INVESTIGATING FORTY YEARS OF STEM RESEARCH: HOW EXPLANATIONS FOR THE GENDER GAP HAVE EVOLVED OVER TIME

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ABSTRACT

The gender gap in college-level STEM remains a persistent issue despite increased efforts to understand and address women's disparate participation. This scholarly article uses a meta-narrative systematic review of the literature to chronicle forty years of STEM-related literature, identify longitudinal patterns and themes in explanations of the gender gap in college STEM majors, and then evaluate the extent to which these explanations have evolved over time. Based on a systematic review of 324 full texts spanning the past 40 years of scholarly literature, five dominant meta-narrative explanations emerged: individual background characteristics; structural barriers in K−12 education; psychological factors, values, and preferences; family influences and expectations; and perceptions of STEM fields. The authors then used the resulting meta-narrative system to examine and document trends both across and within meta-narratives to draw conclusions regarding how scholars, practitioners, and policy makers have conceptualized the determinants of the STEM gender gap over time. Important implications for future research and practice are drawn based upon this analysis.

KEY WORDS:
STEM, gender gap, meta-narrative systematic review

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Understanding the Gender Gap in STEM Fields Entrepreneurship. by Margaret E. Blume-Kohout MBK Analytics, LLC. This report investigates whether gender differences in exposure to industry-funded research and commercialization activities may help to explain disparities in entrepreneurial behavior among science, technology, engineering, and mathematics ("STEM") PhDs. We also describe how changes over time in female representation among STEM doctorates, across fields, have influenced these patenting and entrepreneurship gaps. Methodology. Explanations for these gaps are wide-ranging. Early literature focused on gender differences in human In recent years, state policymakers have strengthened efforts to eliminate the gender pay gap, focusing on three approaches: Laws that prohibit employers from enforcing pay secrecy (CA, CO, IL, LA, ME, MI, MN, NH, NJ, VT). The Institute for Women's Policy Research shows that women earn less than men in nearly all occupations, whether it is work predominantly performed by women or men. For example, even in a female-dominated field like education, female elementary and middle school teachers make only 87 percent of what a man makes for performing the same job. In male-dominated fields like financial management, women earn roughly 70 percent of what men earn for the same work. Why the wage gap persists: There are several possible explanations for the