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**Knowledge Bites Lunch 'n' Learn**

**November 16, 2020**



UNIVERSITY OF  
CALGARY

# An Intervention for Caregivers Supporting Family Members with Substance Use Disorders

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Heather M.

November 16, 2021



# ADDICTION - A FAMILY DISORDER



Although addiction presents itself as a problem of dependent individuals, families are also profoundly affected by the family member's addiction.

*One person may use, but the whole family suffers.*

# PHD RESEARCH

## THE IMPACT OF ADDICTION ON THE FAMILY



**SEEKING RESEARCH PARTICIPANTS FOR AN IN-DEPTH  
STUDY OF THE EXPERIENCES OF MOTHERS WITH  
ADOLESCENT CHILDREN IN ADDICTION TREATMENT**

**For more information, please contact Jackie Smith  
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Ethics ID: REB13 1298  
This study has been approved by the University of Calgary  
Conjoint Health Research Ethics Board.  
Protocol Title: A narrative inquiry into the experiences  
of mothers of children in addiction treatment.  
PI: Dr. Andrew Estefan  
Version Number: 1  
Page 1 of 1  
CHREB template date: January 30, 2014



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Exploring the  
Experiences of  
Four Mothers  
through  
Four Stages of  
Treatment

# Alberta Adolescent Recovery Centre (AARC)

- Youth aged 12-21 with substance use disorders
- Long-term residential treatment centre
- Family Treatment Program
- Evidenced–informed with outcome studies



# NAVIGATING COMPLEXITY...

*"As I went from agency to agency, I just remember feeling overwhelmed and very alone... It is like you are white knuckling it ... I felt trapped in the fear and carrying the responsibility of my son's addiction and mental health ... I felt responsible for making the abnormal seem normal and for holding my family together."*



*"I didn't know what to do but I knew I had to do something."*




# WHAT HAPPENS AFTER TREATMENT?

*“...treatment is not a one-way ticket from addiction to recovery.”*



*“We were all reminded that—amid our sense of progress in treatment & beyond—recovery is also a story of chronicity & continuity, which leaves open the possibility of the unexpected, the unpredictable & the unwanted.”*

# RETURNING RESEARCH TO PRACTICE: STRENGTHENING NATURAL SUPPORTS

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- Parent Aftercare
  - Couples Therapy Workshop
  - Family Case Consultations
  - **Mindfulness**

# MINDFULNESS BASED STRESS REDUCTION (MBSR)

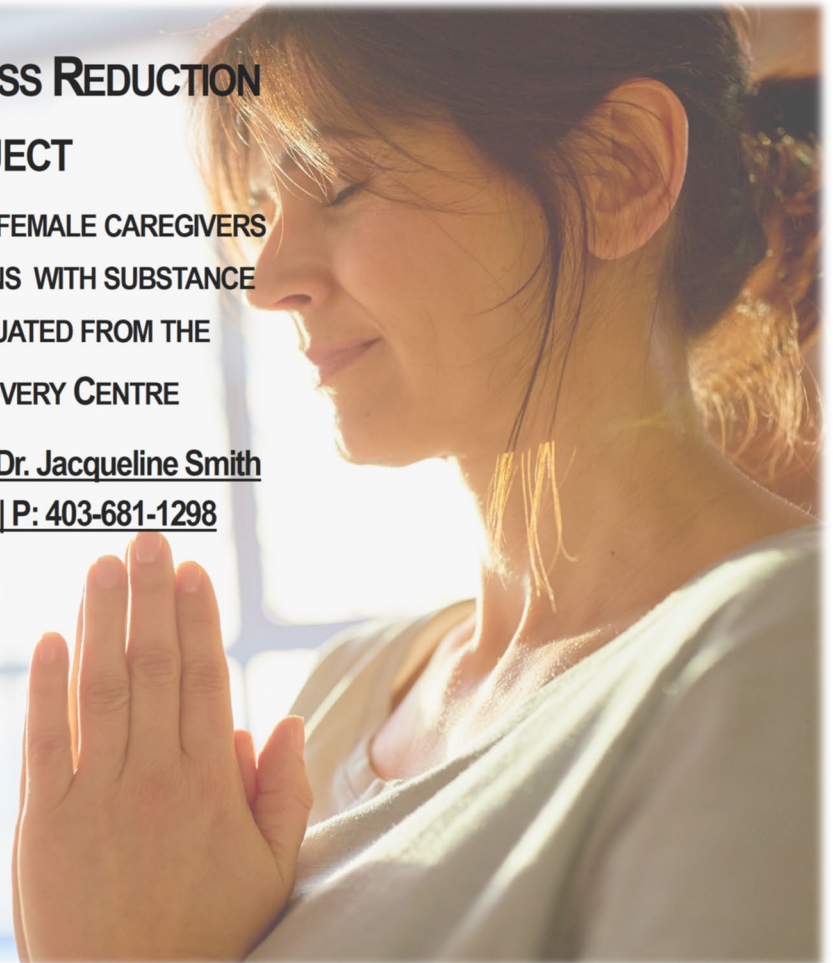
MBSR is supported by two decades of extensive research showing its effectiveness in reducing stress, anxiety, and depression and promoting overall well-being.



