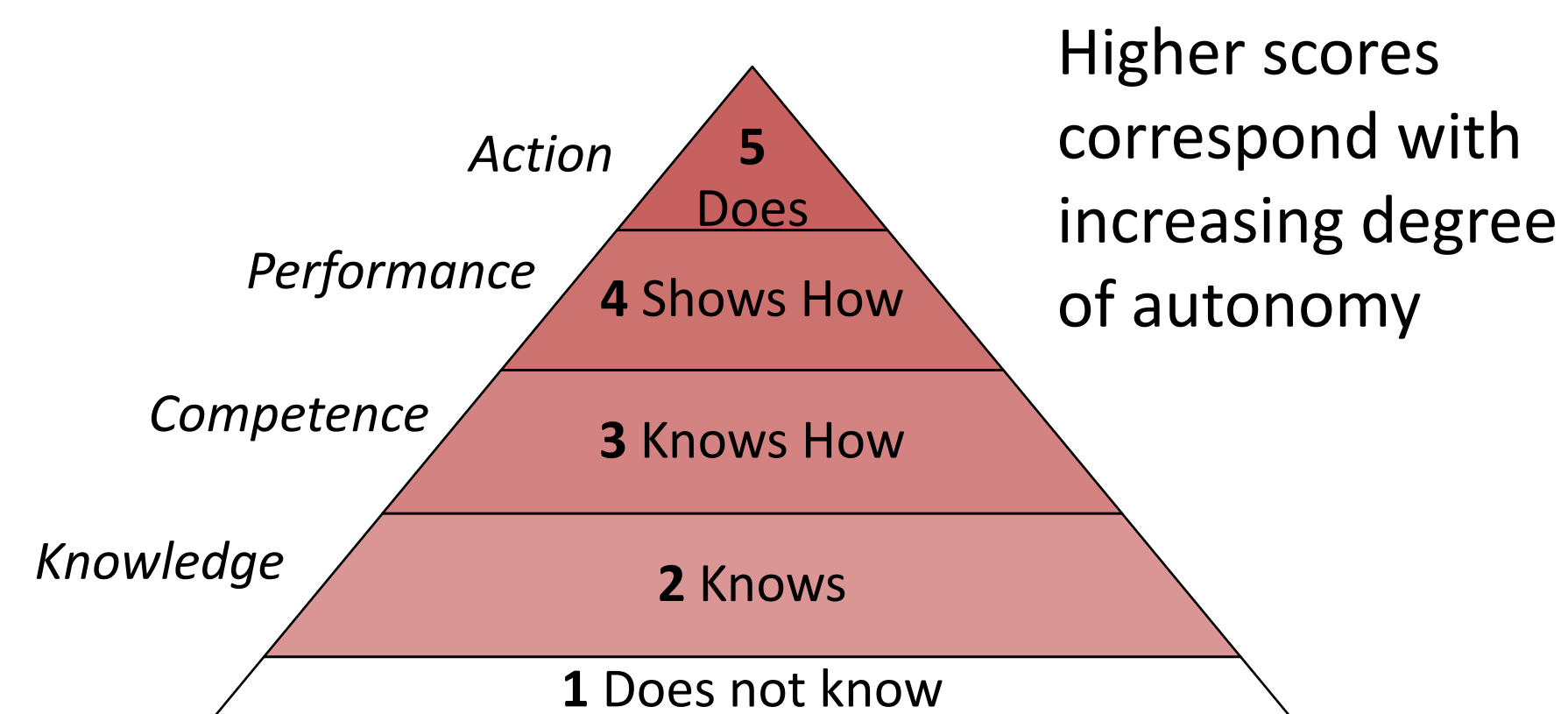


# A Tale of Two Surveys: Differences in Student Confidence Prior to Advanced Pharmacy Practice Experiences

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## Background

- Student readiness to enter advanced pharmacy practice experiences (APPEs) and pharmacy practice is a key element of Standard 24 in the 2016 ACPE Standards<sup>1</sup>
- Self-assessment tools are utilized at the University of Wisconsin-Madison School of Pharmacy to gauge student confidence and readiness
  - PPCP Skills Self-Efficacy Survey (PPCP-SSE)<sup>2</sup>**
    - Validated 29-item questionnaire
    - Items scored on 5-point unipolar scale (1 = not at all confident to 5 = extremely confident)
  - Student Performance Evaluation (SPE)**
    - 19-item evaluation based on CAPE outcomes<sup>3</sup>
    - Used by preceptors to assess students throughout experiential curriculum
    - 15 items scored on 5-point unipolar scale using Miller's Framework for Clinical Assessment<sup>4</sup>



## Objective

To determine student confidence in pharmacists' patient care process (PPCP) skills prior to APPEs, and to compare results using two self-assessment tools.

