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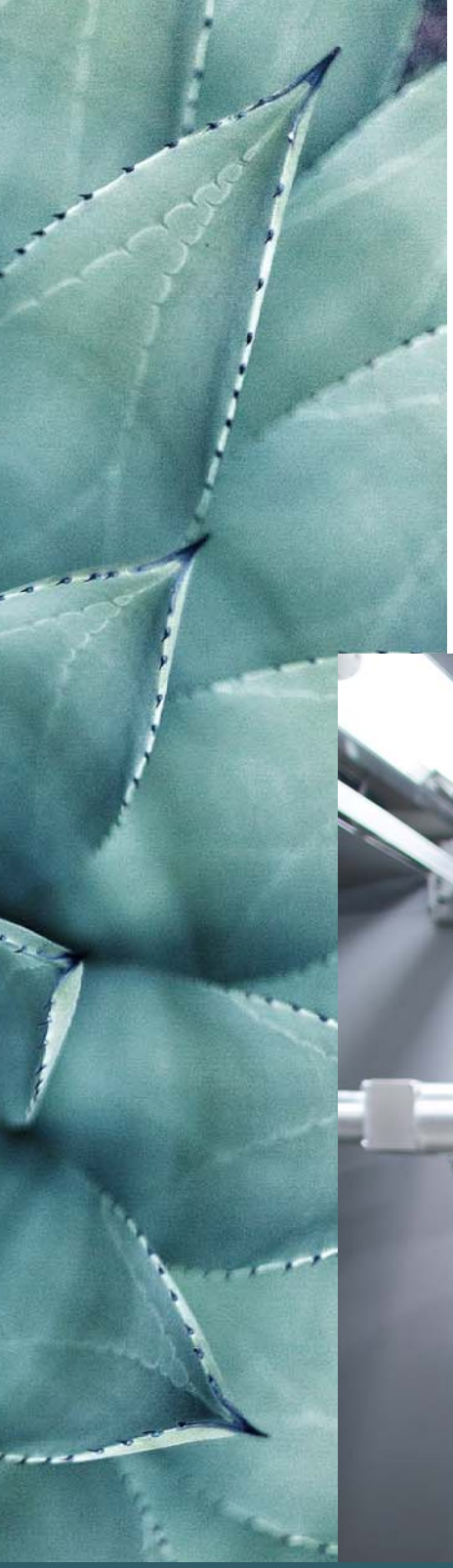
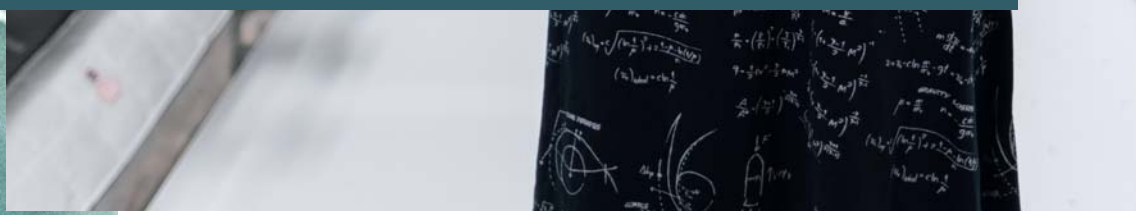
ENDURING FEMALE LEADERSHIP



WOMEN IN STEM:

Strategies to navigate the barriers to career progression & leadership and put you in control



COMPASSION COPING STRATEGIES CLARITY COURAGE CAPACITY

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Welcome

Gain greater control of your career and develop your leadership

Barriers to career progression and leadership continue to limit how women in STEM are able to advance their careers, contribute to their chosen STEM profession in the way they would like and develop as leaders.

In Australia in 2020, women were represented in only 13% of STEM-qualified occupations and 11% of CEO/Head of Business level roles in STEM-qualified industries.[1]

STEM women are talented, committed, and passionate about their chosen professions. They are hugely important contributors to the technological, digital and STEM-driven solutions the world requires. Their leadership skills are critical to the future of STEM. While there is positive effort being placed on increasing gender equity in STEM at all levels from a structural perspective,[2, 3] it's so important that women in STEM understand the barriers to career progression and leadership that exist for them, and learn strategies to navigate these barriers positively, so they can gain greater control of their careers and develop as future leaders.

