

# Evidence of Professional Identity Formation in P1 Students' Career Development Plans and P3 Plan Revisions

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## INTRODUCTION

- Professional Identity Formation (PIF) is a longitudinal and iterative process whereby student pharmacists internalize the profession's core values and beliefs to 'Think, Act and Feel like a Pharmacist'.<sup>1</sup>
- While immersion into authentic practice settings (e.g., experiential and co-curricular) constitutes the hallmark for the development of PIF, didactic simulations and guided reflection can also influence its formation.<sup>2,3</sup>
- This work describes an exploration of longitudinal PIF through a didactic reflection and planning exercise completed within a Pharmacy Career Exploration module in a P1 course with the exercise repeated in a P3 course.

## OBJECTIVES

We hypothesized that professional growth would occur from P1 to P3 manifesting as changes in career goals, increases in detailed strategies and professional identity formation (PIF) indicators. The objective was to compare P1 to P3 Plans for growth, factors impacting growth, and indicators of PIF.

## METHODS

### Career Plan Assignment

- In a P1 course, student pharmacists were introduced to the processes and importance of Continuous Professional Development (CPD), Self-directed lifelong learning (SD-LLL) and Critical Reflection.
- Incorporating the tenets of CPD and SD-LLL, students used the American Pharmacists Association (APhA) Career Pathway Evaluation Program to determine their Career Critical Factors and critically reflect on a career choice.<sup>4</sup>
- P1 students created a 500-word Pharmacy Career Professional Development Plan (Plan) which involved:
  - Identification of a pharmacy career goal with justification of why it would be a good fit, based upon self-reflection of APhA Critical Factors
  - Articulation of concrete strategies and a timeline to implement the strategies to achieve the stated goal.
- To assist students in developing concrete Plan strategies, faculty prepared 4 Career Guidance Resource documents (community pharmacy, health-system/inpatient pharmacy, residency-bound careers, and pharmaceutical industry).
- The exercise was repeated in the P3 year with this same cohort of students.
- Faculty evaluated and graded Plans based on an assignment rubric (Table 1).

