



**GURLZ IN THE
GLOBE
MAGAZINE**

**EMPOWERING
THROUGH
EDUCATION**

**WHERE ARE THE GIRLS!
WHY FEMALE
PARTICIPATION IN STEM
IS SO LOW**

**MIND THE GAP!
WOMEN SHARE THEIR
EDUCATION EXPERIENCES
ON CLOSING THE GAP**

**6 WAYS TO INCREASE
FEMALE PARTICIPATION
IN STEM**

CONGENTBI FOUNDATION

ISSUE 1. APRIL 2021



congentBI

strategy | analytics | technology
supporting smarter decisions

Foreword

Data is everything.

Racial and gender biases are already evident in some AI, and the proportion of women entering STEM education remains low at less than 20% worldwide.

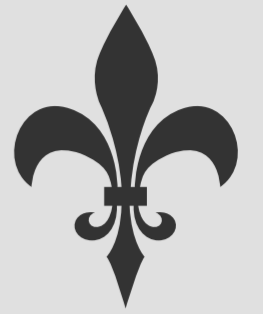
With good data science education and techniques, accurate data analysis, we can bust myths of gender and class stereotyping that continue to contribute to the unconscious bias which limits the life chances for girls from disadvantaged backgrounds.

Rose Nelson - CEO & Founder of
congentBI Foundation

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HOW TO RAISE FEMALES WITHOUT THE GENDER BIAS



The gender bias has infiltrated another crucial aspect of society; this time, it is the education system. Young girls, boys, and even their parents have biases against girls and women as leaders. The dangerous effects of gender dichotomy are evident as confirmed in new research from the Harvard Graduate School of Education. A study from the Making Caring Common Project (Making Caring Common, N.D) shows that many children perceive men as better political and business leaders, whilst women were voted best at childcare.

Why is it essential to avoid gender stereotyping in the early years?



Dr. Kalpana Chawla, Astronaut

Gender stereotyping limits how young girls perceive their futures. Stereotypes can have the devastating effect of convincing young girls that some options are not open to them because of their gender. **Gender stereotyping might take the form of little girls believing that they cannot be leaders.**



Christina Koch and Jessica Meir, astronauts at NASA's First All-Women Spacewalk 2020

Vital Strategies to challenge gender stereotypes:

On a personal level:

Begin by acknowledging where gender stereotypes affect you as an individual to know how you are projecting that aspect of reality, and you can then begin to limit speaking gender roles into existence.

In schools:

'Neutralise' the environment:

Have non-gender specific resources, such as loose parts play, paints and crafts, books, costumes and dress-up, posters, that inspire creativity and excite all children to play with them.

Improve gender-neutral language skills

Substitute sexist language for inclusive synonyms. For example, 'Mankind' becomes 'humanity', 'people' or 'human beings'. And use gender-neutral language such as 'male nurse' becomes 'nurse'. 'woman doctor' becomes 'doctor'. 'Hostess' becomes 'host'.

Support girls by helping them to be conscious of their language:

Talk to young girls about their understanding of gender and sexism and challenge unhealthy beliefs. Young children may have strong ideas that a particular toy or behaviour is not appropriate for their gender. When a child says that something is 'not for girls' or 'not for boys', support them in challenging those beliefs.

Allow girls to go with their thoughts and feelings, not society's expectations, e.g. it is ok for girls to want to play sports.

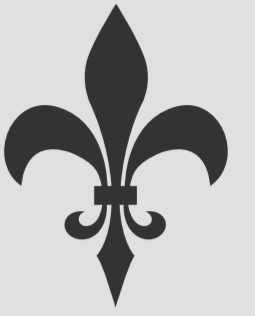


The astronauts Jessica Meir, left, and Christina Koch, aboard the International Space Station at NASA's First All-Women Spacewalk 2020, Nasa, via Associated Press

Summary:

Teaching girls from a young age that their biological gender has no limitations on what they can achieve in life, challenges instilled gender biases, and is crucial for an empowered future for girls.