This resource provides an overview of barriers to career progression and leadership present for women in STEM, outlines associated protective factors, and explores strategies to navigating the barriers. It also provides a self-assessment for STEM women to identify how they are currently leveraging relevant protective factors and where they may want support to navigate barriers that exist for them.

Dr Susan McGinty

FOUNDER OF AYA LEADERSHIP

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Barriers

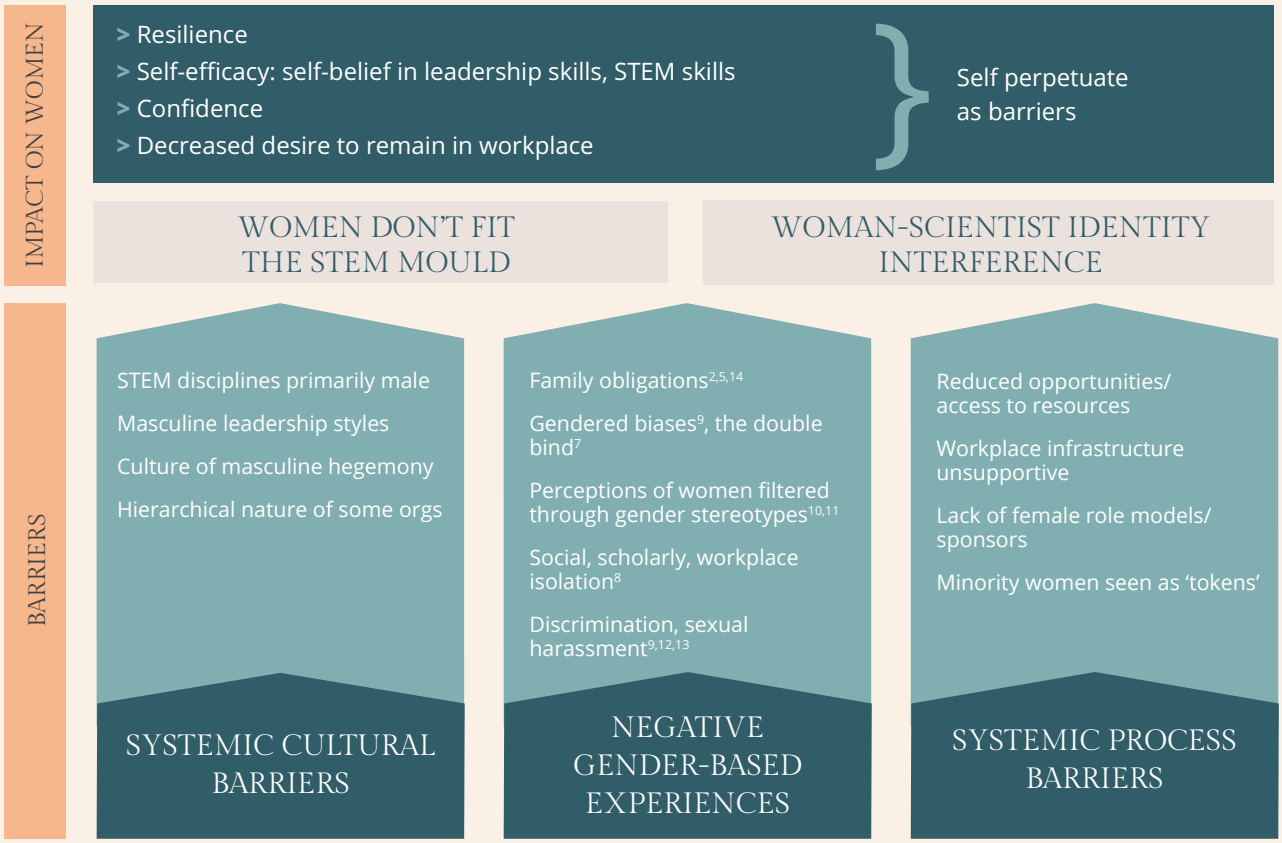
Cultural and process barriers that limit career progression of STEM women

The barriers that exist for women in STEM are underpinned by systemic cultural barriers that arise from STEM disciplines being primarily male-dominated and include the enduring culture of masculine hegemony that exists in STEM fields. This culture is augmented by masculine leadership styles that don't reflect preferred female leadership attributes, and the hierarchical nature of many STEM organisations.[3, 6]