Stress isn't just a feeling or a mental state; if you don't address it, it seeps into every aspect of your life.

# MINDFULNESS BASED STRESS REDUCTION (MBSR) FOR MOTHERS & CAREGIVERS OF YOUTH WITH SUBSTANCE USE DISORDERS

- Feasibility pilot study – with waitlist group
- To evaluate the perceived benefits of MBSR as a self-care intervention
- Self-Compassion and Perceived Stress Scale




**MINDFULNESS BASED STRESS REDUCTION  
RESEARCH PROJECT**

SEEKING RESEARCH PARTICIPANTS - FEMALE CAREGIVERS  
WHO HAVE DAUGHTERS AND/OR SONS WITH SUBSTANCE  
ABUSE ISSUES WHO HAVE GRADUATED FROM THE  
ALBERTA ADOLESCENT RECOVERY CENTRE

For more information, please contact Dr. Jacqueline Smith  
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Ethics ID: REB17-1811  
This study has been approved by the University of Calgary  
Conjoint Health Research Ethics Board.  
Protocol Title: Mindfulness based stress reduction for female  
caregivers of youth with substance abuse issues: A feasibility  
study.  
PI: Dr. Jacqueline Smith

 UNIVERSITY OF  
CALGARY

This study has been approved by the  
University of Calgary Conjoint Health Re-  
search Ethics Board



# MBSR – FACILITATION INFORMATION

- 8-week program
- 2.5 hours every Sunday morning
- Guidance for daily practice for meditation
- Mindful stretching (light yoga)
- Education on stress
- Components of MBSR program
  1. Specific mindfulness practices
  2. Didactical material
  3. Group discussions





# **MINDFULNESS BASED STRESS REDUCTION (MBSR)**

## **A REVIEW OF THE LITERATURE**

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**Derek Luk, MN, RN**

Consultant, Alberta  
Medical Association





# American Mindfulness Research Association

# Change in stress correlates with change in amygdala gray matter



Holzel, Carmody, Vangel et al. (2011).



