

## Women's Belongingness and Self-efficacy in UK Higher Education STEM Courses: Based on Gender Role Identity

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**Abstract :** The underrepresentation of women in STEM (science, technology, engineering and mathematics) fields, especially in the UK where only 38.7% of researchers are female, remains a pressing concern. This study delves into the role of gender role identity, alongside other factors like perceptions of parental expectations and national identity, in influencing the decision to pursue STEM fields in higher education. Utilizing a dataset of 284 participants aged 18 to 50, this research comprises two primary sections, each exploring different facets of STEM choice and the experiences of females therein. Key findings reveal that traditional feminine identity correlates negatively with the choice of STEM. Additionally, several variables, including individual perceptions of parental expectations and national identity, significantly predict STEM choice. A unique interaction was observed amongst females in relation to gender role identity and choice of STEM. Meanwhile, in the context of self-belongingness and self-efficacy in STEM, females reported lower scores than males. The results emphasize the profound impact of self-stereotyping on these variables. The research underscores the importance of recognizing and mitigating the effects of gender roles and self-stereotyping in STEM educational choices and advocates for interventions to cultivate more inclusive environments. The complex interplay between gender role identity, societal factors, and self-stereotyping brings attention to the need for more comprehensive and nuanced approaches in future research to foster greater equity in STEM fields.

**Keywords :** gender role identity, STEM, Self-belongingness, self-efficacy, higher-education

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