These are accompanied by systemic process barriers – including reduced opportunities and access to resources; unsupportive workplace infrastructure; and a lack of female role models and mentors [5, 7,] with minority women in leadership roles being seen as 'tokens'.[8]

At the early-career level, women in STEM suffer a lack of role models and mentors;[2, 5, 7] this extends into their mid-career to include lack of sponsors and less access to development opportunities than men.[2] A significant barrier for women in STEM at these early–mid career levels is that some STEM discipline career pathways and work environments continue to limit career options for women who undertake family caring responsibilities.[2, 5, 14] Being a woman in STEM can also lead to challenge of one's sense of self, a phenomenon known as woman-scientist identity interference.[8, 15, 16]

The combined effect is a reduction in women's resilience, self-efficacy and confidence, which perpetuate as barriers themselves and can reduce the desire to remain in the workplace.



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5 strategies to navigate the barriers to career progression and leadership

1. Resilience
2. Living Core Purpose & Values
3. Voice & Visibility
4. Leadership Development
5. Resource Networks & Mentoring

More than just recovering from adversity, resilience is the capacity to deal with adversity in a positive way, to grow and adapt through disruption, turning challenges into opportunities, and is a protective factor for the career and leadership barriers present for STEM women.[17] Resilient people see adversity as temporary, local (applicable just to that one situation) and changeable (they can do something about it); they deal with adversity by accepting reality and continually improvising.

Strengthening emotional, physical, mental and spiritual resilience and wellbeing is important to enable effective management of adversity if or when it occurs in the workplace context and support growth. Particularly important to resilience in the workplace is applying emotional intelligence and adaptability. Building confidence by stepping outside comfort zones and being open to new experiences will also increase women's resilience and allow them to respond to adversity more positively.

1 | RESILIENCE

> Resilience is the capacity to deal with adversity in a positive way.

Putting it into practice

Strengthening Your Resilience

Do you view adversity as temporary or indefinite? Local or extensive? Changeable or fixed?

In what ways do you purposefully invest in your own resilience – emotional, mental, physical and spiritual? Where would you benefit from expanding investment in your resilience?

How effectively do you adapt to disruption and deal with adversity? How do you demonstrate continual improvisation? How do you prioritise growth as an input and outcome of the challenges you face? Where would you benefit from additional effort here?

How well do you understand and apply your own emotional intelligence capabilities? Consider undertaking an emotional intelligence assessment, such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

2 LIVING CORE PURPOSE & VALUES

Core purpose and values are the foundation for your strategy, choices and behaviours – they underpin the leader you will be, provide context and meaning to everything you do and provide the filter for which opportunities you pursue.[18]

Living your core purpose and values is an important element of the protective factor of understanding self. To effectively lead others, it is necessary to understand what is important to you and why you do the things you do; to understand and live your purpose; and to pursue goals that align with your personal values and empower others.

Putting it into practice

Understanding and Applying Your Core Purpose and Values

Do you know your why? What drives your passion for what you do?
What are your core values?

How do your core purpose and values show up in your everyday life?

How aligned are your purpose and values to your role, activities, opportunities and choices?

> To effectively lead others, it is necessary to understand what is important to you.

Voice – or the sense that one has agency and influence within an organisational context – is a protective factor for women in STEM.

The belief that one's voice is heard moderates the relationship between more negative and sexist climate perceptions and lower job satisfaction.[19]

Being visible – knowing one's story, promoting oneself strategically and intentionally, communicating with influence and sharing expertise, is another protective factor that contributes to job satisfaction and career progression.[17]

The ability to effectively share your knowledge and engage in science communication is vital and underpinned by influential communication and visibility. Being visible relies on you being able to tell your story, purpose, what you can contribute and how you align with other stakeholders[20] – demonstrating the value you bring, and the support, opportunities and collaboration you offer.

Women are less likely to self-promote because it conflicts with the cultural gender norm that women are supposed to be modest[13] – leading to lower levels of voice, influence and ability to promote oneself strategically and intentionally. This also applies to women in a STEM environment.

Visibility of other women provides important role models and examples of what female STEM leaders can achieve that negates the masculine leadership mould and normalizes female leadership in STEM.[21]

3 | VOICE & VISIBILITY

Putting it into practice

Assessing your voice and visibility

Do you believe your voice is heard in your organisation? That you have influence?

