

# Evaluating the Impact of Cognitive Test Anxiety on NAPLEX and Didactic Curriculum Performance: a Multi-site Study

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## BACKGROUND

- Approximately 21% or 1 out of 5 students in the National college health assessment indicated being diagnosed with anxiety.<sup>1</sup>
- College students mental health is becoming a growing concern among higher education faculty members and universities with anxiety and depression being the most common issues students face.
- Test anxiety reasonably may follow similar trends among our students and has potential to seriously affect student performance and well being with multiple negative correlations to student well being and academic performance.<sup>2,3,4</sup>
- Cognitive interference model suggests that anxious students perform worse on exams not due to intellectual ability, but rather that the brain cannot focus on task relevant material due to the flurry of task-irrelevant thoughts that steal working memory.
- Pharmacy students similar to other professions must successfully pass a single high-stakes exam the North American Pharmacist Licensure Examination(NAPLEX) to practice pharmacy

## PURPOSE

- To evaluate the prevalence and impact of cognitive test anxiety on student pharmacists

## METHODS

- Researchers from 5 Schools of Pharmacy will deliver a survey containing the Cognitive Test Anxiety Scale- 2 (CTAS-2) to 4th year pharmacy students who voluntarily participate.
- Results will be correlated to NAPLEX performance along with other measures that have been correlated to academic success in pharmacy education
- CTAS-2 scores range from 0 to 96 with higher numbers indicating greater test anxiety.
- Evidence based ranges of test anxiety cut offs:<sup>5</sup>
  - Low test anxiety (CTAS-2: 24-43)
  - Moderate test anxiety (CTAS-2: 44-66)
  - High test anxiety (CTAS-2: 67 and above)

Please complete the following items using the 4-point scale below.

1	I lose sleep over worrying about examinations.	1	2	3	4
2	I worry more about doing well on tests than I should.	1	2	3	4
3	I get distracted from studying for tests by thoughts of failing.	1	2	3	4
4	I have difficulty remembering what I studied for tests.	1	2	3	4
5	While preparing for a test, I often think that I am likely to fail.	1	2	3	4
6	I am not good at taking tests.	1	2	3	4
7	When I first get my copy of a test, it takes me a while to calm down to the point where I can begin to think straight.	1	2	3	4
8	At the beginning of a test, I am so nervous that I often can't think straight.	1	2	3	4
9	When I take a test that is difficult, I feel defeated before I even start.	1	2	3	4
10	While taking an important examination, I find myself wondering whether the other students are doing better than I am.	1	2	3	4
11	I tend to freeze up on things like intelligence tests and final exams.	1	2	3	4
12	During tests, I find myself thinking of the consequences of failing.	1	2	3	4
13	When I take a test, my nervousness causes me to make careless errors.	1	2	3	4
14	My mind goes blank when I am pressured for an answer on a test.	1	2	3	4
15	During tests, the thought frequently occurs to me that I may not be too bright.	1	2	3	4
16	During a course examination, I get so nervous that I forget facts I really know.	1	2	3	4
17	I do not perform well on tests.	1	2	3	4
18	During tests, I have the feeling that I am not doing well.	1	2	3	4
19	I am a poor test taker in the sense that my performance on a test does not show how much I really know about a topic.	1	2	3	4
20	After taking a test, I feel I should have done better than I actually did.	1	2	3	4
21	My test performances make me believe that I am not a good student.	1	2	3	4
22	I often realize mistakes I made right after turning in a test.	1	2	3	4
23	When I finish a hard test, I am afraid to see the score.	1	2	3	4
24	I don't seem to have much control over my test scores.	1	2	3	4

Note. 1 = Not at all typical of me; 2 = Somewhat typical of me; 3 = Quite typical of me; 4 = Very typical of me.

## DISCUSSION

- Test anxiety may affect more pharmacy students than faculty or students currently realize.
- Given the magnitude of consequences financial and otherwise to students who unsuccessfully attempt the NAPLEX or worse do not matriculate through the program.
- Test anxiety although not the sole contributor may be one of the easier contributors to modulate the effect of.
- If negative correlations are found between CTAS-2 and academic performance it may be reasonable to consider screening students for test anxiety.
- Interventions for test anxiety exist and many are easy and could be implemented with little faculty or student effort.

## DISCLOSURES

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

## REFERENCES

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