

Criminalistics Section - 2015

B46 Demystifying the American Board of Criminalistics Examination

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After attending this presentation, attendees will understand how factors such as hours of study, educational background, and years of professional experience impact performance on the American Board of Criminalistics (ABC) certification examinations.

This presentation will impact the forensic science community by offering information that will help individuals understand the purpose of the ABC, the history of the examinations, their success rate, and their performance trends.

In light of the 2009 National Academy of Sciences Report, Strengthening Forensic Science in the United States: A Path Forward, and the subsequent creation of the National Commission on Forensic Science, many forensic scientists are considering pursuing certification. The ABC at present provides a path to professional certification to forensic scientists seeking peer recognition of competency in six areas of criminalistics (Comprehensive Criminalistics, Drug Analysis, Fire Debris, Molecular Biology, Hairs & Fibers, and Paints & Polymers) as well as maintenance of certification in the disciplines of General Criminalistics and Biochemistry. At present, the ABC certifies over 1,000 scientists among these disciplines. Prospective applicants must first pass a credential review and then successfully challenge a written examination that assesses knowledge, skills, and abilities within the discipline. A more thorough description of this process is available at www.criminalistics.com.

This presentation describes post-examination reviews that the ABC Examination Committee uses to assess the efficacy of the examination process. Data collected in the examination process includes self-reported demographic information (e.g., education major, degree, years of experience, and hours devoted to study), examinee critiques, and examination scores. Examination scores are first correlated against the demographic information. Separately, test scores are used to monitor the performance of each examination over time and to compare the performance of different examinations.

Analysis of the demographic information clearly shows a positive correlation between the hours of study and a successful outcome for the test applicant. This review shows that within the independent examinations, the success rate is stable through time, while also demonstrating varying levels of difficulty between the individual examinations. For example, whereas each examination is based on a maximum score of 200, the Drug Analysis median test scores varied only two points (148 to 150) over the course of three versions of this examination over a seven-year period, while the difficulty between examinations is demonstrated by median test score values ranging from 133 for the Comprehensive Criminalistics Examination to 165 for the Paints & Polymers Examination.

The ABC Examination Committee reviews all of this data to monitor success rates of the applicants and performance of the examinations.

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