

# Make or Break: The First EMT Exam

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Hypothesis: The first EMT unit exam is a significant predictor of course completion and certifying exam score

## Introduction

This study was designed to see how an EMT student's first unit exam score was in predicting course completion and certifying exam scores. EMS educators and program directors could benefit from this information to identify at risk students earlier, develop remediation plans, or to schedule the first exam before course drop dates. Students could benefit from the data to help predict how likely they are to be successful after their first exam.

## Methods

A retrospective analysis of programmatic educational data was conducted. Five separate courses from a three-year period were examined. The curriculum and instructors used for all courses were consistent. Only students that took the first exam were included in this study.

## Results

A total of 107 EMT student records were included. According to an analysis of variance, a higher first exam score makes a student more likely to complete the course and score well on the certifying exam. When looking at a specific "passing" cut off score of 70 on the first exam, 66 students passed and 41 failed. Of the 66 that passed 62 completed the course and all completers passed the certifying exam. Of the 41 that failed the first unit exam, only 9 finished the course. Of these 9 completers, 5 passed the certifying exam while 4 failed their first attempt. The correlation is .741 with a P value of  $<.001$ . Looking even further, when examining students scoring between 71-80 against students scoring between 81-90, and 91-100, there is no significant difference between the groups in terms of course completion.

## Conclusion

The hypothesis was proved. First exam scores are a significant predictor of course completion and certifying exam scores. Students scoring well on the first exam are much more likely to complete the course and pass the certifying exam.