

This reference matrix categorizes the mindfulness modalities, educational offerings, and clinical applications detailed within the McMaster Program for Faculty Development (MacPFD) "Mindfulness" section.

## Reference Matrix: MacPFD Mindfulness Modalities and Practices

<b>Modality / Concept</b>	<b>Description or Professional Application</b>	<b>Associated Resource or Reference [Citation]</b>
<b>Mindfulness (Core)</b>	Being "fully awake" to perceive the "vividness of each moment" for insight and healing.	MacPFD Definition <sup>1</sup>
<b>MBSR</b>	Mindfulness-Based Stress Reduction; used to decrease burnout and increase empathy in clinicians.	Moll, Frolic, & Keys (2013) <sup>1</sup>
<b>Mindful Self-Compassion</b>	Core education stream focusing on self-kindness versus self-judgment.	Germer & Neff (2013) <sup>1</sup>
<b>DRAM</b>	Developing Resilience through Applied Mindfulness; focuses on builder resilience via participant feedback.	Discovering Resilience Stream <sup>1</sup>
<b>Mindful Communication</b>	Facilitation of wellness and managing conflict through psychiatry and neurosciences.	Savinna Frederiksen
<b>Neuroscience of Mindfulness</b>	Meditative practice applied to family, occupational, and emergency medicine.	Ken Burgess
<b>Science of Meditation</b>	Research-based facts regarding attention, stress resiliency, and brain circuitry.	Mindful.org Curated Resource <sup>1</sup>
<b>Technology-Assisted Practice</b>	Use of bilingual (UCLA Mindful) or neuroscience-based (Healthy Minds) apps for daily regulation.	MacPFD Curated App List <sup>1</sup>
<b>Workplace Resilience</b>	Organizational interventions addressing compassion fatigue and occupational stress.	Andrea Frolic; Diana Tikasz
<b>Transformative Mindfulness</b>	Clinical meditation practices	Valerie Spironello

	specifically addressing care-giver fatigue.	
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## Synthesis of Clinical and Technical Integration

The MacPFD mindfulness framework provides a practical counterpart to the **open awareness** described in Self-Determination Theory (SDT), which is utilized in human-robot interaction (HRI) research to support autonomous functioning.

- Empirical Impact:** Local research at Hamilton Health Sciences demonstrated that practitioners of MBSR experienced significant increases in compassion and decreases in emotional reactivity, which aligns with the "Social Comfort" and "Safety" pillars found in the Neurodivergent Scale for Interacting with Robots (NSIR). <sup>2</sup>
- Procedural Mindfulness:** The emphasis on "Mindful Teaching" and "Mindful Leadership" among the leadership team supports the ethical mandate for researchers to be mindful of the relationships and dependencies users develop with autonomous agents during studies.
- Somatic Regulation:** Modalities such as the "Body Scan" and "soft gaze" practices found in the Mindful Self-Compassion program provide a clinical basis for the "Somatic Sanctuary" concepts measured by the NSIR, specifically regarding atypical social monitoring and sensory safety.