

# Change in General Enterprising Tendency Scores between P1 and P3 Student Pharmacists

Patricia H. Fabel, PharmD<sup>1,2</sup>; Jordan M. Ballou, PharmD<sup>1,2</sup>; Chengwen Teng, PhD, MS<sup>1</sup>; Brianne Dunn, PharmD<sup>1</sup>; Julie M. Sease, PharmD<sup>1</sup>

<sup>1</sup>University of South Carolina College of Pharmacy, <sup>2</sup>Kennedy Pharmacy Innovation Center



**KENNEDY**  
PHARMACY INNOVATION CENTER

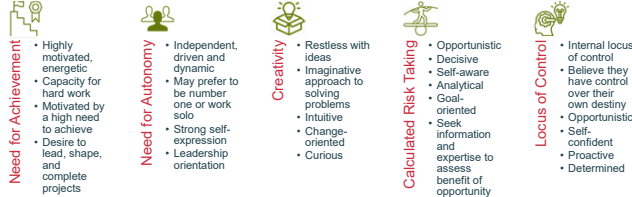


UNIVERSITY OF  
**South Carolina**  
College of Pharmacy

## BACKGROUND

- Standard 4 of the Center for the Advancement of Pharmacy Education 2013 outcomes includes an innovation and entrepreneurship objective.<sup>1</sup>
- To implement assessment methods related to this domain, the University of South Carolina (USC) College of Pharmacy began using the general measure of enterprising tendency (GET2) test to assess student pharmacists' enterprising tendencies in 2018.
- The GET2 test was developed in 1988 by researchers at Durham University Business School in England and is based on five key psychological characteristics of entrepreneurs (Figure 1).<sup>2</sup>
- The overall GET2 score (0 to 100) is categorized into low (< 50), medium (50-79), or high (≥ 80) and indicates their likelihood to start up and manage innovative projects.

FIGURE 1: Enterprising Characteristics Evaluated as part of the GET2 Test



## OBJECTIVE

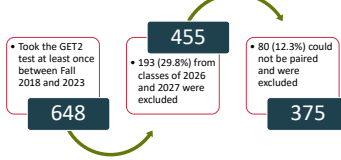
- To assess the change in student pharmacists' GET2 scores from their P1 to P3 year within a Doctor of Pharmacy (PharmD) program.

## METHODS

- USC student pharmacists complete the GET2 test in the fall semesters of the first (P1) and third (P3) professional year with the PharmD program.
- Paired (P1 vs P3) scores were available for 4 cohorts of students – class of 2022, 2023, 2024, and 2025 (Figure 4).
- Data on student participation in various curricular and co-curricular activities and academic performance was also collected and is displayed in Table 1.
- GET2 overall and characteristic scores (Table 2) and categories (Figure 3) were analyzed with Wilcoxon signed rank and chi squared tests, respectively.

## RESULTS

FIGURE 2: Student Pharmacists Included in Study



- More students were categorized as having a low or medium overall GET2 and Need for Achievement score as a P3 than a P1 (Figure 3).
- Overall GET2 and all 5 characteristic scores statistically significantly decreased between P1 and P3 years within the USC PharmD program (Table 2).

TABLE 1: Characteristics of Student Pharmacists

	Total (%) n = 375	Change in Overall GET2 Score between P1 & P3		
		DECREASE	NO CHANGE	INCREASE
Completed Business & Entrepreneurship Program	4 (1.07%)	1 (25%)	0 (0%)	3 (75%)
Participated in Business Plan Competition at least once	23 (6.13%)	8 (34.78%)	4 (17.39%)	11 (47.83%)
Participated in Ownership Bootcamp at least once	42 (11.2%)	15 (35.71%)	5 (11.9%)	22 (52.38%)
Enrolled in PHMY 794: Pharmacy Entrepreneurship elective	26 (6.93%)	13 (50%)	1 (3.85%)	12 (46.15%)
Average P3 Fall GPA (Range)	3.48 (2.48-4.00)	3.46 (2.48-4.00)	3.48 (2.60-4.00)	3.50 (2.51-4.00)
Number of Course Deficiencies				
0	324 (86.4%)	182 (56.17%)	32 (9.88%)	110 (33.95%)
1	22 (5.87%)	10 (45.45%)	3 (13.64%)	9 (40.91%)
2 to 8	29 (7.73%)	21 (72.41%)	1 (3.45%)	7 (24.14%)