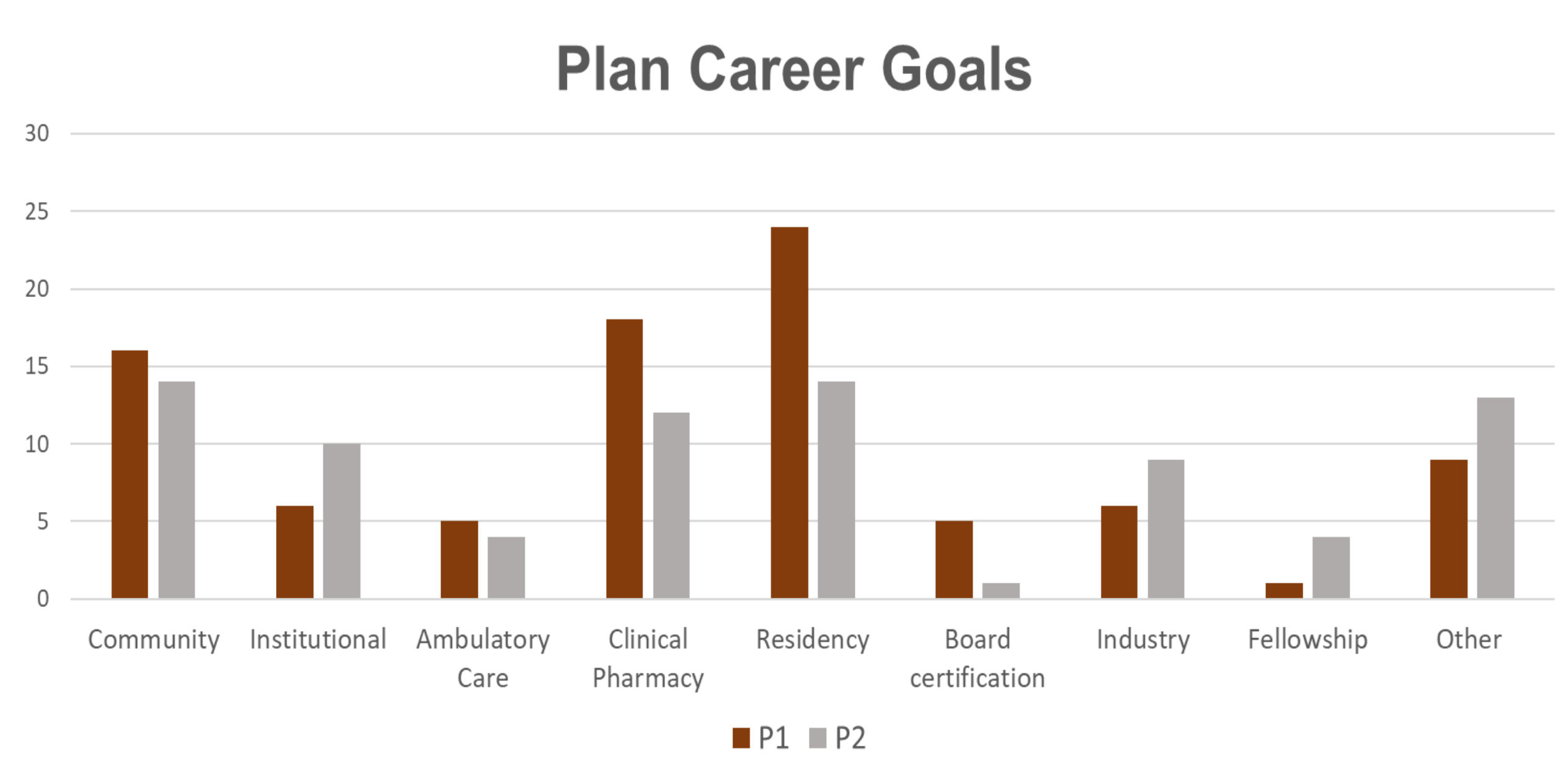
### Professional Growth Assessment

- Thematic analysis was conducted on matched pairs of P1 and P3 Plans
- Professional growth from P1 to P3 was defined as: career goal changes; completion of P1 strategies; and/or more sophisticated specification in Plan strategies.
- To identify factors impacting professional growth and indicators of PIF development (think, act, feel statements) embedded within students' critical reflections, a priori themes from the literature were complemented with emergent themes using an iterative process.<sup>1</sup>
- Three investigators coded 5 essays per round, taking 2 rounds to concur on themes. Two investigators coded Plans, with a 3rd reconciling discrepancies.

**Table 1: Plan Grading Rubric (Maximum point value = 5)**

Assessment	2 points	1 point	0
<b>Critical Reflection of Pharmacy Career Goal</b>	Student provides a specific career goal/trajectory, and upon critical analysis/reflection, indicates why this career is a good fit for the future career. Reflection is thorough, thoughtful, detailed and clear.	Student states their career goal but provides incomplete or limited reflection as to why this career was selected for the student's future.	Student does not articulate a career goal, or articulates a superficial goal, with no reflection as to why this goal was selected for the student.
<b>Specific Development Plan</b>	Student provides specific plans or strategies intended to attain the stated career goal. Plans are detailed, specific, with timelines for completion.	Student provides sufficient plans to meet career goals but is lacking sufficient detail to execute the plans in the future.	Student does not articulate specific plans to meet career or articulates superficial plans with no clear plan of execution.
<b>Spelling and Grammar</b>		No more than 3 spelling and/or grammatical errors	More than 3 spelling and/or grammatical errors and/or does not meet 450-500 words