AFFILIATES: ORGANISATIONS WE SUPPORT, ADMIRE, OR WORK WITH



CAN GIRLS FROM DISADVANTAGED BACKGROUNDS HAVE AN EQUAL FOOTING IN PRESTIGIOUS SPORTS?

In prestigious sports, gatekeeping discourages unconventional participants, such as girls from minority and disadvantaged backgrounds, because of elitist tendencies.

There are evident disparities between men and disadvantaged and minority women taking part in prestigious sports. According to Sport England's latest "Active Lives Adults Survey" (Sport England, 2020),

32% of women in the same social group as men were likely to be inactive, suggesting the existence of external barriers preventing women from participating in sport.

Furthermore, women from Asian backgrounds (36%) and Black women (29.4%) are more likely to be more inactive than white British women (25.3%) (Sport England, 2020), which further suggests that women from minority and disadvantaged backgrounds face more significant barriers to their participation in prestigious sports. The disparities mean that unconventional participants miss out on the benefits of the sports, such as health, leadership skills, and confidence, which are keys to wellbeing.

Crucial steps need to be taken for girls from minority and disadvantaged backgrounds to have an equal footing in prestigious sports:

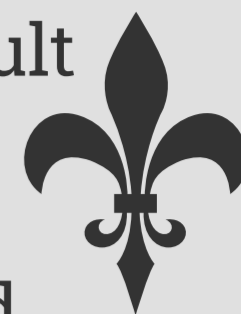
Increasing Inclusivity

Firstly, increasing inclusivity by making the culture accessible to all, eradicates elitism.



Serena Williams in Australia at the ASB Classic, via Phil Walter, Getty Images

The peachy coloured garments in ballet are a prime example, with the default colour that assumes that all dancers are of that skin tone, making those of another skin tone feel unwelcomed in the ballet community. According to 2016 research by Data USA, only 9.12% of ballerinas are of a POC background. These numbers represent the lack of diversity in the professional ballet world (Data USA, 2021). Therefore, a more comprehensive range of skin tones in ballet attire, including pointe shoes and tights allows a larger group of people to feel a real sense of identity as a ballerina.



There are reports of discouraged young ballet students caused by the absence of older role models representing their race or gender in the ballet world. Greater inclusivity in prestigious sports makes girls from minority and disadvantaged backgrounds feel welcomed, respected and belonging. Therefore, increasing inclusivity positively impacts on participation in prestigious sports.

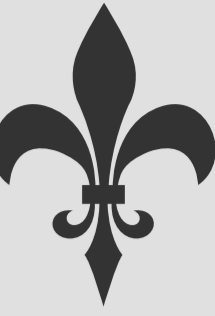
Eliminate gender stereotypes

The second method is to eliminate stereotypes by avoiding the use of them. Many women often feel discouraged from playing prestigious sports because of unrealistic and objectifying images of female athletes', and expectations emphasised in sports media. In particular, body-shaming because of a focus on a women's sex appeal and femininity over their athletic accomplishments. Expectations and stereotypes created by images in the media suggest a demotivating factor in women's participation in sport and exercise. Clearly the dismay of being gazed through the lens of the two extremes of objectification and perceived and body-shamed as unattractive and masculine means gender stereotypes must be dismantled.

An example is Serena Williams, a top athlete in Tennis who has won 23 Grand Slam Titles, the highest number of all times. Serena is an excellent representative for minority women. Unfortunately, Williams has been the subject of body shaming as the media is known for continuously steering the conversation away from Williams's performance and into discussion and analysis of Williams's body type. Some Twitter trolls have negatively presented Williams through a masculine demeanor and a challenge to hegemonic ideas of femininity (Sky News, 2021), however this narrative has a reductionist effect on Williams's natural stature and athletic achievement.



Katie McDonnell, Traceur vaulting over ledge, via Pinterest



Undoubtedly style, grace, and aestheticism are significant and respected components of the culture of numerous prestigious sports, but by placing more emphasis on women's performance by promoting athleticism and achievement, rather than gender stereotyping, promotes the freedom to participate in prestigious sports in a manner that is meaningful to minority and disadvantaged girls. Thus, eliminating gender stereotypes can enrich the health and wellbeing of minorities and disadvantaged girls in the long-term.