How well do you promote yourself strategically and intentionally?

How well do you communicate your expertise?

How regularly do you contribute your expertise, collaborate with others, and demonstrate your value to the organisation's mission?

What access do you have to female role models?

> Develop an effective leadership style that is authentic to you, reflective of who you are as a person.

4 LEADERSHIP DEVELOPMENT

Women in STEM often feel they must work twice as hard as their male colleagues to have their skills recognized and can experience inequitable access to career development activities.[5] Formal continuing professional development and leadership development are both recognised as important protective factors against the career and leadership barriers STEM women can experience.[20]

For STEM women, it is important to understand that leadership occurs at all levels, and doesn't require a leadership title or management responsibility. Leadership development must be anchored in purpose and mission, rather than how you think you are perceived as a woman. It's important to develop an effective leadership style that is authentic to you, reflective of who you are as a person.

Foundational to leadership development, identifying individual strengths allows women in STEM to focus on using their individual strengths effectively. This approach will also create opportunities that align with their strengths, and will deliver success and create impact.

Putting it into practice

Focus on leadership and strengths development

How do you view yourself as a leader?

What leadership opportunities (formal or informal) do you have access to?

What access do you have to leadership development via training, mentoring, job-shadowing, or participation in committees or other activities?

You know what your technical strengths are, but how well do you understand your other strengths?

How are you using your strengths purposefully? How aligned are they with the way you work? Consider undertaking a Strengths Profile assessment.

5 RESOURCE NETWORKS & MENTORING

> Networking is recognised as a key leadership development practice for women to access senior leader role models, peers and resources.

Mentoring and building strategic networks are known to support and advance women in leadership and STEM.[7, 22] Female mentors and effective leaders are important contributors in facilitating positive outcomes for women in STEM and are associated with greater perceptions by STEM women that they have voice.[8]

Networks enable you to offer more and have more impact. A network is a set of relationships that you depend on to get things done, to get ahead in your career and to develop professionally. Networking is recognised as a key leadership development practice for women to access senior leader role models, peers and resources, develop collaborative relationships, and gain confidence in themselves as leaders.[23, 24]

Putting it into practice

Developing your resource networks & mentoring relationships

Do you have a mentor? If not, how can you access a mentor? What support would you seek from a mentor?

Who could you share your experiences and strengths with by being a mentor?

What do your networks currently look like? Do you have networks that can support your day-to-day work? Do you have people to support you when you need help with your technical and non-technical challenges in the workplace?

How diverse are your networks? Do they offer the variety that expands your access to resources, expertise, different experiences and collaboration opportunities?

How could you expand and leverage your networks to better support you and provide greater opportunities?

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SELF-ASSESSMENT: EFFECTIVE USE OF PROTECTIVE FACTORS

How effectively are you utilising protective factors to navigate the barriers to career progression and leadership that exist for you?

Against each of the five focus areas, rate your skill and knowledge in that area, as well as how effectively you are applying each of them in your work.

PLOT YOUR ASSESSMENT ON THE NEXT PAGE >>

1-2

If you assess a score of 1-2, you have low skills and knowledge in that focus area and are either not applying the skills/knowledge at all, or are doing so intermittently, without purpose and with little to no positive impact.

3

If you assess a score of 3, you have medium skills and knowledge in that focus area and are applying the skills/knowledge intermittently with low-medium positive impact.

4

If you assess a score of 4, you have high skills and knowledge in that focus area but may be applying the skills/knowledge inconsistently and achieving medium impact.

5

If you assess a score of 5, you have high skills and knowledge in that focus area and are applying the skills/knowledge consistently with purpose and achieving high impact.