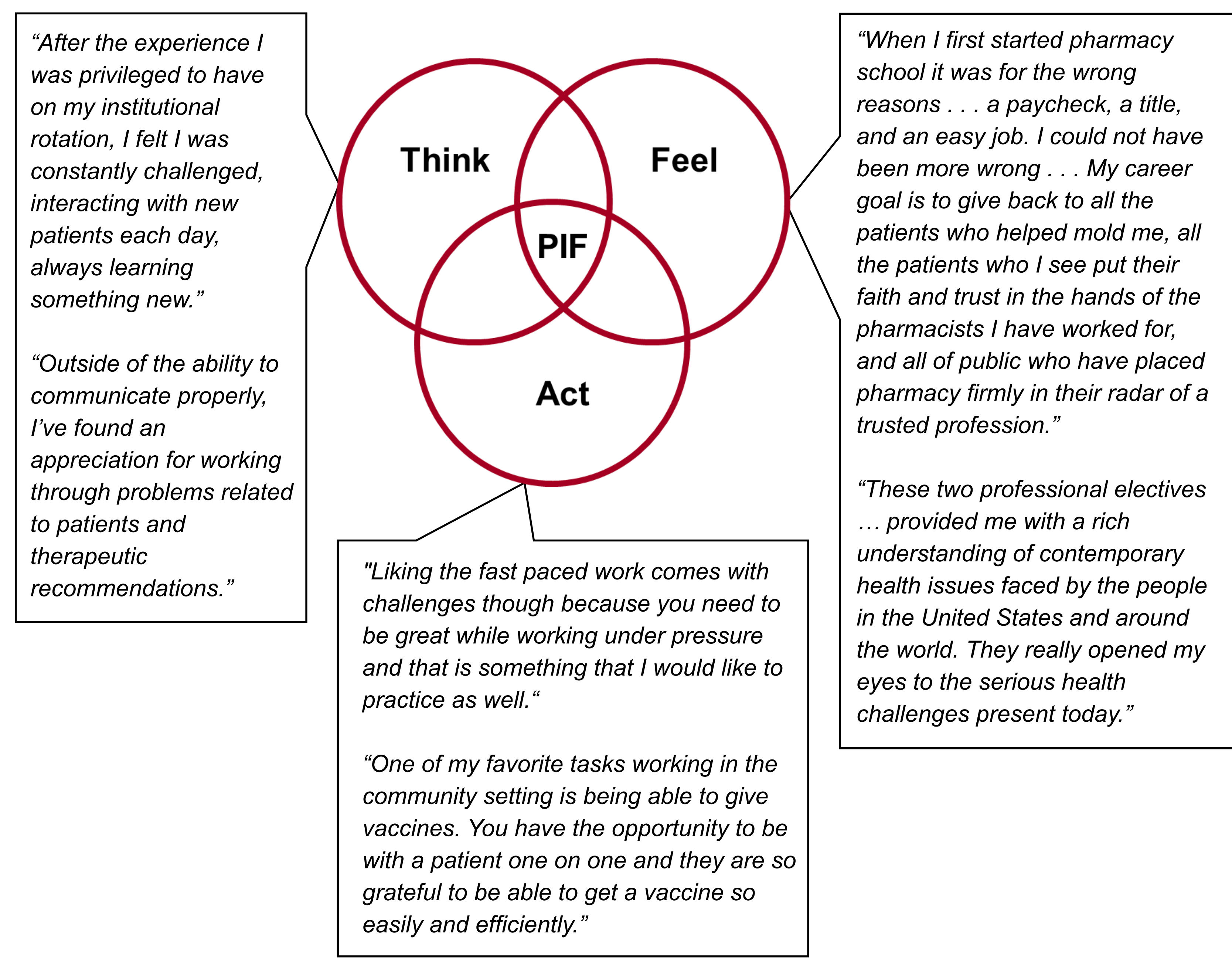
**Figure 1: Evidence of Career Goal Professional Growth P1 to P3 (n = 60)**



**Table 2: Factors influencing Professional Growth and PIF**

	P1 (n=60)	P3 (n=60)
<b>Positive Professional Experiences</b>		
IPPE (Institutional, Community, Team based Care)		19 (32%)
Employment	19 (32%)	39 (65%)
Institutional	2 (3%)	10 (17%)
Community	16 (27%)	17 (28%)
PHIT experiences (co-curricular)	5 (8%)	20 (33%)
Campus Opportunities	0	7 (12%)
Research experience	0	3 (5%)
Role modelling and mentoring	15 (25%)	3 (5%)
Networking	6 (10%)	15 (25%)
Didactic Course work	2 (3%)	15 (25%)
<b>Other Professional Experiences</b>		
Dissonance	3 (5%)	5 (8%)
Negative professional experiences	1 (2%)	8 (13%)
Awareness they do not desire direct patient care	6 (10%)	7 (12%)
<b>Personal experiences</b>		
With HC system/illness	3 (5%)	5 (8%)
Community service/volunteering	3 (5%)	1 (2%)