Safe spaces

Entering unfamiliar territory can definitely be an exciting yet anxiety-inducing experience for many women. Therefore, the third strategy is to provide communities for minority and disadvantaged girls to participate in sports. When away from the harsh gaze of the hegemonic and often white, male-dominated society, girls can feel more welcome and comfortable.

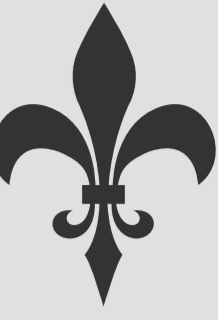


Female balarina practicing in a school , Via Louis Tucker

For example, This Girl Can is a charity that runs women-only sports classes as part of their commitment to get more women active and participating in sports. The support is a source of encouragement against the judgement many women feel for reasons including how they look when exercising, feelings of inadequacy, or feeling they should be spending more time on their families, studies, or on other priorities. This Girl Can has inspired over 320,000 women to get active as a result of seeing the 2020 campaign, which highlights the powerful impact that inspiring reinforcement can have on minority and disadvantaged girls participating in prestigious sports.

Summary:

Minority and disadvantaged girls can take up space in prestigious sports through critical measures and have an equal footing in prestigious sports. Diversity and inclusivity are crucial to the future of these sports. Providing equity through supporting methods, and eliminating stereotypes by eliminating the use of them are the best methods for increased participation. Measures can mean girls have equal access to prestigious sports and receive the benefits. When the participation rate increases, there can be a further focus on increasing athleticism and performance, so minority and disadvantaged girls can unlock their full potential and reach new heights.



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HOW TO INCREASE FEMALE PARTICIPATION IN STEM AND REDUCE THE LONG-TERM EQUALITY GAP AMONGST FEMALES WHO STUDY STEM SUBJECTS?

The gender bias in STEM is evident in the workforce, and educational attainment, as women hold 47% of all jobs, but only 24% of STEM jobs. However,

STEM is the driving force of the economy, where innovation occurs. It's where creativity is allowed, and it's also the place where people can make a real difference. It is a place to solve the problems of the world. Given the gender bias in STEM, where women hold 47% of all jobs, but only 24% of STEM jobs, institutions need to have women involved in the process through STEM by increasing female participation (White, 2021)

Here are vital methods to increase female participation:
A: knowing the direct connection is essential for all but particularly women. A study conducted by Microsoft found that 72% of the girls polled said it was vital for them to have jobs that directly helped the world.

Therefore showing a direct connection between the sciences and improvement of humanity's problems, illnesses and disease is a crucial method to increase female participation in STEM.

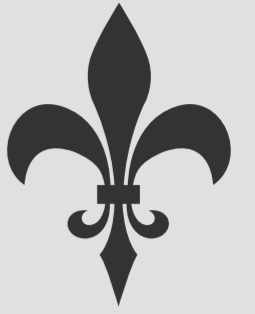
For example, STEM has accelerated advancement in some of the world's most critical industries, such as logistics, manufacturing, healthcare, farming, and beyond. Science is at the



Female surgeons in a hospital, Via Getty Images



STEM Practitioners, Via Light a Spark



forefront of the global health crisis and has paved the way for the accelerated propulsion of vaccinations and treatments for COVID-19.

B: Increase female participation by creating feelings of welcomeness and inclusivity through a step system.

On an individual level, it is equipping women in political skills to make themselves competitive to create encouraging attitudes and mindsets towards women's place in STEM.

C: Training and developing the department increases female participation on an organisational level. Training headteachers and managers to be more facilitating towards the career development of women. Provide resources and support for career development and equitable policies to create a level playing field. For example, Hilton Worldwide is rated as one of the top places for women in the country to work, with over 53% of female employees and staff feeling that Hilton has modelled a caring atmosphere on all levels of management from the Executive Team to the property level.

