

Training the next generation of internationalist

FEMALE UNDERREPRESENTATION IN SPACE SCIENCE:

A CASE STUDY OF THE AFRICAN REGIONAL CENTER FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION

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Female Underrepresentation In Space Science

Student research for the Regional Academy on the United Nations and UNOOSA

Research question: Why are there so few women in space science? A case study of ARCSTE-E





Methods: interviews and survey

Results: lack of female applicants, lack of role models, gender discrimination, some existing programmes



Our Team (left to right):

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Recommendations



Our Research Question: Why so few women at ARCSSTE-E?

To what extent are women involved in the field of space science today?

What is the situation women face while pursuing a space related career?

What initiatives are currently in place at the regional centers and what could be added?

ARCSSTE-E

- Inaugurated in 1998, Partner Institution: Obafemi Awolowo University
- Participants' countries of origin: 17
 English-speaking countries





Methods

Interviews

- 5 Qualitative, semi-structured Interviews
- Interview partners: senior staff, female teachers, alumni
- Snowball sampling



Survey

- Female alumni
- Questions developed from our interviews



Results I: The Gender Gap among Students and Staff

Gender Gap

- ☐ 14-40% women among total student body at ARCSSTE-E
- = 20% of the total staff are female
- Women in senior members' positions: rather the exception, not the norm
- Upward trend in female participation





Results II: Applications and Admissions

Applications

- ARCSSTE-E receives a lower amount of female applications, in comparison
 - Different reasons:
 - → little interest
 - → pressure by family and environment,
 - → 'a global phenomenon'
 - Problem: different perception by actors



Results III: Lack of Female Role Models

"During the summer camp in Abuja, I once told a young girl how to draw a rocket, how to make a satellite. We did a lot of things. And I told them, *you can do these things*, and, in fact, the mothers that came were so surprised." (female teacher)

Half of our respondents were inspired by a role model





Results IV: Issues of discrimination

"The male students, they think they are superior and that they have superior brains" (female teacher)

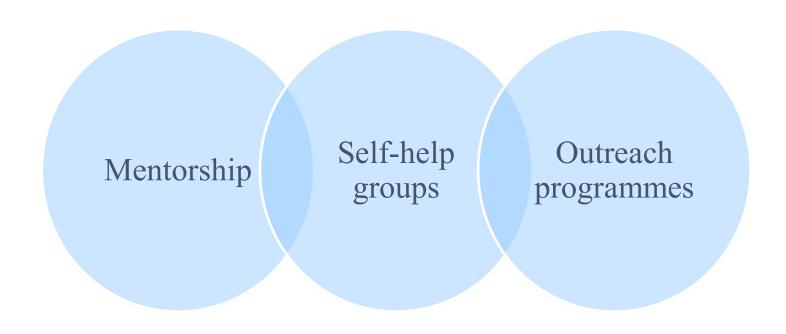
"In Nigeria and Africa at large [discrimination] is a very serious problem. We have this mindset that a girl and a boy are not supposed to work together and knowing that engineering and science at large is a man's cause, so it has always made them to believe that[it] is not for girls." (female alumni)

9 respondents reported experiences of day-to-day discrimination based on their gender





Results V. Existing projects





Results VI. Lack of awareness

If you are good, you are good. If you are wise, there are no limits for you. If

"

you are a lady - women have the same opportunities.

(male respondant)



+ Further research is Recommendations needed Target female Use role models to students at outreach motivate students to programmes apply Enhance the number of female participants Gender-specific admission criteria How to enhance female participation Training for students, Raise awareness for in space science? teachers and gender-related policies management Create a more supportive environment Provide funding Support existing programmes Create networks

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THANK YOU!

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