FIGURE 3: Percentage of Overall GET2 & Characteristics Categories (Low, Medium, High)

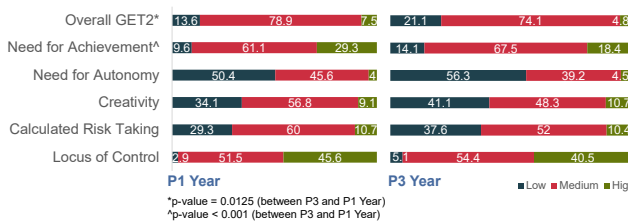
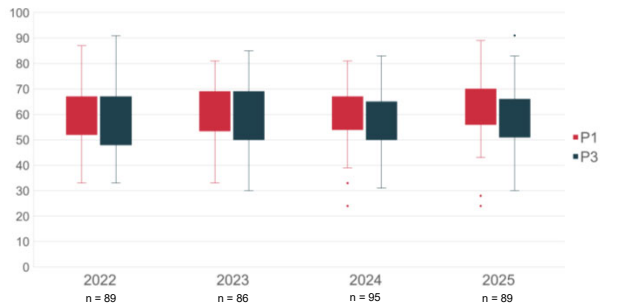


FIGURE 4: Overall GET2 Score by Cohort



## KEY POINTS

- As student pharmacists progress within the USC PharmD program, they are less enterprising and less likely to start up and manage innovative projects.
- Additional research is needed to evaluate the impact different curricular models and co-curricular engagement have on student pharmacists' enterprising tendencies.

TABLE 2: Average (Range) GET2 Overall & Characteristic Scores Between P1 and P3 Year

	Overall GET2	Need for Achievement	Need for Autonomy	Creativity	Calculated Risk Taking	Locus of Control
P1	61.48 (24-89)	68.98 (17-100)	42.76 (0-100)	54.15 (0-100)	55.77 (0-100)	76.16 (25-100)
P3	58.36 (28-91)	64.27 (17-100)	39.83 (0-100)	51.93 (8-100)	52.87 (0-100)	73.26 (17-100)
p-value	< 0.0001	< 0.0001	0.0132	0.0131	0.0091	0.0006

## DISCUSSION

### Limitations

- 80 student pharmacists' GET2 scores could not be paired (due to leaving the program, not completing the test, multiple submissions with inconsistent scores, name change, and repeating P1 or P2 year) and were excluded from analysis.
- Sample sizes of students participating in entrepreneurial curricular and co-curricular activities are too small to determine an impact on GET2 scores.
- Other student pharmacist characteristics, such as employment history, undergraduate courses, and previous degree(s), were not collected and may have impacted scores.

### Conclusions

- Results suggest that, as student pharmacists progress within the PharmD program, they are less enterprising and less likely to start up and manage innovative projects.
- Additional research is needed to evaluate the impact different curricular models and engagement in activities that foster an innovative mindset have on student pharmacists' enterprising tendencies.

## REFERENCES

- Center for Advancement of Pharmacy Education 2013 Educational Objectives. Available from: <https://www.aacp.org/sites/default/files/2017-10/CAP-2013-20%281%29.pdf>. Accessed: 21 June 2024.
- General Measure of Enterprising Tendency Test. Available from: <http://www.get2test.net/>. Accessed 21 June 2024.

**Disclosures:** Authors of this presentation have no financial or personal relationships with commercial entities relevant to this presentation to disclose.

**Corresponding Author:** Patricia H. Fabel, PharmD, BCPS, FAPhA; fabelp@kennedycenter.sc.edu