D: Start early with early exposure to projects, meaningful work and conversations with women in STEM so that girls can see themselves as potential scientists, engineers, and astronauts. Computer Club for Girls (CC4G), set up in 2005, encourages females to develop an interest in computing and technology.

E: Finally, emphasising marginalised peoples. African and Hispanic heritage people have the most interest in STEM but receive less support to pursue.



Emirati Azeizah, the first female petroleum engineer for unconventional sites for Total Unconventional Gas, via Friday Magazine

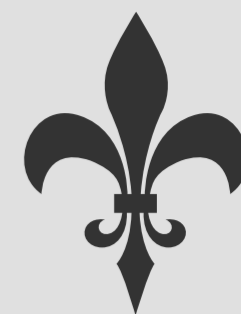
The mentorship scheme set up in 2020 by two young women from Ilford and Romford, has initiated a programme to encourage more BAME students to break into STEM fields after successfully doing so themselves.

Finally:

The discussed methods are actionable, but the most effective implementation to increase the participation of women in STEM is at the core.

Create strong foundations for girls to participate in STEM and be resilient enough to withstand challenges to push them out of sync from elements of inequality created by masculine culture.

Ingrain maths and science as part of girls identity rather than it feeling forced upon them. By creating a sense of vision, confidence, goals and leadership, women can motivate workplaces that are challenging.



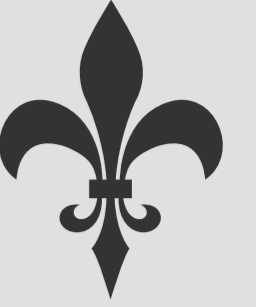
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WHAT DEFINES A DISADVANTAGED WOMAN?

Women who are disadvantaged are deserving of equity to reduce the impact of the level of difficulties faced.

Malala Yousafzai is widely recognised for defying the Taliban in Pakistan and campaigning for females to receive the right to have an education. She is from a disadvantaged background.

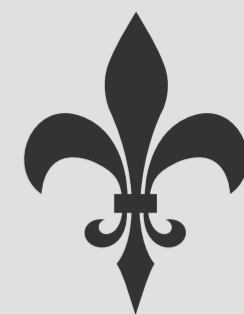
'Disadvantaged' is the general term for individuals or groups of people who face special problems such as physical or mental disability, lack of money or economic support.

The subjective term also includes those who are marginalised by race, gender, sexual orientation and other intersectional identities



Malala Yousafzai is the youngest-ever Nobel Peace Prize laureate. Photo: via storypick.com

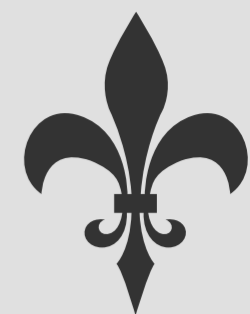
Letter from the Editor



Sarah studied International relations at Birmingham University and is passionate about raising attainment for Girls and Women with special interest in using STEM education to break the glass ceiling for the disadvantaged.

In was time to put an end to the divide in the Educational attainment gap between the 'haves' and 'have nots' which was made worse by the detrimental media representation. We wanted to produce purposeful media on this specific issue. We set out to tell stories that highlighted real human interactions and human dignity for disadvantaged girls and women. We created Gurlz in the Globe Magazine to engage culture, build community, and introduce a new conversation – one that talks about local and global concerns of disadvantaged girls and women. Gurlz in the Globe is more than a magazine, it is a mission, and this is only our starting point. We'll start small, and we'll dream big.

Sarah!



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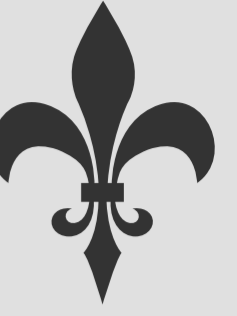
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**TIME'S
= UP**

GURLZ IN THE GLOBE

GURLZ IN THE GLOBE MAGAZINE IS DEDICATED TO
DELIVERING THE NARRATIVE THAT FOSTERS THE
EMPOWERMENT OF DISADVANTAGED GIRLS AND
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