

## Intersectionality<sup>1</sup>

is a **framework** used to analyse how **systems of power and oppression** impact individuals' **lived experiences** based on their **various social group identities**.<sup>1,2,3</sup>

**Social group identities** may include:

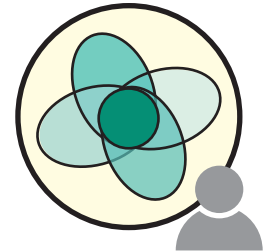


**For example** it is often cited that women make less money than men. Looking closer, the data tells a more nuanced story: White women earn more than Black men, and Black men earn more than Latinx and Black women.<sup>10</sup>

## Why does this matter?

To foster inclusive work and academic environments, we need to understand how people experience these settings differently, and under what conditions.

An intersectional analysis can highlight areas that need improvement, and offer strategies to foster spaces where all identities can thrive.<sup>11</sup>



The following explores a few areas where this analysis is useful for STEM communities.

## Impact on Workplace Climates

Women of colour face a **"double jeopardy"**<sup>4,5,8,9</sup>



They experience **prejudice** and **discrimination** both as a **woman** and as a **person of colour**.<sup>4,5,6,7</sup>

The impact of "double jeopardy" can multiply when a person holds many marginalized identities (e.g. class, sexuality, having a disability, religious practice, etc).<sup>6</sup>

Women of colour experience **more harassment** than men and White women.<sup>5</sup> Harassment is linked to attrition both in workplaces and academic environments.

## Workplace Climate Case Study

A study of 400+ astronomers & planetary scientists found women of colour experienced the highest rates of:

- **Harassment**
- **Assault**
- **Other negative workplace experiences**.<sup>5</sup>



**Women of colour** also **felt unsafe** in the workplace because of their:

**gender**<sup>5</sup> (40%) & **race**<sup>5</sup> (28%)

This highlights that not all women in STEM experience work climates in the same way.

Learn more about implicit bias, what you can do to combat it, and our research in our white paper series on our website: <http://successinstem.ca/>

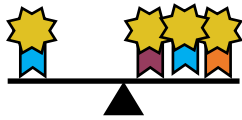
# Intersectionality in STEM

## Harmful Stereotypes & Behaviour Patterns

Not fitting the stereotype of a person who works in STEM can negatively impact employees. The following are patterns that specifically impact women scientists.

### Prove-It-Again<sup>12</sup>

To be seen as **equally competent** as co-workers women need to provide **more evidence** of their past work, study, and achievements than men.



Black women report needing to do this more than other women.<sup>12</sup>

Look for the **intersectional analysis** in these sections

### Tug of War<sup>12</sup>

Gender bias can increase conflict between women.

This can appear as:

- Lack of support for women employees from women coworkers and administrative staff
- Making assumptions about other women's qualifications/effectiveness
- Rivalry between women.



Latinas are more likely to report challenges in receiving support from administrative staff.<sup>12</sup>

While some may assume personalities are the source of these conflicts, it is often a symptom of gender bias in the workplace.<sup>12</sup>

### The Maternal Wall<sup>12</sup>

After having a child, women are **assumed** to be **not as competent** or **committed** to their work.

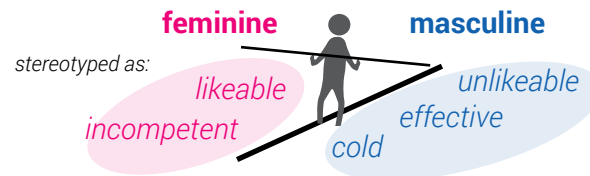


Affects women of all backgrounds.<sup>12</sup>

This can lead to an identity conflict where the person juggles the expectations of both work and family roles.<sup>13</sup>

### The Tightrope<sup>12</sup>

Women's behaviour is often judged in the workplace. It can be perceived as overly:



Asian-American women report backlash for more "masculine" behaviours than other women.<sup>12</sup>

Women balance the expectation of acting "feminine" with the stereotype that effective scientists have masculine characteristics.

