

# **PREDICTING NURSING STUDENTS PASSING THE ATI COMPREHENSIVE PREDICTOR EXAMINATION**

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# PURPOSE

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## × Purpose:

- + to determine if there were any correlations between the 2014 graduating class and their Test of Essential Academic Skills (TEAS) test scores, taking remedial math or remedial English, and failing the ATI Comprehensive Predictor Examination.

PURPOSE?



# BACKGROUND

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# BACKGROUND

- ✖ ATI Nursing Education has published two research briefs regarding some of the indicators that help to predict the passing of ATIs Comprehensive Predictor examination.
- ✖ Each study was based on large sample sizes and one study was able to demonstrate that achieving a level two or above on the Medical-Surgical, Nutrition, and Maternal-Newborn Content Mastery Series tests predicted passing the ATI Comprehensive Predictor exam.



# BACKGROUND

- ✖ Faculty noted students in one cohort had more difficulty passing the ATI Comprehensive Predictor than previously noted.
- ✖ Faculty wanted to determine if they could see any correlations in the predictors in the 2014 graduating class.
- ✖ Weak subject areas were identified.



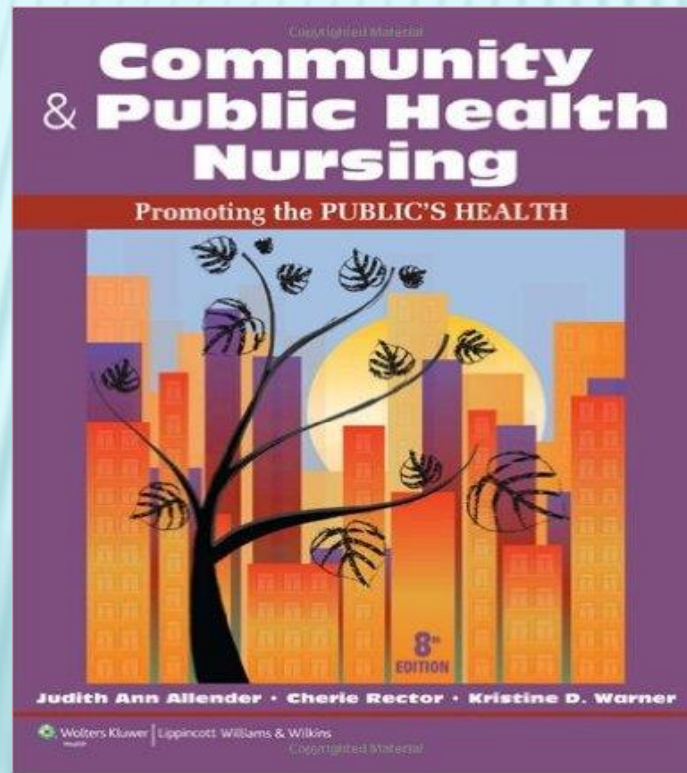
# BACKGROUND

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- ✖ ATI research results indicate that the strongest correlation is with the Adult Medical/Surgical test ( $r = .577$ , 14.9%)
- ✖ Second strongest correlation is with Nutrition test ( $r = .541$ , 13.9%)
- ✖ Third strongest correlation is with Maternal/Newborn ( $r = .527$ , 12.9%)
- ✖ Fourth strongest is with Pharmacology ( $r = .507$ , 11.5%)

# BACKGROUND

- ✖ Community Health makes the least contribution to the prediction of passing the ATI comprehensive predictor (3.9%).





# BACKGROUND

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- × Students that fail to achieve at least Level 2 Proficiency or above on their Content Mastery tests (even one test), the likelihood they will pass the NCLEX drops dramatically





# IRB APPROVAL

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- ✖ The study was approved by the IRB

Institutional review  
board (IRB)



