ABSTRACT

A significant amount of research has been conducted on female representation in STEM to help reduce discrimination in work settings. Despite the relevance of this topic, no integrative review of this literature has been published with a human sustainability perspective. We focus on this issue by synthesizing major findings across disciplines, levels of analysis, and countries. Informed by human resource management and knowledge production processes, the results of our integrative review uncover a theoretical model in which female representation relates to women's sustainability. We develop a comprehensive understanding of how female representation in STEM via capabilities is associated with maintenance, growth, and generativity or, alternatively, with crashing. These outcomes are enhanced or inhibited by major country-, organizational-, group-, and individual-level factors associated with time. We consider future orientation as a moderator related to the country level of analysis and flexible work arrangements (i.e., flextime) as a moderator related to the organizational level of analysis. In regard to the group level of analysis, we consider gender differences in: a) time devoted to teaching, mentoring, and advising, b) trends over time in female first and last author, c) departures and promotions over time, and d) time to full professor. In regard to the individual level of analysis, we consider time constraints, time flexibility, and time to career independence. We conclude our review by identifying theoretical implications and future research opportunities on how to advance female representation in STEM academic settings across the world.