

Gender equity and human development in science

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It has been five years since Etzkowitz and colleagues (2008) heralded a "coming gender revolution in science"-following floods of monographs and journal articles giving rise to a veritable sexology of science in which scholars seek to describe and explain gender inequalities in science from multiple perspectives. The presence of gender disparities in science has been seen as a conflict between practice and norms of science: scholars espouse Mertons (1973) norm of universalism which suggests that all people have an equal opportunity to contribute to scholarship, yet studies of various countries, regions, and disciplines have demonstrated pervasive gender inequalities in the contribution of women to the scientific literature. This work seeks to evaluate whether the gender revolution in science has been realized-examining the contribution of female scholars to the literature, the extent to which female scholars collaborate nationally and internationally, and the impact of scholarship contributed by women using nearly 5.5 million articles from the Web of Science. Furthermore, these scientometric variables will be compared to two socio-economic variables, namely the human development and gender inequality indices constructed by the United Nations. The results of this large-scale analysis provide a global understanding of the scholarly communication behaviors of women as well as the relationship between these behaviors and the socio-economic development of the country in which these women are working. From a bibliometric perspective, this work highlights the potential for the integration of heterogeneous datasets to answer socially-relevant questions.