# RESULTS

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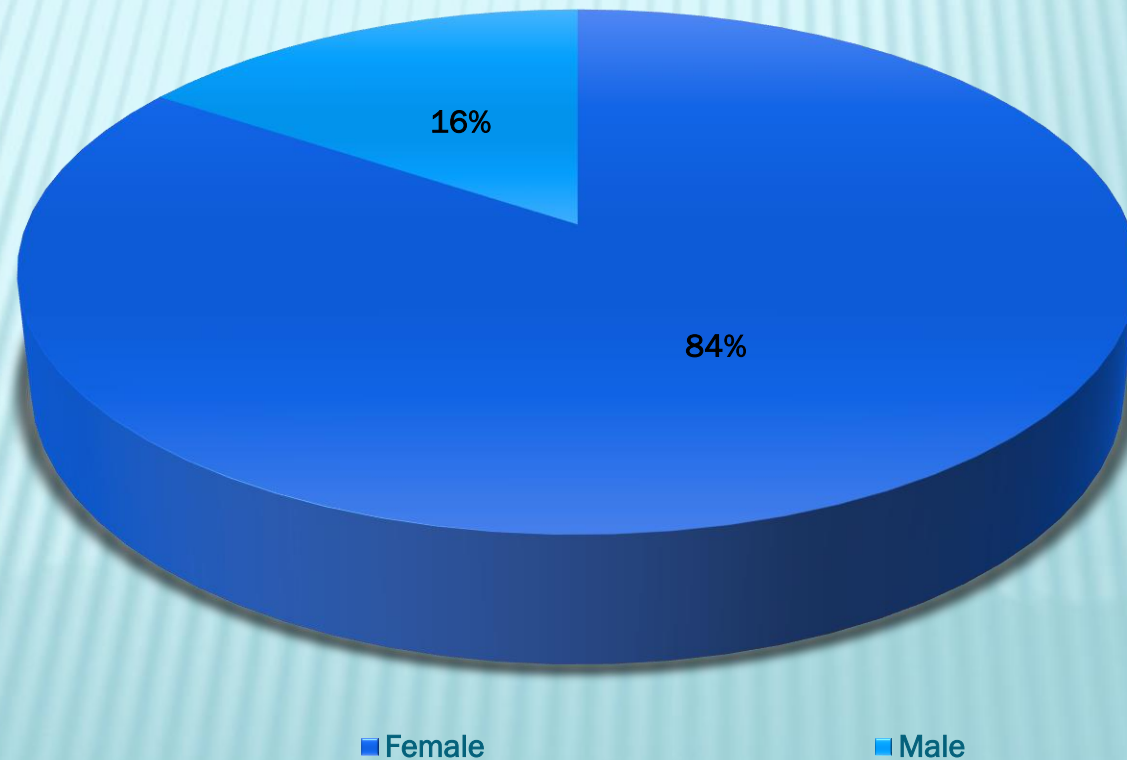
- ✖ Data from 51 student subjects were entered into a SPSS file.



# RESULTS

43 FEMALES AND  
8 MALES  
RANGING IN AGE FROM 23 TO 49.

Gender





# ETHNICITY

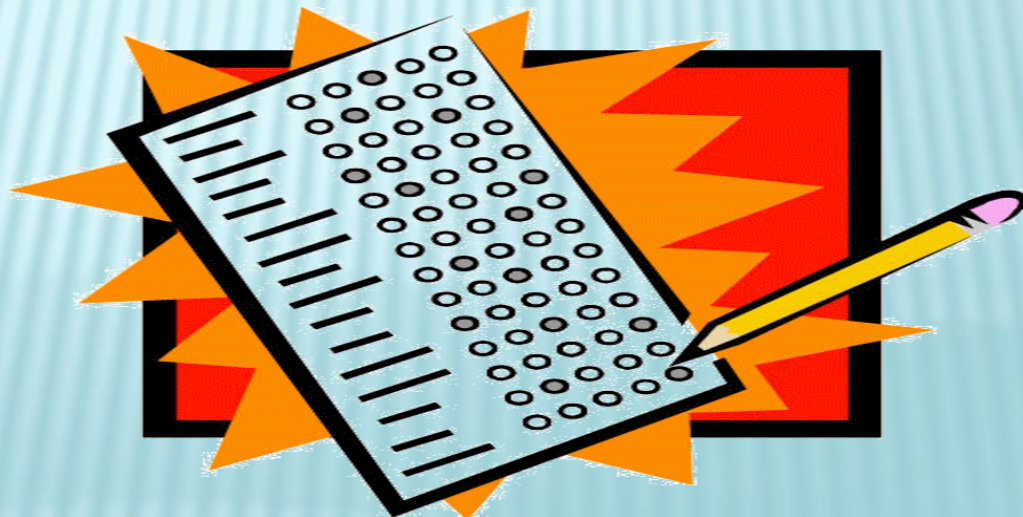
- 37% Caucasian,
- 20% Asian,
- 13% Hispanic,
- 7% African American,
- 5% Filipino,
- 4% Asian Indian,
- 3% Other,
- two declined
- one Native American



# RESULTS

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- ✖ Average admitting GPA for these students was 3.59.
- ✖ Admitting TEAS test score was 81.5%
- ✖ Currently students are allowed to retake the TEAS test as many times as they desire.



