



# ResearchLink

## Compassion Training as a Pathway to Lifelong Health and Well-Being



*Two new research studies find compassion is important to health and well-being. The first study explored how a compassion meditation program called Cognitively-Based Compassion Training, or CBCT, impacts the body's response to psychosocial stress. Findings show that the practice of CBC reduced stress-induced immune and behavioral responses that have been repeatedly shown to be risk factors for the development of both physical and mental illness.*

*A follow-up study showed that CBCT also improves people's ability to recognize the emotions of others and does so by increasing activity in brain regions known to be essential for the development and expression of empathy. Many studies suggest that as a group individuals exposed to early life trauma and/or neglect show abnormalities in both stress responses and abilities to empathize with others. Given this, it is encouraging to note the practice of CBCT was found to increase hopefulness while simultaneously reducing the levels of stress and immune chemicals that promote disease. Together, these studies highlight the importance of compassion in our everyday lives and the impact they can have on overall health and wellbeing.*

### The Many Benefits of Compassion Meditation

In recent years, researchers have begun to focus on how meditation impacts the immune and neuroendocrine systems, among other health systems. These systems are important as they are relevant to disease advancement and growth. Researchers have found that certain types of meditation may positively influence one's health.<sup>1,2</sup> However, much of the research on the benefits of meditation conducted to date focuses on calming the mind, improving focused attention, or developing mindfulness.<sup>3</sup> Little research has focused on meditation specifically designed to create compassion for others.

However, an emerging body of evidence suggests that these compassion-based practices may offer unique and additive health benefits to the more commonly

studied mindfulness practices. For example, in addition to the studies of CBCT mentioned above, researchers have found that compassion meditation practices may offer significant health benefits. For example, one recent study found that brief exposure to compassion meditation training resulted in positive benefits for areas of the brain associated with stress.<sup>6</sup> Further, a type of compassion training known as metta has been shown to increase self-compassion,<sup>7</sup> which in turn has been shown to reduce stress, burnout, depression, and anxiety as well as increase life satisfaction.<sup>7,8,9</sup>

For these reasons, researchers have continued to examine how compassion meditation positively impacts health and wellbeing.



# Compassion Training as a Pathway to Lifelong Health and Well-Being

## About the Studies of CBCT

*Conducted by Researchers at The University of Arizona and Emory University*

Cognitively-Based Compassion Training, or CBCT, is a manualized, secular meditation program designed by Geshe Lobsang Tenzin Negi, PhD at Emory University. Dr. Charles Raison and colleagues wanted to examine CBCT in under-researched areas. First, how CBCT impacts the body's response to psychological stress was studied. Then, continuing the examination of compassion training, Dr. Raison and colleagues explored how CBCT might benefit at-risk adolescents living in foster care.

### *Study 1: How Compassion Training Impacts Health and Well-Being in College Students*

Over the spring and fall semesters of the 2006 calendar year, 61 participants aged 17 to 19 took part in the study. All participants were recruited through an introductory health education class at Emory University. Participants were then split: half were assigned to six weeks CBCT and half were assigned to a health discussion group.



#### Text Box 1: Elements and Schedule of Compassion Meditation Training Program

##### *Week 1*

Develop basic focus and mental stability. Participants learn basic attentional meditation practice by using the breath as the object of focus.

##### *Week 2*

Introduce mindfulness practice. Participants learn non-judgmental observation of the processes of thought and bodily sensation.

##### *Week 3*

Use focus and mindfulness techniques to explore universal human desires for happiness and avoidance of suffering as a means to develop compassion for the self.

##### *Week 4*

Continue meditation. Participants instructed to examine the steady and unsteady nature of the differences between "friends" and "enemies."

##### *Week 5*

Meditative reflections. Participants learn meditative techniques aimed at generating compassionate emotions.