# CONNECTEDNESS & SELF- COMPASSION

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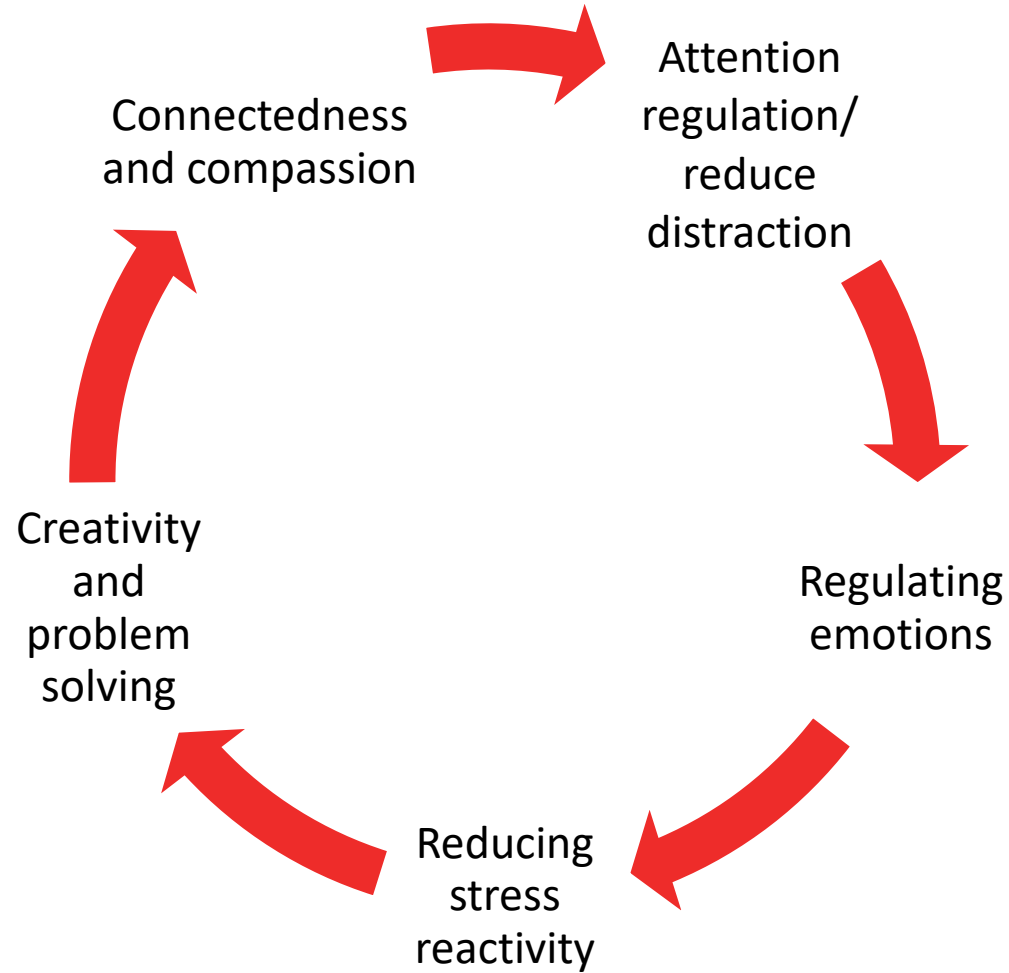
# ATTENTION REGULATION

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- Problem: Sensory overload
- Train attention to focus what is relevant, what is meaningful, and hold stability of awareness



# RESEARCH – BENEFICIAL EFFECTS



- Holzel, Carmody, Vangel et al. (2010).
- Lim, Condon & DeSteno (2015)
- Lutz, Brefczynski-Lewis, et al. (2008)
- Fox, Nijeboer, Dixon, et al. (2014)
- Tang, Ma, Wang, et al. (2007)
- Baas, Nijstad & DeDreu (2015)
- Gard, Noggle, Park, et al. (2014)
- Ostafin & Kassman (2012)

# MINDFULNESS: WHAT WE PRACTICE

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- Intentionally focusing attention
- Clarity of perception
- Openness, curiosity, kindness
- Insight: Recognizing patterns of mind
- Letting go
  - Attachment and avoidance
  - Narrow identification as a static person
- Resting in awareness itself





# RESULTS FROM MBSR PROJECT

- Measures

- Perceived Stress Scale (PSS)
- Self-Compassion Scale (SCS)
- Participant Interviews

