

Evaluating the Effectiveness of a Pharmacy Pre-Matriculation Program (PMP) through Multi-Year Comparative Baseline Performances



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METHODS

- A 6-week summer Pre-Matriculation Program (PMP) funded by the THECB Minority Health Research and Education Grant Program was implemented at Texas A&M College of Pharmacy for three consecutive years (2018 – 2020).
- The PMP was specifically designed to improve pharmacy baseline performances of **underrepresented and first-generation** pharmacy matriculated students.
- This 6-week program was built using five key content areas (*Part I*: calculations; *Part II*: organic chemistry, biochemistry, physiology, and medical terminology) that are considered essential to first-year pharmacy academic success.
- Student self-paced online modules (with in-built assessments) were developed for each of the content areas by five pharmacy faculty subject experts alongside academic coaching and peer mentoring.
- Pre/post*-PMP baseline assessments on each of the content areas were administered to evaluate the effectiveness of PMP and compared with the *non*-PMP matriculated students.
- The test questions remained the same for *pre*-PMP, *post*-PMP and *non*-PMP baseline readiness assessments.

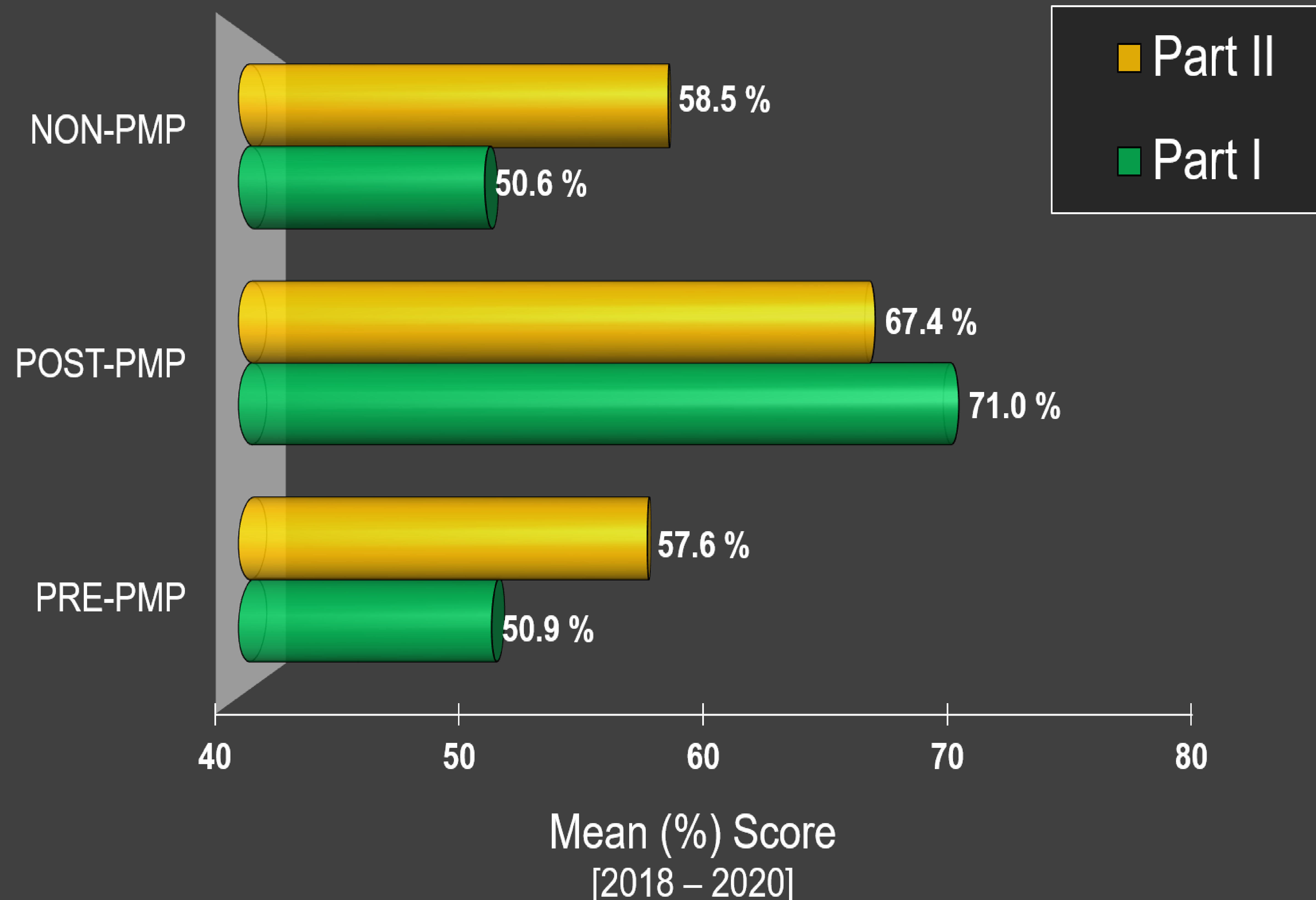
OBJECTIVE

To evaluate the effectiveness of a Pre-Matriculation Program (PMP) by comparing pharmacy baseline performances of PMP students with Non-PMP students within three cohorts.

3-Year Comparative Pharmacy Baseline Performance [2018 – 2020] Pre-PMP vs Post-PMP vs Non-PMP

Part I: Calculations

Part II: Organic Chemistry, Biochemistry, Physiology, and Medical Terminology



RESULTS

- 21.3% (23/108), 33.6% (38/113) and 41.4% (46/111) of matriculated pharmacy students participated in PMP during 2018, 2019 and 2020 respectively.
- PMP participants' mean % score (baseline assessments) *positively* shifted at *post*-PMP (*Part I*: 71.0%; *Part II*: 67.4%) when compared to their own *pre*-PMP performance (*Part I*: 50.9%; *Part II*: 57.6%) and when compared with the *non*-PMP group (*Part I*: 50.6%; *Part II*: 58.5%) averaged over the three cohorts.

CONCLUSIONS

- The implementation of the 6-week summer PMP resulted in a significant increase in participants' knowledge in all five content areas studied over a three-year period.
- Such positive PMP intervention is predictive of enhancing first-year pharmacy academic success, especially for **underrepresented and first-generation** pharmacy students.

ACKNOWLEDGMENT

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