

**Recent Scientific Research on the  
*Transcendental Meditation*® technique  
(2014-2019)**

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# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Four Stories

Knowledge (Basic Research) → Organizing Power (Applied Research)

Story # 1: TM Improves Gene Expression → Health and Longevity

Story #2: TM Increases Brain Integration → Improves Academic Outcomes

Story #3: TM Most Effective Stress Reduction Technique → Universal Stress Reduction

Story #4: TM Is From Authentic Vedic Knowledge → Improved National Consciousness

# Story #1: TM Improves Gene Expression → Health and Longevity

## New Basic Research

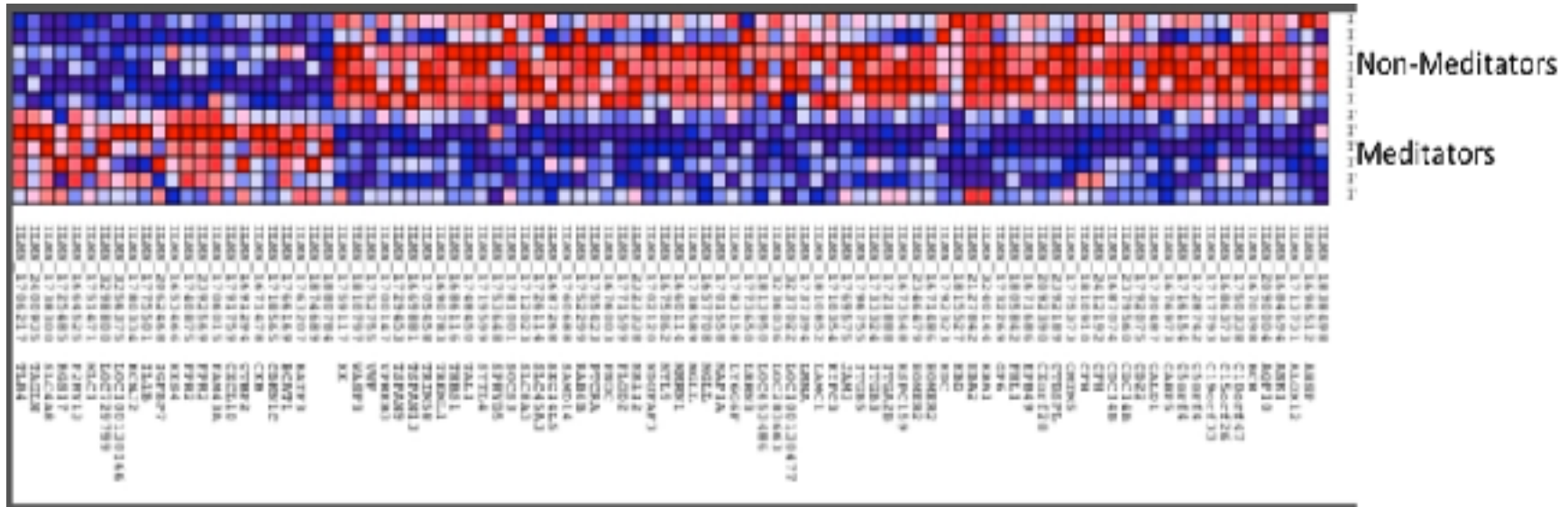
- TM improves gene expression in a manner that could be expected to reduce inflammation, improve the response to stress, protect from cardiovascular disease, and protect from cancer.
- TM increases telomere length, which is associated with increased longevity.

## New Applications

- TM prevents enlargement of heart in hypertensive patients.
- TM enhances cardiac rehabilitation.
- TM enhances cardiac rehabilitation.
- TM decreases risk of atherosclerosis.
- TM improves immune function.
- TM increases vitality in HIV patients.
- Chapter on Stress, TM and Hypertension published in major medical text book.