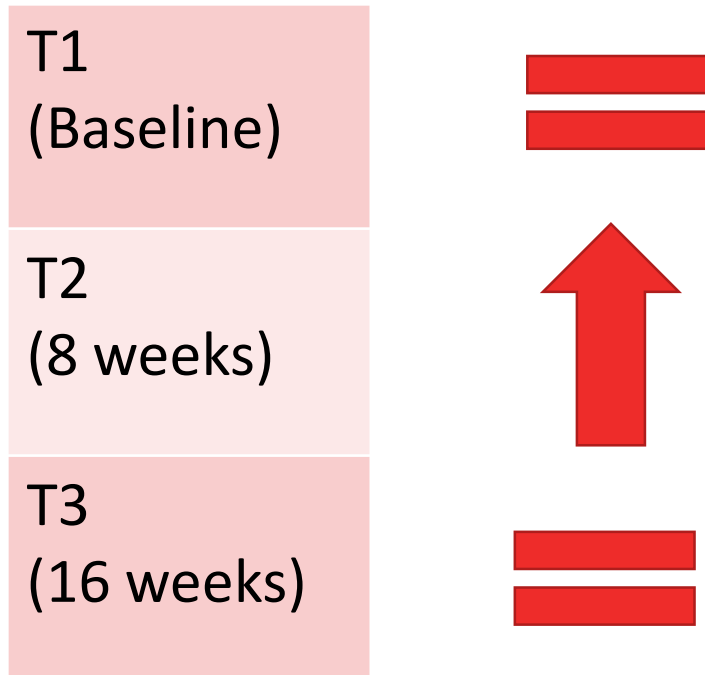
- Participants

- Treatment group (n=21)
- Waitlist control group (n=22)

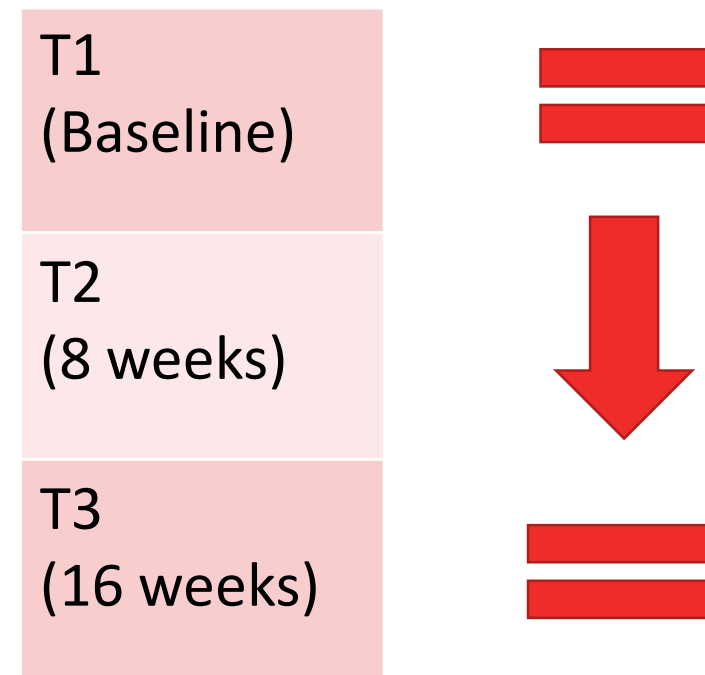


# QUANTITATIVE RESULTS

## Self-Compassion Scale



## Perceived Stress Scale



# QUALITATIVE INTERVIEW QUESTIONS

What did you enjoy about this MBSR program?

What did you not enjoy about this MBSR program?

How has this MBSR program affected your ability to feel self-compassion?

How has this MBSR program affected your ability to manage the stress that you have in your life?

What has been the most significant change you have noticed in yourself since you completed this MBSR program?

Is there anything else that I didn't ask you about that you would have liked me to ask about?

# QUALITATIVE RESULTS

- Impact of MBSR
  - Self-compassion
  - Perceived stress
  - Interpersonal effectiveness
  - Physical wellness
- Perceptions of MBSR program
  - Group experience
  - Program delivery
  - Recommendations



Contents lists available at ScienceDirect

## Addictive Behaviors

journal homepage: [www.elsevier.com/locate/addictbeh](http://www.elsevier.com/locate/addictbeh)



# A pilot of a mindfulness based stress reduction intervention for female caregivers of youth who are experiencing substance use disorders



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<sup>b</sup> Alberta Health Services, Calgary, Alberta, Canada

<sup>c</sup> Faculty of Social Work, University of Calgary, Calgary, Alberta, Canada

## HIGHLIGHTS

- 43 female caregivers of youth with SUDs were included in an 8-week MBSR program.
- MBSR led to reduced stress and increased self-compassion.
- Participants experienced improved physical wellness and interpersonal effectiveness.
- MBSR facilitated community connection among participants with shared experience.

