

UNRAVELING THE DISCREPANCY: GENDER DISPARITIES IN STEM AT AFRICAN POST-SECONDARY INSTITUTIONS

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Introduction: Gender disparities in STEM (Science, Technology, Engineering, and Mathematics) fields may be seen all around the world. This inequality is particularly pronounced in Africa, where women face major obstacles in postsecondary STEM courses. The goal of this study is to review the published evidence on the problems faced by African women in postsecondary STEM disciplines and to offer evidence-based interventions to increase women's involvement in STEM careers.

Methods: The rapid review methodology was used. Peer-reviewed journals, conference proceedings, institutional reports, and policy documents pertaining to African women's experiences in postsecondary STEM contexts were examined. Articles were chosen based on relevance, rigor, and recentness using the PRISMA model. A qualitative content analysis technique was used to identify key themes, highlighting research that offered empirical evidence and comparable outcomes across different African areas.

Results: The review uncovered significant geographical inequalities. North and Southern African areas have slightly higher female STEM engagement than West and East Africa. Cultural preconceptions, poor access to resources, and inadequate mentorship were all common difficulties across the continent. Surprisingly, nations with aggressive gender-responsive policies, such as Rwanda and South Africa, have seen an increase in female STEM presence over the last decade. These countries' case studies highlighted the efficacy of specific measures, such as community mentorship programs, gender-inclusive curriculum, and state-sponsored STEM scholarships for women. Based on these ideas, the following context-specific methods were proposed:

1. Developing mentorship programs that link African female students with renowned African women in STEM.
2. Including African women's significant achievements in STEM courses.
3. Through seminars, workshops, and pan-African projects, we are increasing the visibility of African women in STEM disciplines.
4. Creating spaces for African female STEM students to discuss their experiences, problems, and coping mechanisms.
5. Promoting and implementing gender inclusive policies in African STEM faculties.

Conclusions: The course of action to gender parity for STEM in Africa is extremely complicated. However, by embracing the ideas presented in the study, which are based on a fast literature assessment, we may chart an inclusive path that encourages African women to explore, achieve, and lead in STEM fields. Such efforts are critical for Africa's science community and wider social advancement, guaranteeing a diversified and constructive approach to STEM innovation and growth.

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