47 (69)
Currently retired?	
Yes	4 (6)
No	64 (94)
State of ENTRY level position (N=68)	
New York	41 (60)
Other	27 (40)
State of CURRENT level position (N=45)	
New York	23 (51)
Other	22 (49)
Year started ENTRY level position	1993 ± 13.7
Year started CURRENT position	2005 ± 8.4
Mid-Range Adjusted Entry Level Salary (In 2014 US Dollars) (N=65)	\$145,687 ± \$76,254
Mid-Range Adjusted Current Salary (In 2014 US Dollars) (N=46)	\$203,599 ± \$90,750
Time (years) Between Entry and Current Position (N=43)	15.02 ± 9.35
Mean of Difference in Mid-Range Salary (Entry Level/Current) (In 2014 US Dollars) (N=43)	\$61,738 ± \$116,150 (P<0.001)

RESULTS

Figure 1: Change Over Time of Utilization of Pharmacy and MBA Degrees

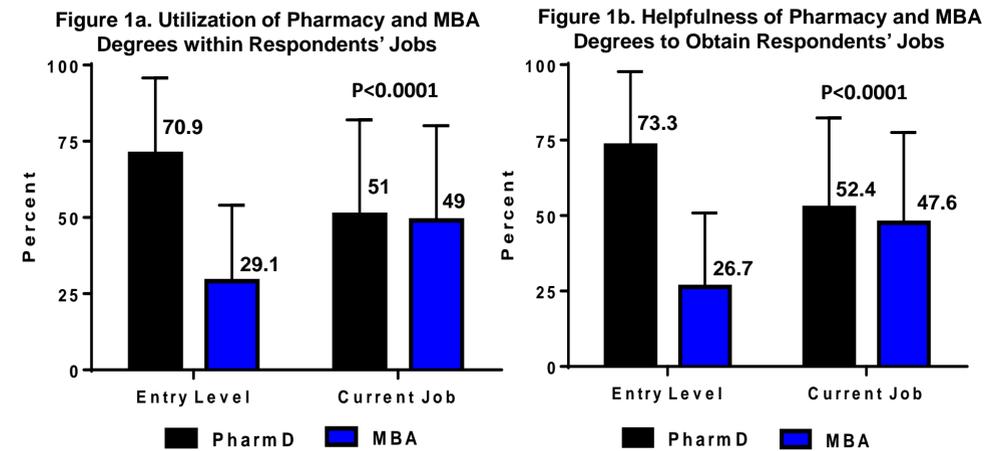


Figure 2: Attitudes and Perceptions of Pharmacy/MBA Graduates in Entry and Current Positions

Figure 2a: Attitudes and Perceptions of Pharmacy/MBA Graduates with their Entry Level Position

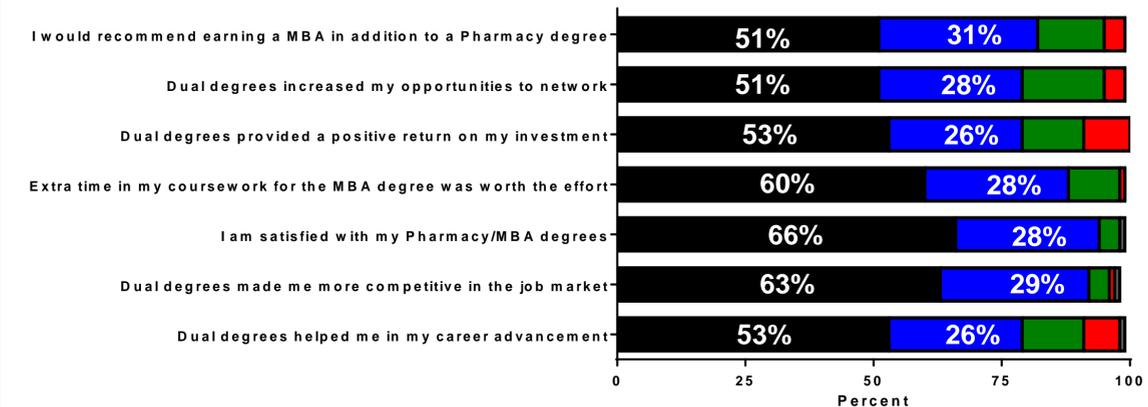


Figure 2b: Attitudes and Perceptions of Pharmacy/MBA Graduates with their Current Position

