

Research offers new hope for gender equity in STEM fields

July 18 2017, by Linda B. Glaser

Men continue to be much more likely to earn a degree in STEM fields than women, despite efforts made over the last few decades. New research from Cornell's Center for the Study of Inequality (CSI) on fields of environmental study offers unexpected hope in closing this gender gap.

In a study of nine million degree recipients in the United States between 2009 and 2014, Dafna Gelbgiser and Kyle Albert, M.A. '11, Ph.D. '16, found that the student population of green fields of study is systematically more gender-equal than other fields of study, both in STEM and non-STEM disciplines. The researchers suggest that because these new fields lack traditional gender norms and stereotypes, they attract a balanced gender population. Their findings are reported in "Green for All? Gender Segregation and Green Fields of Study in American Higher Education," published July 6 in the journal *Social Problems*.

"The underlying implication of our results is that universities can likely increase the representation of men, or women, in gender-imbalanced fields like engineering or education if they emphasize their potential relation to the environmental movement," says Gelbgiser, a postdoctoral researcher at CSI. "Our findings suggest that [gender balance](#) in STEM fields is malleable and these emerging fields can be a force leading to greater equality in higher education."

One explanation for the [gender gap](#) in STEM is that women are more

drawn to care-oriented and humanistic fields rather than technical and scientific disciplines. But, the researchers write, "As a new social phenomenon, the environmental movement enables fields to emerge outside of existing paradigms – for example, being simultaneously care-oriented and technical, or both humanistic and scientific – and therefore transcend traditional gender divisions."

The 21st century has ushered in explosive growth at [higher education](#) institutions of such green fields as sustainability studies and environmental science; the total number of degrees awarded in green programs have increased by about 81 percent. Although some of these fields are rooted in the life sciences – the STEM area with the greatest gender balance – most of them evolved from other fields, such as architecture, law and engineering, which have traditionally been male-dominated. The researchers found the greater the [gender imbalance](#) of the parent [field](#), the greater the difference in the gender composition of green programs.

"Just by institutions changing how academic fields are framed, they can create better gender balance," Albert says. "If universities carefully frame their curricular offerings to emphasize different themes, they can reduce the level of [gender inequality](#) in course enrollments."

More information: Dafna Gelbgiser et al. Green for All? Gender Segregation and Green Fields of Study in American Higher Education, *Social Problems* (2017). [DOI: 10.1093/socpro/spx019](https://doi.org/10.1093/socpro/spx019)

Provided by Cornell University

Citation: Research offers new hope for gender equity in STEM fields (2017, July 18) retrieved 11 May 2024 from <https://phys.org/news/2017-07-gender-equity-stem-fields.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.