



3-year PharmD program vs. 4-year PharmD program. What is the impact on students and faculty?



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INTRODUCTION

With the number of pharmacy schools on the rise in the United States, several factors can influence the selection of a 3- vs 4- year Doctor of Pharmacy (PharmD) program, including financial, personal, and time commitments. In a study conducted by Frick et al. in 2011, students in a 3-year program, on average, experienced more stress than students in a traditional 4-year program.¹ On the contrary, a recent study by the NIH in 2022 compared accelerated programs vs. traditional timeline medical programs and reported the advantages of an accelerated program regardless of the stress factor.² There seems to be a gap in the literature evaluating students' perspectives regarding stress levels and quality of life; moreover, there is evidently a lack of faculty insight in these studies. This study aims to further elucidate the advantages and disadvantages of 3- vs 4-year doctoral programs and the overall impact on quality of life, work-life balance, and involvement in the PharmD profession for students and faculty members from each respective program.

OBJECTIVES

- To evaluate the impact of a 3- vs. 4-year pharmacy program from a student and faculty perspective with respect to school- and work-life balance.
- To evaluate the advantages and disadvantages of a 3- vs 4-year pharmacy program, considering financial matters, student involvement in leadership position(s), employment during academic year(s), and having the opportunity to participate in a research project.

METHODOLOGY

- IRB-exempt qualitative analysis of data collection using a questionnaire distributed via SurveyMonkey to faculty and students in 3- and 4-year PharmD programs.
- The 5-10 minute survey consisted of 12 and 9 questions for students and faculty, respectively.
- Responses were collected anonymously and in aggregate.
- Descriptive statistics were used to analyze the data.

Inclusion/Exclusion

- Inclusion: Students currently enrolled in a PharmD program or faculty currently employed at a PharmD program.
- Exclusion: Individuals not currently enrolled in a PharmD program or not currently employed at a PharmD program.

Survey Questions (Selected Questions)

Survey Questions for Students Enrolled in PharmD Programs

1. Is your school a 3- or 4-year PharmD program?
2. Before starting your PharmD program, how many years of pharmacy experience did you have?
3. In your current PharmD program, have you held, or do you currently hold, any leadership positions? (Note: this can include a leadership position in an on-campus organization or initiation into an on-campus fraternity). If so, how many?
4. In your current PharmD program, on average, how many hours a week do you work in a paid position?
5. In an average school year, how many volunteer opportunities (non-paid) are you able to participate in?
6. In your current PharmD program, are you directly involved in a research project?
7. Within the past 6 academic months, how well would you rate your school- and work-life balance? On a scale of 1-5 (1: Very Poor, 2: Poor, 3: Acceptable, 4: Good, 5: Very Good)
8. How would you rate your overall quality of life while enrolled in your current PharmD program? On a scale of 1-5 (1: Very Poor, 2: Poor, 3: Acceptable, 4: Good, 5: Very Good)
9. In 1-2 sentences, can you describe why you decided to pursue the pharmacy program you are currently enrolled in?

Survey Questions for Faculty Employed in PharmD Programs

1. Are you currently employed as a faculty member at a 3- or 4-year PharmD program?
2. Have you been employed as a faculty member in BOTH a 3- and 4-year PharmD programs?
3. How would you rate your overall experience in the 3-year PharmD program that you currently or previously taught at? (0= Absolute Worst, 5=Absolute Best) Do not answer this question if it does not apply to you.
4. In your current PharmD program, how well would you rate your ability to balance your workload (leadership/research/scholarship)?
5. In your current PharmD program, how would you rate the time you have to devote to scholarship?
6. In your current PharmD program, how would you rate the time you have to prepare for lecturing?
7. In your current PharmD program, how would you rate the time you have for student development/office hours?

RESULTS

Table 1: 3- vs 4-year PharmD Program Student and Faculty Participants

	Students n=201	Faculty n=68
3-year	60 (29.85%)	14 (20.59%)
4-year	141 (70.15%)	54 (79.41%)

Paid Hours Per Week in 3-year Pharm D Program

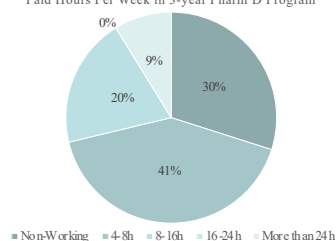


Figure 2: Number of Hours of Paid Work Experience During an Academic Year in a 3-year PharmD Program

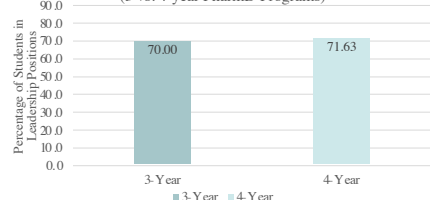


Figure 4: Student Involvement in at Least One or More Leadership Positions in a 3- vs 4-year PharmD Program



Figure 6: Faculty Rating to Student Development/Office Hours in a 3- vs. 4-year PharmD Program

Average Quality of Life (3 vs 4-year PharmD Programs)

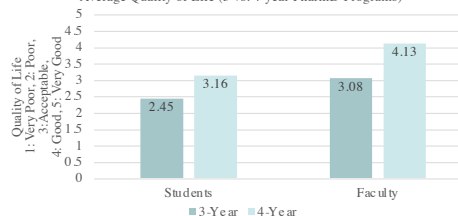


Figure 1: Quality of Life in a 3- vs 4-year PharmD Program in Students and Faculty