##### *Week 6*

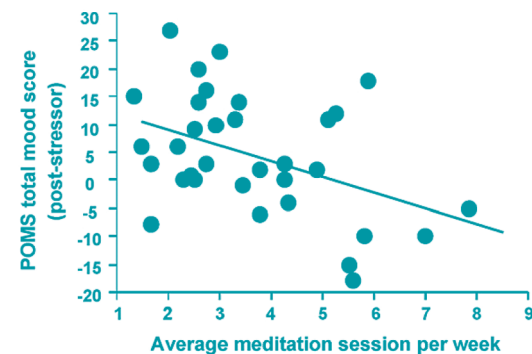
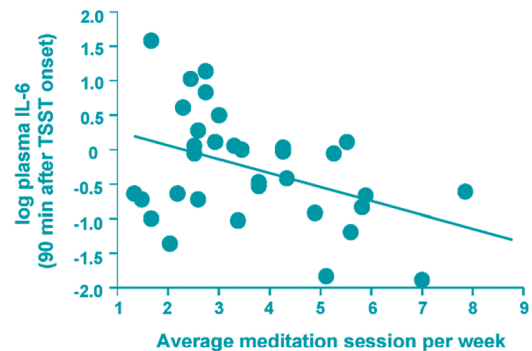
Meditation aimed at creating compassionate emotions for friends, strangers, and enemies. Instructions given on how to continue the practice "at-home."

After the six-week period, participants were subjected to the *Trier Social Stress Test (TSST)*, which is an oft used laboratory test for examining how the body and brain respond to psychosocial stress. During the TSST participants had their blood drawn. Lastly, participants answered the 30-item *Profile of Mood States (POMS)* questionnaire. Groups were then tested and compared to one another to see if the group that had received training had better health and wellbeing outcomes than the group that did not.

#### **Findings:**

No meaningful differences between those who received compassion training and those who did not were found. This means that the two groups do not meaningfully differ in their responses to test items.

However, within the group of participants who received compassion training, meaningful links between amount of meditation practice and innate immune and behavioral responses to stress were found such that:



1. More meditation practice was linked with decreased TSST (top) and POMS scores (bottom). Lower scores mean better health.
2. Participants with median practice times above the median were found to have lower TSST and POMS scores when compared to participants below the median.

To better confirm that practice time impacted stress responses, Dr. Raison and his team enrolled a subsequent demographically identical group of young adults and subjected them to the TSST prior to randomization to CBCT to examine whether baseline differences in stress responses would predict amount of subsequent practice time. No such associations were observed, strongly suggesting that the association between practice time and improved stress responses observed in the first study reflect the fact that engagement with CBCT enhances these key health-related variables.

### ***Study 2: How Cognitively-Based Compassion Training Benefits At-Risk Adolescents in Foster Care***

A total of 70 adolescents, ages 13-17 who were currently in the foster care system, were recruited for the study. All adolescents were living in a multi-county metropolitan area. Guardians of the adolescents completed *The Child Behavior Checklist – Parent Version* (CBCL). The CBCL assesses a child’s behavioral and emotional problems as well as their school performance. The adolescents in the study completed the *Children’s Hope Scale* and *The State-Trait Anxiety Inventory – Trait Subscale*, among many other scales and provided saliva for the analysis of key stress and immune related chemicals.

Again, participants were split into group groups: one group received CBCT while the other group was waitlisted. Males and females were assigned to separate classes that met



#### **Text Box 2: What is Cognitively-Based Compassion Training**

- A reflective practice that teaches active examination of loving-kindness, empathy, and compassion towards loved ones, strangers, and enemies.<sup>10</sup>
- Employs a variety of mental restructuring and emotion producing practices with the goal of developing a calmness of mind that fosters acceptance and understanding of others.<sup>4</sup>

for one hour, two times a week, for six weeks – a total of 12 classes. After the six week period, the measures were re-administered. Pre- and post-scores were then compared.