## Methods

Population: Graduating classes of 2022 and 2023

### PPCP-SSE

- Required survey completed at end of P3 pharmacotherapy skills lab series

### Baseline SPE

- Required survey completed prior to start of first APPE

### Data Analysis

- Results report generated for each survey
- Descriptive statistics used

## Results

- 198/259 (76.4%) students completed both surveys

	Overall Score Mean (range)	Overall Mean Score Interpretation
PPCP-SSE	4.17 (3.87-4.57)	"Very confident" to "Extremely confident"
Baseline SPE	3.30 (2.66-3.87)	"Knows How" to "Shows How"

Comparison of Student Confidence



Student Performance Evaluation (SPE) - BEFORE first APPE

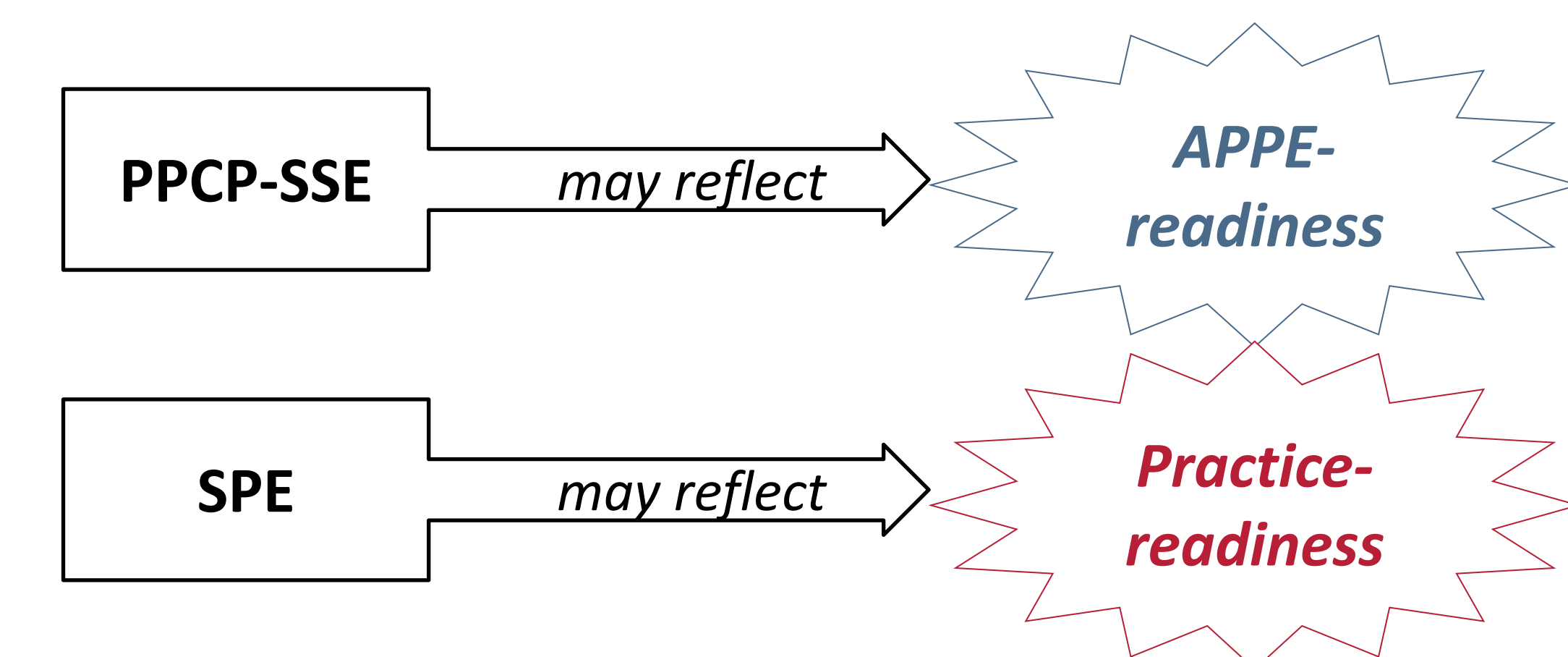
	Mean	SD
Foundational Knowledge	3.21	0.71
PPCP-Collect	3.59	0.71
PPCP-Assess	3.24	0.67
PPCP-Plan	3.05	0.74
PPCP-Implement	3.08	0.81
PPCP-Monitor	3.11	0.70
PPCP-Document	3.34	0.86
Med Use System Manager	2.66	1.10
Health Promotion	3.04	0.92
Population-Based Care	2.90	0.96
Interprofessional Team	3.42	0.90
Verbal Communication	3.87	0.75
Written Communication	3.64	0.79
Self-Awareness	3.87	0.84
Leadership	3.52	0.84