**Figure 2: Professional Identity Formation**



**Table 3: PIF Indicator Statements**

	P1	P3
<b>Think:</b>	0	8
Evaluating data	0	1
Problem solving	0	2
Identifying medication related problems	0	1
Continuing to learn about new drugs disorders, practices, and technologies that impact patient care (CPD Knowledge Development)	0	4
<b>Act:</b>	36	81
Team member/collaborator	0	4
Collect pertinent information to make decisions	0	3
Communicating effectively/providing accurate information other healthcare profession- * Providing direct patient care and pharmacy based services (communicating, monitoring med therapy, health and wellness screenings, medication administration)	0	5
* Promoting Public Health, lifestyle, preventive health	3	16
Provide medications and other healthcare products	0	1
Provide medications and other healthcare products	21	25
CPD: Skill development (patient care, business, professional leadership, language)	12	27
<b>Feel:</b>	42	52
Responsible provide accurate information to patients, caregivers, and other HCP	1	4
Responsible for following the laws, regulations, standards of practice	0	1
Compelled to optimize medication use	5	4
* Compelled to focus on patient care, advocate for patient, enhance wellbeing	21	24
Compelled patient care, sub category: Desire to work with underserved, impact SDH	6	7
Compelled to develop covenantal relationships with patients/trusted source	4	7
Compelled to portray a professional image	0	1
Accountable for their actions and decisions	1	1
*Confident in their knowledge/ability to carry out pharmacist responsibilities	1	0
Empathy and compassions for their patients and for those with whom they work	3	3

Emergent themes adapted from Reference 1  
*Italics: emergent themes not in reference 1 or modified based on student reflections (optimize medication use vs compelled to optimize patient care as not all students desire patient care)*  
 \* Combined from reference 1

## RESULTS

### Career Plan Assignments

- 127 Students in P1 2020 and 134 students in P3 2022 completed Plans
- Rubric grades revealed that 12% of students (over the 2 cohorts) lost points due to lack of sufficient or specific strategies or a timeline to achieve stated career goals

### Profession Growth Assessment

- Of 120 matched students, 60 pairs of P1 and P3 Plans were analyzed.
- Professional growth was manifested by P1 to P3 career goal changes (47%, Figure 1), completed P1 Plan strategies (19, 32%) and increased Plan detail (27,45%)
- Factors influencing growth increased in P3 Plans (Table 2) with students primarily reflecting on the impact of outside employment (65%) [particularly in community pharmacy], professional organization activity (33%), and IPPEs (32%).
- Several students expressed no desire to engage in direct patient care.
- Reflections included factors which could negatively impact growth and PIF.
- Compared to P1 reflections, P3 reflections demonstrated increased growth in how students think (0,8), act (36, 81) and feel (42, 52) like pharmacists [Table 3, Figure 2].
- Emerging PIF themes not included in the literature based PIF domains included participation in professional organizations, CPD knowledge/skill development and non-patient care roles.

## DISCUSSION & CONCLUSION

- A portion of P3 students still struggled with articulating specific strategies to achieve stated goals, which serves as an area for instructional improvement.
- In the P3 year, 7 students reflected they did not desire a direct patient care role. While the PIF literature is highly focused on the role of the pharmacist in direct patient care, there are a plethora of roles without direct patient care where pharmacists can positively, yet indirectly, impact patient care.<sup>1</sup>
- The impact of pharmacists from outside employment and IPPE preceptors was noted in numerous student reflections demonstrating the important role our community of practice has on student career choices and PIF. This speaks to the need to continue to develop our alumni and preceptor networks about their important role in student professional development.
- While students reflected positively on the importance of professional organizations, the source we extracted our PIF domains for analysis did not include the role of professional organizations in students PIF.<sup>1</sup>
- The domains of PIF should expand to include non-direct patient care roles, professional organization impact and preceptor/employer influences on PIF.
- Using the CPD process, students created and revised Career Development Plans. P3 Plans demonstrated professional growth through changed career goals, improved strategies and increased evidence of PIF impacted by numerous factors, as students honed career trajectories.

## REFERENCES

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