Cues of Belongingness on Websites of Science, Technology, Engineering & Math Departments

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RESULTS

Consistent with predictions:
• The proportion of women in photographs AND
• The proportion of inclusiveness words predict greater proportion of degrees awarded to women

Multiple Linear Regression: F(2,76) = 7.84, p < 0.01, R² = 0.17

INTRODUCTION

Situational cues can provide information about who belongs and does not belong in particular domains:
• The underrepresentation of women in STEM domains may serve as a cue that women do not belong (Murphy et al., 2007)
• The presence of a multicultural philosophy, which emphasizes recognition of, acceptance of, and respect for diversity, may serve as a cue of inclusiveness (Purdie-Vaughns et al., 2008)

The current research examines the extent to which these cues are present on the websites of university STEM departments. Specifically, we examined:
• The proportion of women portrayed in photographs
• The presence of a multicultural philosophy, as indicated by the proportion of inclusiveness words

We compared these cues to the proportion of bachelor and graduate degrees awarded to women in each domain.

HYPOTHESES

• Greater proportion of women in photographs will predict greater proportion of degrees awarded to women.
• Greater proportion of inclusiveness words will predict greater proportion of degrees awarded to women.

METHOD

Predictor Variables
Content analyzed websites of 7 STEM departments from each of 18 universities across the U.S. (n = 123):
• Proportion of women in photos (academic settings only)
• Proportion of inclusiveness words (analyzed by LIWC software; e.g., accept, appreciate, respect, recognize, include, embrace)

Outcome Variable
Proportion of bachelor and graduate degrees awarded to women (collected directly from departments; 80% response rate)

RESULTS (Continued)

These trends lead to following question:
Do website photographs accurately depict the proportion of women in each department?

CONCLUSIONS & FUTURE DIRECTIONS

University STEM department websites display cues of belongingness that correspond to the proportion of degrees awarded to women. Importantly, these cues are not mere reflections of the actual proportion of women in each department.

Future directions:
• Do these cues of belongingness directly influence women’s interest in STEM domains?
• At what point does accurate representation matter? (e.g., is there a critical mass that must be presented?)
• What are the consequences of overrepresenting (and underrepresenting) women in photos?