Public Abstract
First Name: Deborah
Middle Name: Melissa
Last Name: Martin
Adviser's First Name: Cynthia
Adviser's Last Name: Frisby
Co-Adviser's First Name:
Co-Adviser's Last Name:
Graduation Term: SP 2015
Department: Journalism
Degree: MA
Title: Women in science: are portrayals on primetime television negative, and what are effects of exposure to such content?

Twenty years ago, the U.S. Department of Education began investing millions to get more girls interested in science, technology, engineering and math – or STEM – fields. Yet the needle has barely moved, and the American Association of University Women cite that media continually promotes science is not for girls.

Therefore, led by Albert Bandura’s Social Cognitive Theory that individuals “learn cultural patterns of behavior through repeated observations of actual models, such as teachers, as well as from symbolic models, such as those in the media,” (Long, Steinke, Applegate, Knight Lapinski, Johnson & Ghosh, 2010, p. 358), this experiment investigated, “Is there a relationship between exposure to entertainment TV’s portrayal of women in science, which may be negative, and the self-efficacy of female college students, ages 18 to 24?” a population making career decisions.

The Independent variable was exposure to media, manipulated two ways; a positive and negative portrayal captured from each of two primetime television programs, The Big Bang Theory and Bones. The Dependent variable was self-efficacy. Volunteer participants (N=124) were randomly assigned to one of two treatments, positive/negative. Participants then watched the brief online video clips and answered an appraisal inventory.

Character liking was tested as a moderator variable, but results were non-significant whether liking influenced either of the other variables under consideration. Also, a non-significant finding, there appeared to be no relationship between exposure to negative media and lower self-efficacy.

What was found to be of interest, however, was that all the young women participants reported lower self-efficacy for STEM activities, regardless of treatment, and those exposed to negative portrayals of women in science reported even lower levels of self-efficacy for STEM.

Importance of the findings and future research opportunities are discussed.