

# Impact of Field of Study on Forensic Knowledge

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**Abstract:** Forensic science is a much-needed field to society, as forensic science provides the foundation for investigations from the crime scene to the laboratory. Often, forensic science is not widely taught to the students of America, leading to misunderstandings that are conveyed from fictional television. This study was conducted to attempt to see if the field of study of college students and college graduates affects their forensic knowledge. In this study, forensic knowledge will be defined as how many questions over general forensic science knowledge can be answered correctly. These findings can be applicable in the sense that they can be used to understand to what degree a person's major impacts how much they are aware of the investigative processes and analysis of crime scenes and evidence. To answer this, a survey was conducted consisting of two preliminary questions, and ten knowledge-based questions. After all the responses were recorded, the results were analyzed and compared to find that although a student's field of study may have some degree of impact on their forensic knowledge, it may not be the only variable that should be relied upon.

**Keywords:** *Field of Study, Forensics, Survey, College*

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Forensic science is an integral part of criminal and laboratory investigations. The general public's conceptions of the proceedings of forensic science and criminal justice have been shown to be influenced by their portrayal in television shows and movies. These misconceptions have been dubbed "the CSI effect" (Melinek 2018). However, there must be other variables, besides the CSI effect, that could possibly explain what people understand about forensic science. If a person has a stronger background in science, they may have a better understanding of general forensic science. This brought up the question: can a

person's knowledge of forensic science be affected by their field of study in college? This study will attempt to answer that question by asking current and former college students from a variety of disciplines to answer general questions about forensic science.

## Materials and Methods

To start, the survey was conducted using Google Forms and consisted of two questions to establish the personal profile of each respondent while keeping anonymity and ten

general introductory forensic science questions. These questions established what each respondent's general field of study was and whether they have taken a college-level science class. The first question was included to set field of study up as the independent variable and the dependent variable being the average of forensic science-based questions answered correctly for each field of study. The latter question was included to represent a confounding variable. Zero replications were done.

## Results

The survey was sent out to thirty-five people, and twenty-six people completed the survey. Twelve respondents said they study science, ten study art, two study education, and two study engineering. Ultimately, the field of study with the most knowledge of forensics science was respondents who study science with an average of 6.5 questions correct, followed by respondents who study art with an average of 4.6 questions correct. Respondents who study engineering had the third highest knowledge of forensics with an average of 5 questions correct, lastly followed by respondents who study education with an average of 4 questions correct (Figure 1). Respondents who have taken at least one science course had an average score of 6 questions correct and respondents who have not taken any university-level science courses had an average score of 4.4 questions correct (Figure 2).

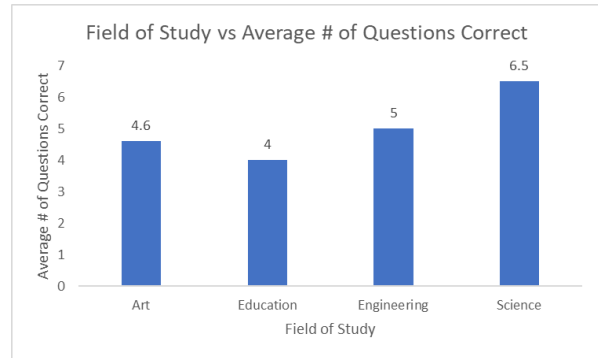


Fig. 1. Relationship between Average Number of Questions Answered Correctly and Field of Study

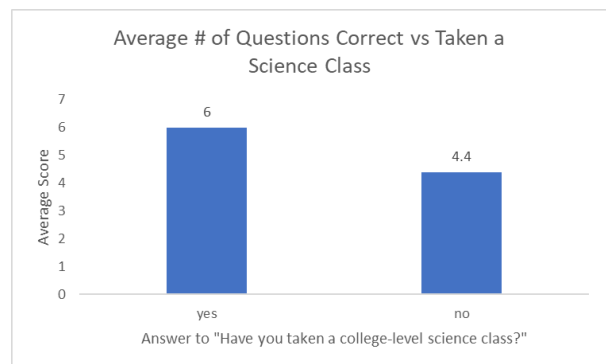


Fig. 2. Relationship between Average # of Questions Answered Correctly and if a Science Class has been Taken

## Discussion

Based on the results of the survey, field of study seems to show a correlation with how much a person understands about forensic science. If a respondent answered that their field of study was science, they were more likely to have a greater knowledge of forensic science than the other fields of study that were surveyed. Secondly, whether the respondents had taken a college-level science class was recorded, because it could potentially impact the validity of whether the knowledge of forensics is dependent only on the respondents' field of study. Because some

majors require science classes to be taken even if the major is not a field of science, this could potentially affect how much a person could understand about forensic science, as basic science courses teach laboratory etiquette and various scientific methods that are applied in forensic science. Because some of the respondents declared their field of study as something other than science and reported that they have taken a science class, this could possibly be a confounding

variable. Respondents who answered that they have taken a college-level science class had a higher average score than those who answered that they have not taken a college-level science class. Therefore, the results of the survey suggest that although studying science correlates with the amount of forensic science related questions you can answer correctly whether the respondent has taken a college-level science course impacts the reliability of those results.

**References:**

Melinek, J. 2018. 'CCI' is Dead Wrong About Forensics.  
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