ABSTRACT

Although women are qualified and capable of being successful in science, technology, engineering, and mathematics (STEM) majors, only a fifth to a third of the STEM fields are composed of women. In contrast, nationally forensic science undergraduate and graduate programs (also a STEM major) average a higher percentage of female students. The purpose of this research was to determine why women are choosing forensic science as a career path over other STEM majors. A survey was sent to current female forensic science students and recent graduates. Based on their answers, many knew they wanted to enter forensic science before they started college, and were influenced by popular forensic television shows and fiction books. A follow-up research project tried to determine at what point during a woman’s education she is mostly likely to be discouraged from pursing a STEM degree and the common sources of that discouragement. A survey was sent to female university faculty teaching in STEM fields. Their responses were compared to the forensic science survey results.

INTRODUCTION

The advancement of women in academia has been compared to the advancement of female physicians. Both careers have high workload and high stress, yet medicine seems to be doing a better job at recruiting and retaining women [1]. However, in 2005, 28% of all medical faculty members were women while the first year medical student population was 45% female [2].

Jones found that the female faculty in STEM departments were less satisfied with their jobs and were given less opportunity for advancement [3]. The recruitment and retention rate of women in STEM academic positions does not match the number of women pursuing STEM degrees. Possible sources of discouragement must be identified in order to correct it. This research project seeks to address this issue.

The female to male ratio of students in forensic science programs, both undergraduate and graduate, does not reflect the same trend as STEM majors. Nationally, forensic science programs average 78% female students [4] with some universities reporting even higher percentages.

The purpose of this research is to determine why women are choosing forensic science as a career path over other STEM majors and identify the sources of discouragement.

METHODS & MATERIALS

FORENSIC SCIENCE SURVEY

A confidential survey was designed to determine what undergraduate STEM degree the Marshall University forensic science graduate students and alumni were switching from in order to pursue their Master’s degree in forensic science. The survey also incorporated questions to identify any events in their personal life that led them to their choice.

STEM FACULTY SURVEY

A confidential survey was designed to determine at what point during a woman’s education is she mostly likely to be discouraged from pursing a STEM undergraduate or graduate degree, and the sources of discouragement. Participants were recruited from the female faculty members in the College of Science, School of Medicine, and Forensic Science Program at Marshall University.

RESULTS

Why More Women are Pursuing Forensic Science Graduate Degrees Instead of Other Science, Technology, Engineering, and Math (STEM) Degrees: A Qualitative Study

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Although women are qualified and capable of being successful in science, technology, engineering, and mathematics (STEM) majors, only a fifth to a third of the STEM fields are composed of women. In contrast, nationally forensic science undergraduate and graduate programs (also a STEM major) average a higher percentage of female students. The purpose of this research was to determine why women are choosing forensic science as a career path over other STEM majors. A survey was sent to current female forensic science students and recent graduates. Based on their answers, many knew they wanted to enter forensic science before they started college, and were influenced by popular forensic television shows and fiction books.

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REFERENCES


CONTACT

Catherine G. Rushton, MSFS
Email: rushton1@marshall.edu