PPCP Skills Self-Efficacy Survey (PPCP-SSE) - AFTER completing spring semester of P3 skills lab series

	Mean	SD		Mean	SD
<b>Collect: For an individual patient, I am confident in my ability to collect...</b>			<b>Care Plan: For an individual patient, I am confident in my ability to... (continued)</b>		
A past medication history	4.48	0.62	Implement a care plan by initiating, modifying, discontinuing or administering medication therapy as authorized	4.03	0.73
A current medication list	4.57	0.55	Implement a care plan by determining appropriate follow-up time	3.87	0.84
Relevant medical history	4.36	0.64	Implement a care plan by providing patient counseling on drug & non-drug recommendations	4.25	0.67
Health/wellness information and lifestyle habits	4.35	0.67	Conduct continuous monitoring and evaluation of medication safety and effectiveness	4.08	0.71
Physical assessment findings from the electronic health record or other form of documentation	4.16	0.82	<b>Collaborate: I am confident in my ability to...</b>		
Health data from the electronic health record or other forms of documentation (i.e., labs, vitals, etc.)	4.38	0.70	Communicate with another health care professional in verbal format	4.21	0.72
<b>Cultural and Social Factors: For an individual patient, I am confident in my ability to assess...</b>			Collaborate with another health care professional to monitor and modify a care plan for a patient	4.21	0.67
Health literacy	4.01	0.76	Collaborate with another health care professional to develop a patient-centered care plan	4.25	0.66
How cultural factors impact health preferences/beliefs	3.91	0.75	Collaborate with a patient to develop a patient-centered care plan	4.27	0.61
Access to medications or other aspects of care	4.12	0.73	Collaborate with another health care professional to implement a care plan for an individual patient	4.26	0.67
Social determinants of health to diminish disparities and inequities	3.98	0.78	Collaborate with a patient to help them successfully implement a care plan	4.28	0.67
<b>Care Plan: For an individual patient, I am confident in my ability to...</b>			Collaborate with a patient to establish a patient-pharmacist relationship that supports engagement and effective communication	4.30	0.68
Identify medication-related problems	3.96	0.70	Document a care plan in the medical record	4.17	0.66
Prioritize medication-related problems	3.91	0.75			
Assess each medication for safety	4.17	0.72			
Assess each medication for effectiveness	4.24	0.71			
Assess each medication for appropriateness	4.17	0.70			
Develop a care plan that addresses med-related problems & optimizes medication therapy	4.01	0.71			
Develop a care plan that sets goals of therapy for achieving clinical outcomes in context of patient's overall health care goals & access to care	4.03	0.72			

## Discussion

- Students entering APPEs have an appropriate level of confidence knowing they have a year of additional experiential training
- Students consistently rated themselves higher on the PPCP-SSE as compared to the SPE
  - May be due to the SPE scale incorporating autonomy



### Limitations

- PPCP-SSE was a "post" survey following completion of skills lab curriculum whereas SPE was a "pre" survey prior to completion of APPE curriculum
- Preceptors can review SPE self-assessments so students may be more modest
- Students may rate themselves lower on SPE to show improvement in their performance
- Unknown impact of COVID19 pandemic on student self-assessment

### Future Directions

- Incorporate additional years of data
- Correlate to preceptor performance evaluations and P3 performance-based exam scores

## Conclusions

- Student confidence in performing PPCP skills prior to APPEs varies based on the setting and timepoint
- PPCP-SSE may be a marker of APPE-readiness whereas the SPE may be a marker of practice-readiness

## Disclosures

Authors of this presentation have nothing to disclose concerning possible financial or personal relationships that may have a direct or indirect interest in the subject matter of this presentation.

## References