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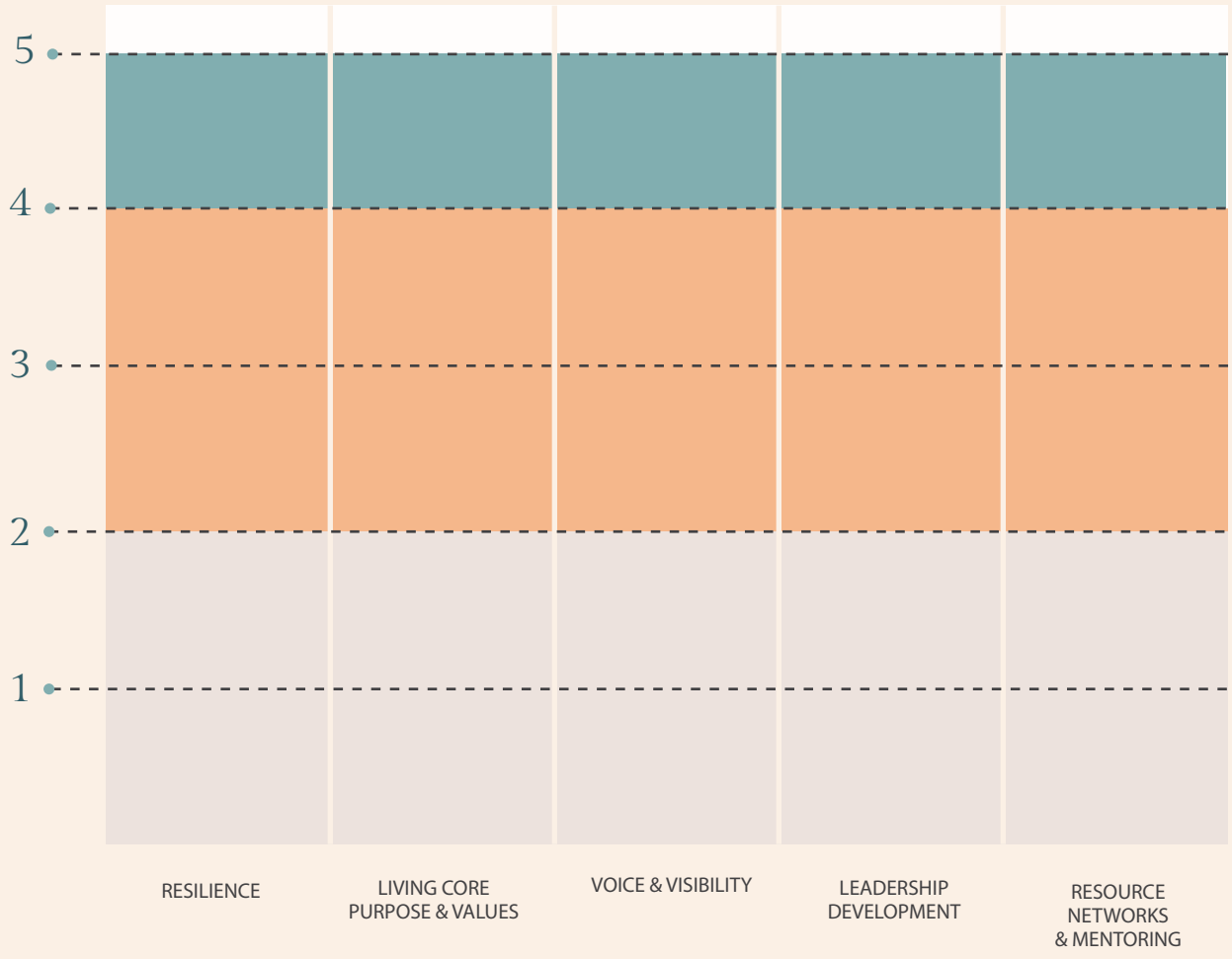
Action

Chart your self-assessment to identify your areas for focus and development



Require support to navigate barriers
Commence skill and application development to support your navigation of barriers

Partially navigating barriers
Consider further specific skill or application development to enhance your ability to navigate barriers

Effectively navigating barriers
How can you amplify your efforts to navigate barriers even more successfully, or use your skills to support other women?

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Are you ready to effectively leverage these focus areas to increase your visibility, confidence and success as a STEM leader?

If you identify any focus areas in which you would like to develop your skills, knowledge or application, to increase your visibility, confidence and success as a STEM leader; here's how I can help you:

Women in Leadership Foundations Program

Foundational leadership development workshops for early-career women in STEM

Women Who Lead STEM Mastermind Program

6-month leadership development program for mid-career women who want to navigate leadership barriers and achieve enduring visibility, influence and impact in their profession.

To find out more details or start a conversation about how I can support you or the female leaders in your STEM organisation, get in touch susan@ayaleadership.com

Dr Susan McGinty

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If you would like to discuss how Aya Leadership can support you or leaders in your STEM organisation to create business sustainability through enduring leadership growth please reach out...

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