# RESEARCH QUESTION

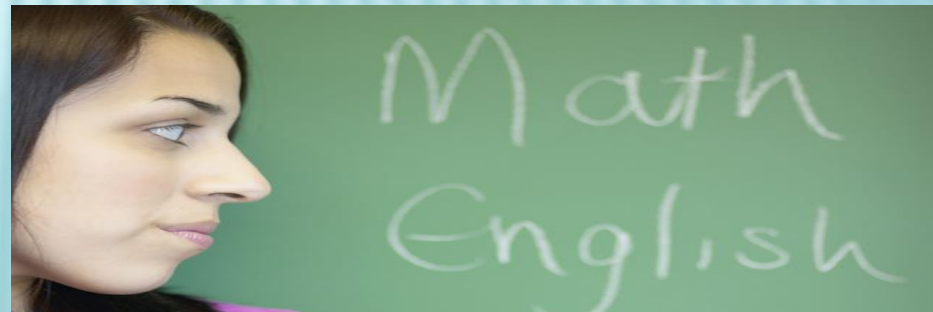
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- ✖ TEAS test scores and passing the Comprehensive Predictor were correlated,  $r=0.538$  with  $p<.000$ .
- ✖ Approximately 30 percent of the variation in the January 2014 Comprehensive Predictor scores were accounted for by the students' TEAS test scores.



# MATH AND ENGLISH REMEDIATION

- ✖ Math remediation: the mean score for both groups was identical to three decimal places: 0.724.
- ✖ Similarly, English remediation: the mean score was 0.712
- ✖ Mean score for those who did not remediate in English was 0.741; even so, this was not statistically significant.



# PHARMACOLOGY TREND

- ✖ One subject area, Pharmacology was proven to be difficult for not only this 2014 group of students, but previous groups.





# DISCUSSION

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- ✖ TEAS test scores for this group of students did correlate with passing the ATI Comprehensive Predictor Examination.
- ✖ This is similar to research conducted by ATI.
- ✖ However, there was no statistically significant difference in the ATI Comprehensive Predictor Examination scores for those students who took remedial math or those who took remedial English.





# DISCUSSION

- ✖ Nurse educators need to be aware the TEAS test scores do help to predict the success of nursing students in the nursing program.
- ✖ Since the TEAS test scores are used as part of the entrance requirements into many traditional BSN programs, nursing faculty need to be made aware of these scores and assist students who score low on the TEAS test to provide extra assistance throughout their BSN program.



# DISCUSSION

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- ✖ Important for nurse educators to decrease attrition rates in order to reduce faculty and students' time and costs.
- ✖ Increased attrition may leave spots in a program open causing other potential students to miss out on the opportunity to be admitted into a nursing program.
- ✖ Curriculum in this program is being revised to include more pharmacology for future students since this was noted as a trend.

# IMPLICATIONS

- ✖ Students should be made to remediate if they do not achieve Level 2 Proficiency or above on the Content Mastery Series in every course
- ✖ The ATI Nutrition test needs to be offered prior to the Comprehensive Predictor
- ✖ Consider the level used for passing the ATI Comprehensive Predictor and sticking to it-be willing to fail students



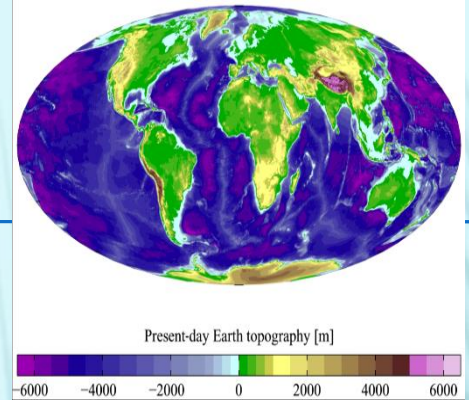


# ATI CAPSTONE COURSE

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- ✖ Two students took the ATI capstone course
- ✖ ATI provides students with review, assessments to evaluate content knowledge and most importantly with remediation. Completed with a focused review and assignments are posted by their ATI educator.
- ✖ According to Clark, “We have seen on average a 25 point increase in ATI predictor scores with the ATI Capstone content review” (Clark, K., 2014, personal communication).

# GLOBAL IMPLICATIONS



- ✖ Nursing students that take remedial English or Math are not necessarily at a disadvantage to those who do not.
- ✖ International students who read and write English at a high-remedial level or need assistance with math should be encouraged to remediate in English or Math if they choose to pursue a nursing career.