#### **Findings:**

On most of the scales the two groups did not differ; however, again, meaningful differences were found based on how much one practiced cognitively-based compassion training. Specifically, the more an adolescent practiced the more hopeful and the less generalized anxiety they felt.

Further, responses from participants suggest CBCT proved useful when dealing with daily life stressors. Themes to emerge are listed in the chart below.

THEME	STRATEGY	EXAMPLE
Anger Management	Compassion Meditation	“My brother got me mad at home. He spilled oxide powder on my shoes and my mom’s shoes and blamed it on me. I went and did meditation and it calmed me down.”
Stress Management	Perspective Taking	“At school when changing classes and kids are running into you – [CBCT] taught me not to worry about small stuff.”
Concentration	Deep Breathing	“The breathing is excellent. I use when test taking.”
Compassion/Empathy	Perspective Taking	“Empathy – everybody [was] being mean to new girl at school [so] I talked to her and showed her empathy.”
Unspecified School/ Home Conflict	None Specified	“Different situation at school, CBCT has helped.”

In addition to these behavioral outcomes, increased practice time during the study was associated with significant reductions in the stress hormone cortisol and the inflammatory marker c-reactive protein. Such reductions, if sustained, would likely confer significant physical and mental health benefits.

## Study Implications

- Compassion meditation may reduce stress-induced immune and behavioral responses, which relates to better health and well-being.
- CBCT appears to be a promising program for youth with histories of maltreatment who are currently experiencing psychological problems and social instability.
- Meditation is one approach many could take to better their overall health and well-being.



### Text Box 3: Interested in Compassion Meditation?

Although CBCT is not currently available for clinical indications, there are numerous resources available to those who want more information about Compassion Meditation in general.

#### BOOKS

- *An Open Heart: Practicing Compassion in Everyday Life* by The Dalai Lama
- *Lovingkindness: The Revolutionary Art of Happiness* by Sharon Salzberg
- *Modern Buddhism: The Path of Compassion and Wisdom* by Geshe Kelsang Gyatso
- *The Mindful Path to Self-Compassion: Freeing Yourself from Destructive Thoughts and Emotions* by Christopher Germer
- *Calming Your Anxious Mind: How Mindfulness and Compassion Can Free You from Anxiety, Fear, and Panic* by Jeffrey Brantley
- *Treating the Whole Patient: Exploring the Healing Potential of a Mind-Body Approach to Mental Health* by Jon Draud, Rakesh Jain, Vladimir Maletic, and Charles Raison

#### WEBSITES

- [www.tibet.emory.edu/research](http://www.tibet.emory.edu/research)
- [www.self-compassion.org/guided-self-compassion-meditations-mp3.html](http://www.self-compassion.org/guided-self-compassion-meditations-mp3.html)
- [www.meditationincolorado.org/meditation\\_techniques.htm](http://www.meditationincolorado.org/meditation_techniques.htm)

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10. Ozawa-de Silva B & Dodson-Lavelle B. An education of heart and mind: Practical and theoretical issues in teaching Cognitive-Based Compassion Training to children. *Practical Matters*. 2011; 1 (4), 1-28.

[This ResearchLink](#) summarizes two studies:

- (1) Pace, T.W.W., Negi, L. T., Adame, D. D., Cole, S. P., Sivilli, T. I., Brown, T. D., Issa, M. J., Raison, C. L. (2009). Effect of compassion meditation on neuroendocrine, innate immune and behavioral responses to psychosocial stress. *Psychoneuroendocrinology*, 34, 87-98. doi: 10.1016/j.psyneuen.2008.08.011
- (2) Reddy, S. D., Negi, L. T., Dodson-Lavelle, B., Ozawa-de Silva, B., Pace, T. W. W., Cole, S. P., Raison, C. L., & Craighead, L. W. (2012). Cognitive-based compassion training: A promising prevention strategy for at-risk adolescents. *Journal of Child and Family Studies*, 21. doi: 10.1007/s10826-012-9571-7

[Suggested citation for this ResearchLink:](#)

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