

Student Anxiety Towards Performance-Based Assessment with Repeated Exposure

Daniel S Longyhore, Pharm.D., M.S. Ed., BCACP



Background

State anxiety has *not* been linked to success in performance-based assessment (PBA) in pharmacy education¹. However, students continue to discuss differing levels of anxiety when new PBAs are introduced into a curriculum. The objective is to identify the difference in student anxiety between those first exposed to a moderate-risk summative PBA versus those with repeated exposure.

Methods

Student anxiety was assessed using the Spielberger State-Trait Anxiety Index (STAI). Students completed this survey in their third-professional year, with Group A completing it in 2015 and Group B in 2017. Both groups completed the survey two weeks prior to their end-of-semester OSCEs. Group A was new to OSCEs and had not undergone simulation as a progression-related exam. Group B had experienced OSCEs as a progression-related exam since starting pharmacy school. Anxiety scores for trait and state were compared between groups.

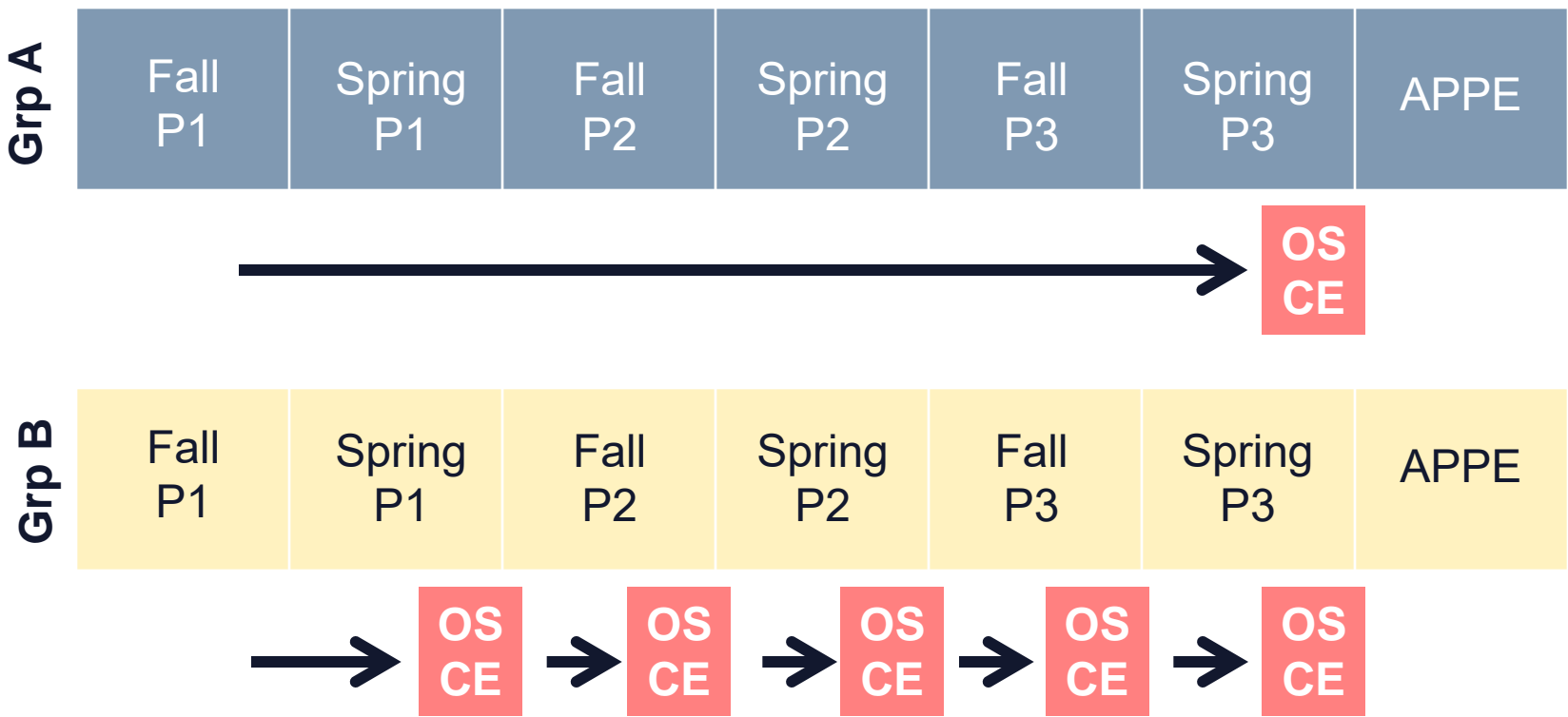
¹Longyhore DS (2017). Pharmacy Student Anxiety and Success With Objective Structured Clinical Examinations. *American Journal of Pharmacy Education* 81(1), 7. doi: 10.5688/ajpe8117

Test-Sophistication Hypothesis

“Test-taking skills”

Anne Anastasi

...describes how an initial exposure to testing may have an effect on performance in subsequent testing opportunities. In addition, *following initial exposure, participants report feeling less test-related anxiety..*



State and Trait Anxiety

Charles Spielberger

State Anxiety: the anxious feelings reported by a person in response to a particular event or stimulus.

Trait Anxiety: the “baseline” anxiety reported by a person as part of their every-day level of activity.

Results

Men		Pop.	Grp A (n=25)	Grp B (n=25)
	State	35.7 to 36.5	47.4	39.3*
Women	Trait	34.9 to 38.3	38.2	41.1

Men		Pop.	Grp A (n=34)	Grp B (n=42)
	State	35.3 to 38.8	48.5	39.9*
Women	Trait	34.8 to 40.4	43.6	45.9

*significant versus Group A.

Discussion Points

When implementing new methods for performance based assessment (e.g. OSCEs), be prepared to manage higher than expected levels of student anxiety.

Moderate-to-high stakes “practice” sessions may be of benefit to reduce student anxiety.

It remains to be studied if performance-based assessments conform to the test-sophistication hypothesis with regard to student performance.