# GLOBAL IMPLICATIONS

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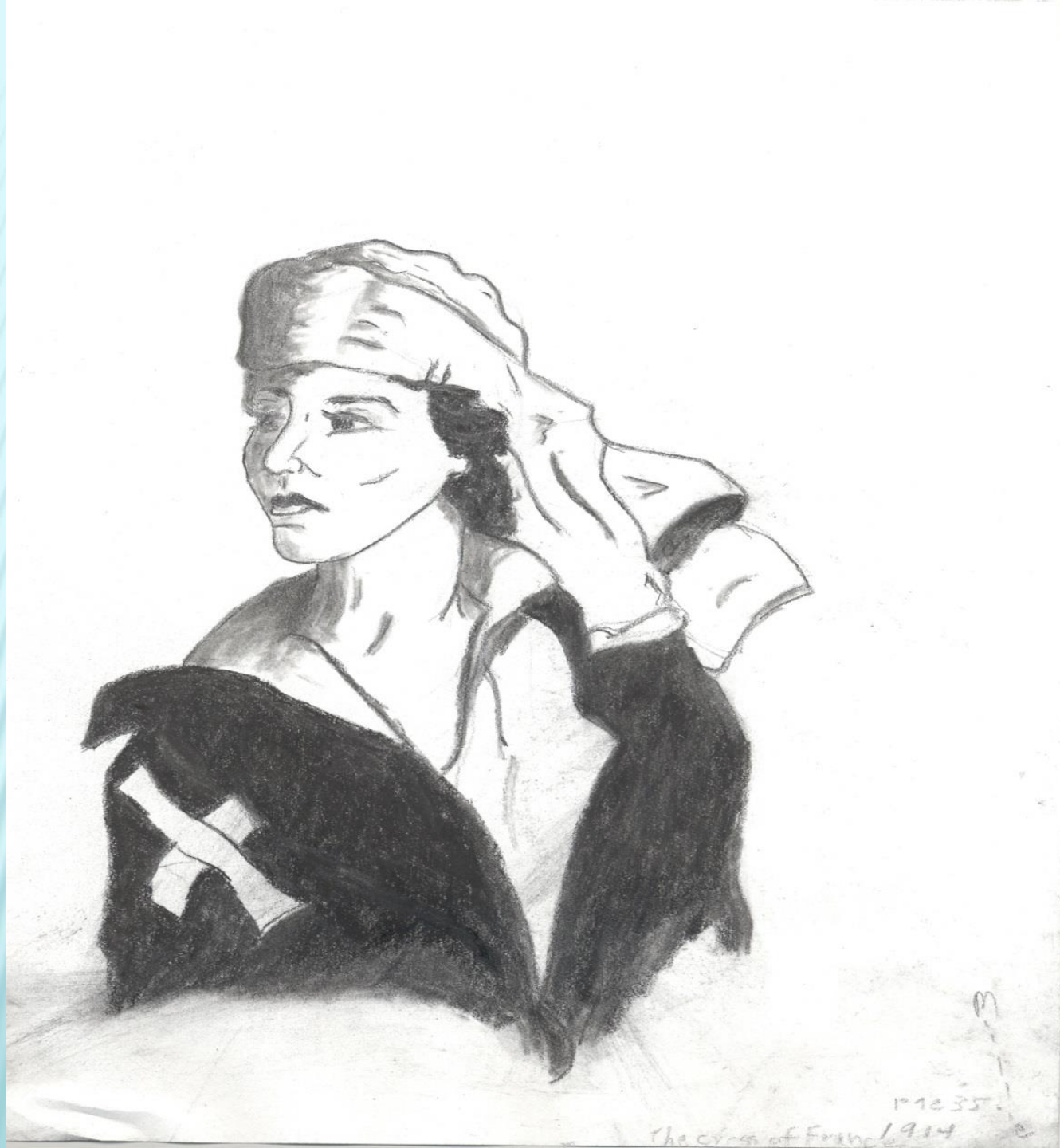
- ✖ It is important both locally, nationally, and globally to develop and maintain metrics of student success which can track student performance. This allows nursing schools to utilize their scarce resources better; a topic of great concern in less affluent nations.
- ✖ Further research is required on what some of the other predictors are not only for this group of nursing students, but also so nurse educators can enhance the success of nursing students throughout their nursing programs.



# REFERENCES

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- ✖ ATI Nursing Education. (n.d. a). Research brief: Understanding the preparation needs of post-graduation and Pre-NCLEX examinees. ATI Nursing Education. Retrieved from [http://www.atitesting.com/Libraries/pdf/Research\\_Brief\\_-\\_Students\\_Preparedness\\_prior\\_to\\_NCLEX.sflb.ashx](http://www.atitesting.com/Libraries/pdf/Research_Brief_-_Students_Preparedness_prior_to_NCLEX.sflb.ashx)
- ✖ ATI Nursing Education. (n.d. b). Research brief: Using RN Content Mastery Series test data to identify student needs. ATI Nursing Education. Retrieved from [http://www.atitesting.com/Libraries/pdf/Research\\_Brief\\_-\\_RN\\_CMS\\_final.sflb.ashx](http://www.atitesting.com/Libraries/pdf/Research_Brief_-_RN_CMS_final.sflb.ashx)



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