# PARTICIPANT EXPERIENCE



*“If I look like a wreck when I come into emergency with my daughter, it’s because I’ve been through hell...”*

feeling judged

grief

crazy

fear

loss

panic

bewilderment

shock

regret

rumination



# PARTICIPANT EXPERIENCE — FOLLOWING MBSR

*“There is no need to go to India or anywhere else to find peace.  
You will find that deep place of silence right in your room, your  
garden or even your bathtub”.*

Elizabeth Kubler Ross



grounding

calming

tapping

settling

# IMPLICATIONS FOR PRACTICE

- How to incorporate with patients/families
  - Family is the client
  - Continuity of care – chronicity of addiction
- Focus for Clinicians working in AHS settings
- Where to begin
- MBSR is the large picture - focus on bite sized pieces

# WHERE TO START



1. Mindfulness for  
clinicians



2. Mindfulness as a  
tool for our clients

# WHERE IS MINDFULNESS AVAILABLE?

## UCalgary Wellness Services

- Start your own daily mindfulness practice with this self-directed, online program.

<https://www.ucalgary.ca/wellness-services/staying-healthy/learning/self-help-resources/mindfulness-online>

## Virtual (Free 8-week MBSR)

- Palouse Mindfulness (<https://palousemindfulness.com/>)

## Formal Training

- The Centre for Mindfulness Studies

<https://www.mindfulnessstudies.com/about/>

# Q&A

Principal Investigator: Dr. Jacqueline Smith, PhD, RN  
[jacqueline.smith1@ucalgary.ca](mailto:jacqueline.smith1@ucalgary.ca)

## References

### Emotional regulation

Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., & Lazar, S. W. (2010). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry research*, 191(1), 36–43. doi:10.1016/j.psychresns.2010.08.006



## References

### Connectedness

Lim D, Condon P, DeSteno D (2015) Mindfulness and Compassion: An Examination of Mechanism and Scalability. *PLoS ONE* 10(2): e0118221.  
<https://doi.org/10.1371/journal.pone.0118221>

Lutz A, Brefczynski-Lewis J, Johnstone T, Davidson RJ (2008) Regulation of the Neural Circuitry of Emotion by Compassion Meditation: Effects of Meditative Expertise. *PLoS ONE* 3(3): e1897.  
<https://doi.org/10.1371/journal.pone.000189>

## References

### Enhanced attention performance

Kieran C.R. Fox, Savannah Nijeboer, Matthew L. Dixon, James L. Floman, Melissa Ellamil, Samuel P. Rumak, Peter Sedlmeier, & Kalina Christoff. (2014). Is meditation associated with altered brain structure? A systematic review and meta-analysis of morphometric neuroimaging in meditation practitioners. *Neuroscience & Biobehavioral Reviews*, (43)

Tang, Y. Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., ... Posner, M. I. (2007). Short-term meditation training improves attention and self-regulation. *Proceedings of the National Academy of Sciences of the United States of America*, 104(43), 17152–17156. doi:10.1073/pnas.0707678104

## References

### Enhanced attention performance (Continued)

Jha, A. P., Krompinger, J., Baime, M. J. (2007). Mindfulness training modifies subsystems of attention. *Cognitive Affective & Behavioral Neuroscience*, 7, 109-119. doi:10.3758/CABN.7.2.109

Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., & Gelfand, L. (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. *Emotion*, 10, 54- 64. <http://dx.doi.org/10.1037/a0018438>

Tang, Y. Y., Lu, Q., Geng, X., Stein, E. A., Yang, Y., & Posner, M. I. (2010). Short-term meditation induces white matter changes in the anterior cingulate. *Proceedings of the National Academy of Sciences of the United States of America*, 107(35), 15649–15652. doi:10.1073/pnas.1011043107

## References

### Creativity and problem solving

Baas, M., Nijstad, B. A., & De Dreu, C. K. (2015). Editorial: "The cognitive, emotional and neural correlates of creativity". *Frontiers in human neuroscience*, 9, 275. doi:10.3389/fnhum.2015.00275

Gard, T., Noggle, J. J., Park, C. L., Vago, D. R., & Wilson, A. (2014). Potential self-regulatory mechanisms of yoga for psychological health. *Frontiers in human neuroscience*, 8, 770. doi:10.3389/fnhum.2014.00770

Ostafin, B.D., & Kassman, K.T. (2012). Stepping out of history: Mindfulness improves insight problem solving. *Consciousness and Cognition*, 21, 1031-1036