Paid Hours Per Week in 4-year Pharm D Program

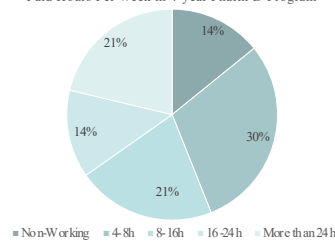


Figure 3: Number of Hours of Paid Work Experience During an Academic Year in a 4-year PharmD Program

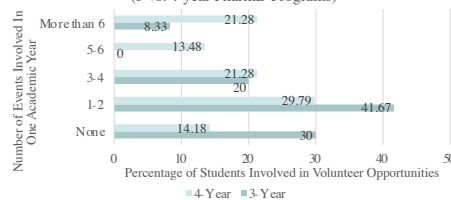


Figure 5: Student Volunteer Opportunities in One Academic Year in a 3- vs 4-year PharmD Program

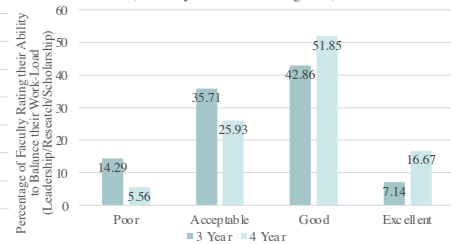


Figure 7: Faculty Rating to Faculty Work-Load Balance in Leadership/Research/Scholarship in a 3- vs 4-year PharmD Program

DISCUSSION

(Figure 1) The data reveals that students in a 4-year PharmD program have a better average quality of life (QOL) than those in a 3-year PharmD program (QOL scores of 3.16 and 2.45, respectively). Additionally, the data collected for the faculty members also follow a similar trend, with the average QOL being higher in 4-year PharmD programs compared to 3-year (QOL of 4.13 and 3.08, respectively).

Work experience obtained as a full-time student in a 3- vs 4-year PharmD program was also evaluated (Figures 2 and 3). The data showed an overall higher percentage of students not at all employed in a 3- vs 4-year PharmD program (30% vs 14%, respectively).

Students in a 4-year program, were able to hold to some degree, more leadership positions compared to students in a 3-year program (Figure 4). A higher percentage of students were involved in at least one or more leadership positions in a 4- vs 3-year PharmD program (71.63% and 70.00%, respectively). With regards to student volunteer opportunities in one academic year (Figure 5), the data showed that 4-year PharmD students, on average, do more volunteer opportunities (with 14.18% of 4-year PharmD students not participating in volunteer opportunities) when compared to 3-year PharmD programs (with 30% of 3-year PharmD students not participating in volunteer opportunities).

Data showed an overall higher percentage of rating "Good" and "Excellent" from faculty in 4-year PharmD programs (59.26% "Good" and 12.96% "Excellent") vs ratings from faculty in 3-year programs (28.57% "Good" and 7.14% "Excellent"), with regards to their ability to devote time to student development and office hours in their respective 4- vs 3-year PharmD program (Figure 6). Faculty were also asked to rate their work-load balance in leadership, research, and scholarship in 4- vs 3-year PharmD programs. Data revealed an overall higher percentage rating of "Excellent" from 4-year PharmD faculty vs 3-year PharmD faculty (16.67% and 7.14%, respectively).

On average, students in a 4-year PharmD program exhibited more involvement in the pharmacy field through employment, leadership, and volunteering and reported a higher quality of life. Similarly, on average, faculty respondents from 4-year PharmD programs express that they can devote more time to student development/office hours and express overall higher satisfaction with respect to their faculty work-load balance.

Data collected reflects the current research available and published articles follow a similar trend.

The aforementioned outcomes may be due partly to perceived minimized stress levels in 4-year programs vs 3-year programs, allowing students more time and ease of mind to obtain employment, student volunteer opportunities, and leadership roles. Although the study did not account for other variables such as accessibility of leadership/volunteering opportunities, availability of employment positions, students' intrinsic and extrinsic motivations to obtain employment, or pursue leadership and employment positions, etc., the data trends do reveal that, overall, students in 4-year programs are more likely to devote time to working increased hours per week and participate in leadership/volunteering roles.

Recall bias and limited sample size, yet the data helps provide student pharmacists and faculty members with the opportunity to gauge both the advantages and disadvantages of attending a 3- vs 4-year PharmD program.

Survey responses do not represent national data. Mainly distributed through social media, local California PharmD students and faculty, CPhA, and CSHP outlets.

Does not account for other confounding variables that could impact QOL, socioeconomic status, employment accessibility, leadership positions available, etc.

The data is preliminary and implies others to continue the research collected and to determine other variables that impact 3- vs 4-year PharmD programs.

CONCLUSION

There are limited number of published studies regarding 3- vs 4-year pharmacy schools and their impact on quality of life, leadership, and overall work-life balance. The data collected could provide both students and faculty members with information that will aid their decision in choosing to apply to or employment at a 3- vs 4-year pharmacy school.

Based on data from the study, students in 3- vs 4-year PharmD programs reported more overall quality of life, student involvement through leadership, and higher reports of working while in pharmacy school. On the same end, faculty from 3- vs 4-year PharmD programs reported a greater ability to devote time to student development and office hours and reported a better work-load balance. This is not a complete representation of the public's perspective of each respective program due to limited participants and this study's inability to control confounding variables. Future studies should aim to include a larger sample size, multi-state, larger demographics, and should also include socioeconomic status, employment accessibility in the area the PharmD student resides, number of leadership positions available to PharmD students, number of hours PharmD faculty are expected to devote to student development and office hours vs how many they are able to achieve in their program, and more.

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REFERENCES