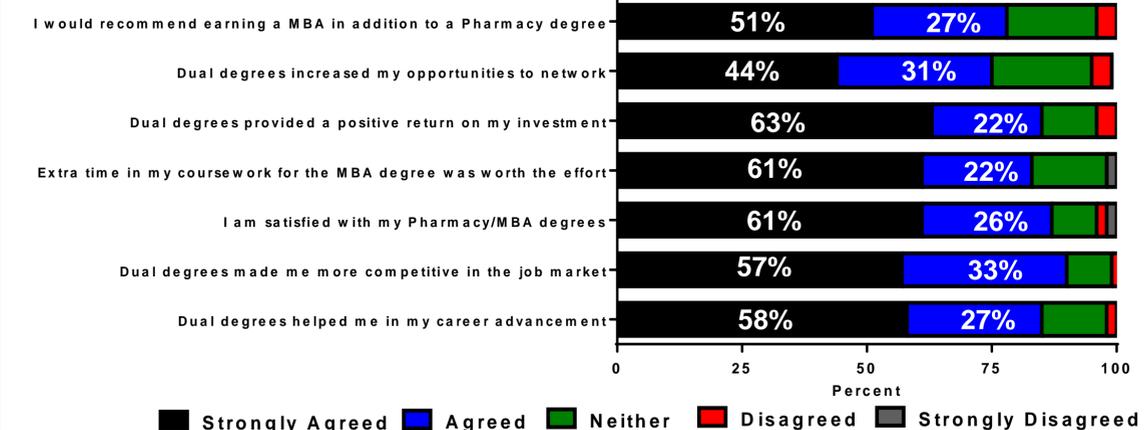
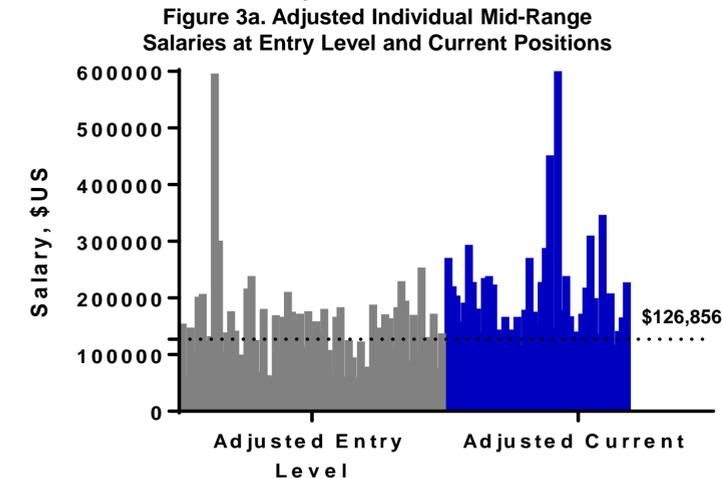


Table 2: Changes in Pharmacy/MBA Graduate Position Settings

Pharmacy/MBA Position Setting	Entry Level (N=65)	Current (N=47)
Pharmaceutical industry	16 (25)	9 (19)
Chain pharmacy (4+ units)	12 (18)	6 (13)
Hospital/Institutional (inpatient) pharmacy	10 (15)	4 (9)
Managed care pharmacy	7 (11)	2 (4)
Other (please specify)	7 (11)	9 (19)
Independent pharmacy (1-3 units)	5 (8)	2 (4)
Management Focused	3 (5)	3 (6)
Residency or Fellowship	3 (5)	5 (11)
Clinic (outpatient) pharmacy	1 (2)	2 (4)
Federal/Military/Department of Defense pharmacy	1 (2)	0 (0)
College or school of pharmacy (Academia)	0 (0)	4 (9)
Consultant pharmacy	0 (0)	1 (2)

Figure 3: Adjusted Mid-Range Salaries of Pharmacy and MBA Graduates in Entry Level and Current Positions



*Salaries were adjusted for inflation to 2014 based on the CPI inflation calculator, Bureau of Labor Statistics
**** Median retail pharmacist salary in 2015 according to www.salary.com (Accessed 7-9-15)

Figure 3b. Mean of Mid-Range Difference in Adjusted Salary (Entry Level/Current) Histogram