This can lead to more expectations of women doing more "feminine" work such as administration and mentoring.<sup>12</sup>

## Barriers to Leadership

With the impact of "**double jeopardy**" and additional discrimination, women of colour's leadership potential can be **significantly reduced**.<sup>7, 20</sup>

Coping mechanisms for discrimination can include **detaching from the stressor**, or **internalizing the blame for the reactions**.<sup>21</sup>

Neither of these support pursuing leadership opportunities.



Black women are perceived **more negatively** in leadership positions than Black men and White women.<sup>15</sup>



They are also disproportionately penalized for mistakes in their role.<sup>15</sup>

## Beyond Race & Gender

**Ageism** is also active in the workplace. It is most common among young and older individuals, and is experienced more by women than men.<sup>16</sup>

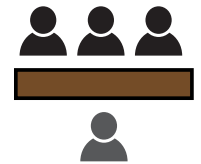
For example, women academics are scrutinized and discriminated against based on their appearance - a combination of ageism, and **"lookism"** (stereotypes based on what the person wears and how they appear).<sup>17</sup>



**Class** is also worth consideration;<sup>19</sup> discussions about "culture fit" can be subtly asking for experiences only accessible to those with plenty of disposable income.<sup>19</sup> Race and class also interact and impact workers' experiences of sexism<sup>21</sup> and their overall health.<sup>18</sup>

## Impact on Equity Processes

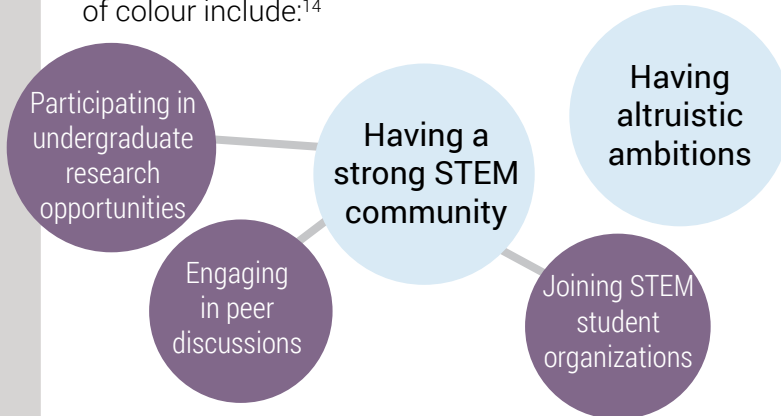
A study of the Equal Employment Opportunity Commission (EEOC) in the USA found that plaintiffs who claim discrimination against more than one aspect of their identity were **half as likely** to succeed in their case, compared to those who allege discrimination against one group (e.g. gender).<sup>22</sup>



EEOC data reveals that intersecting identities can also place groups at low or high risk for experiencing harassment; for example disability, gender, age, and race.<sup>23</sup>

## Pathways to Persistence

With the many barriers facing students of colour in STEM programs, there are ways to support their persistence in the field. Strategies that support women of colour include:<sup>14</sup>



For women working in STEM organizations, the following can support their persistence and combat negative stereotypes and their effects:<sup>15</sup>

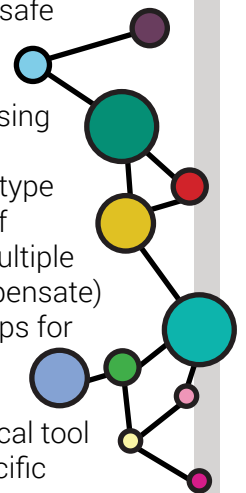


## Seeking Complexity

Using an intersectional lens is critical to understanding the work needed to create more inclusive and safe workplaces for all people.

While researching and proposing solutions to challenges like unconscious bias and stereotype threat, consider the impact of each policy or action from multiple perspectives - ask (and compensate) people from a variety of groups for their feedback.

Intersectionality is an analytical tool that can help to uncover specific challenges and areas for improvement, revealing opportunities to strengthen our practices and environments.



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## About Engendering Success in STEM (ESS)

Engendering Success in STEM (ESS) is a research partnership focused on evidence-based solutions. The shared goal of our research is to foster women's inclusion and success in STEM (Science, Technology, Engineering, and Math). We bring together social scientists, STEM experts, and stakeholders in STEM industry and education to use an evidence-based approach to break down the biases girls and women face on their pathway to success. Funded by the Social Sciences and Humanities Research Council.