# DNA: Improved Gene Expression (Basic Research)

## through the *Transcendental Meditation* Technique



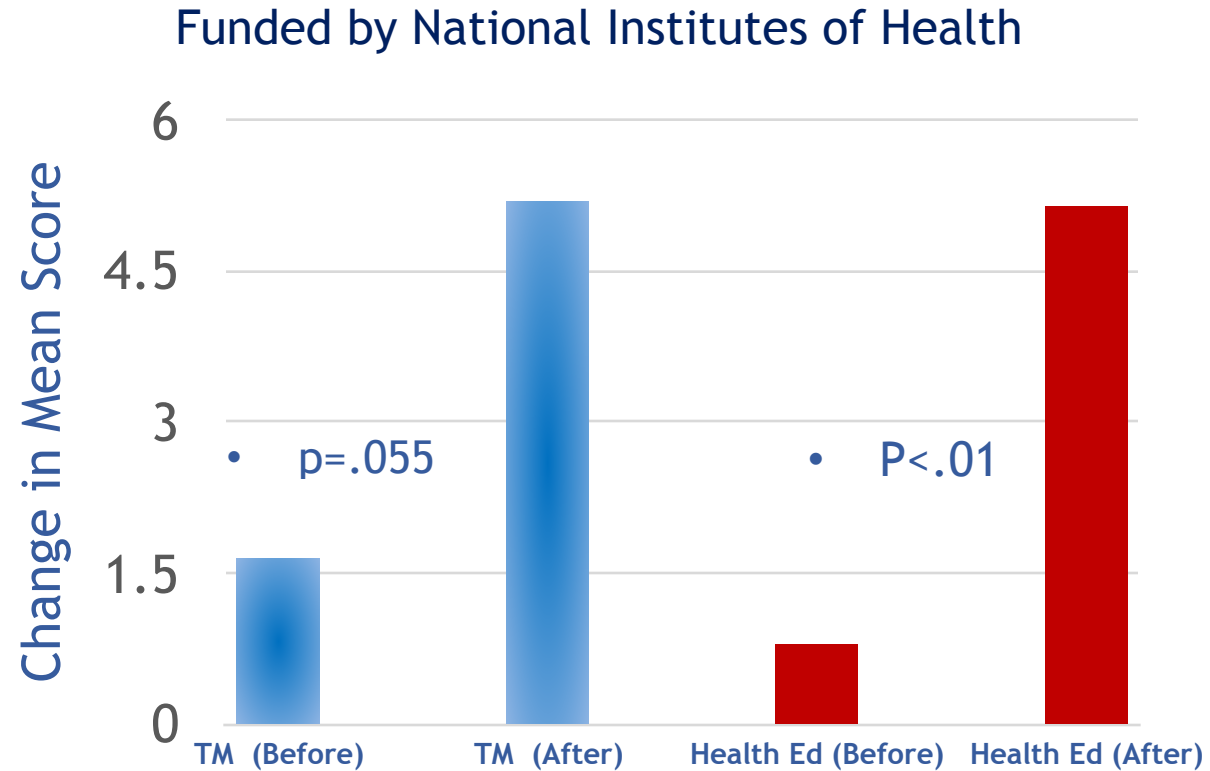
**Red** = Genes that were increased in expression

**Blue** = Genes that were decreased in expression

TM affects global gene expression in a manner that could be expected to reduce inflammation, improve the response to stress, protect from cardiovascular disease, and protect from cancer.

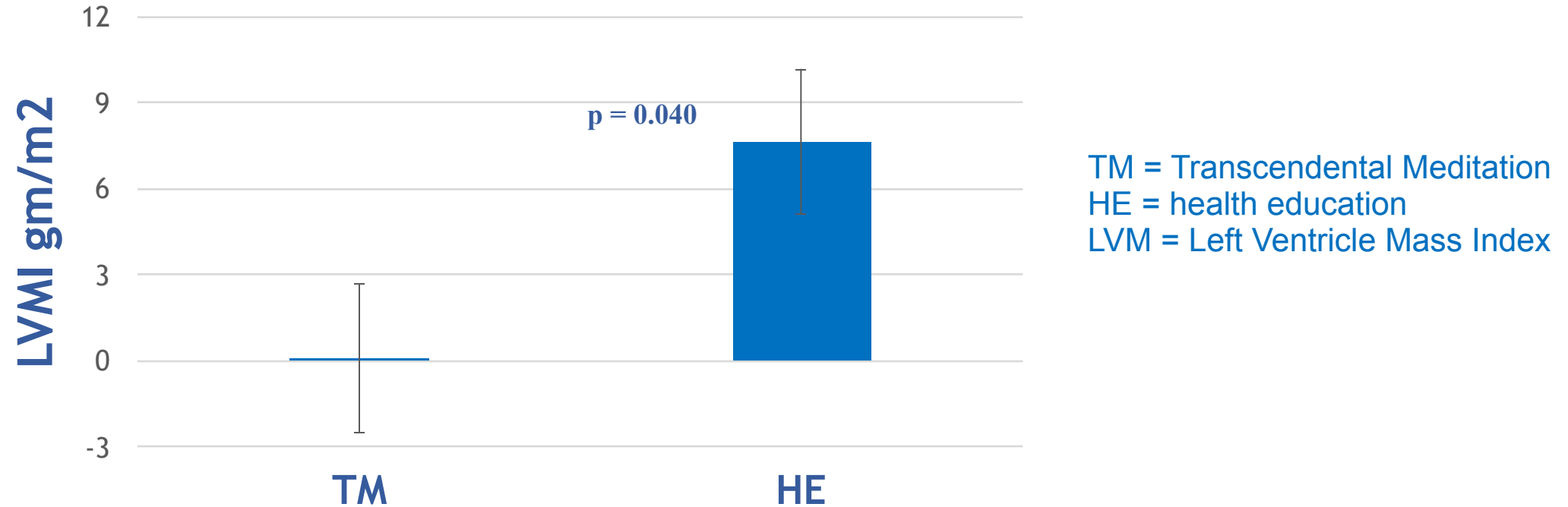
Reference. Wenuganen S, Fagan J, Wallace K, Travis F, Srivastava M, Walton K. “The effects of the TM technique on gene expression.” Fairfield, Iowa: Maharishi University of Management; 2014.

# Transcendental Meditation and Health Education: Effects on Telomerase *Gene Expression*



**Reference.** Duraimani, Shanthi , Schneider, Robert H., Randall, O.S., Nidich, S.I., Xu, S. , Ketete, M, . . . Fagan, John (2015, Nov 16). Effects of lifestyle modification on telomerase gene expression in hypertensive patients: A pilot trial of stress reduction and health education programs in African Americans. *PLoS ONE*, 10(11), e0142689. doi:10.1371/journal.pone.0142689

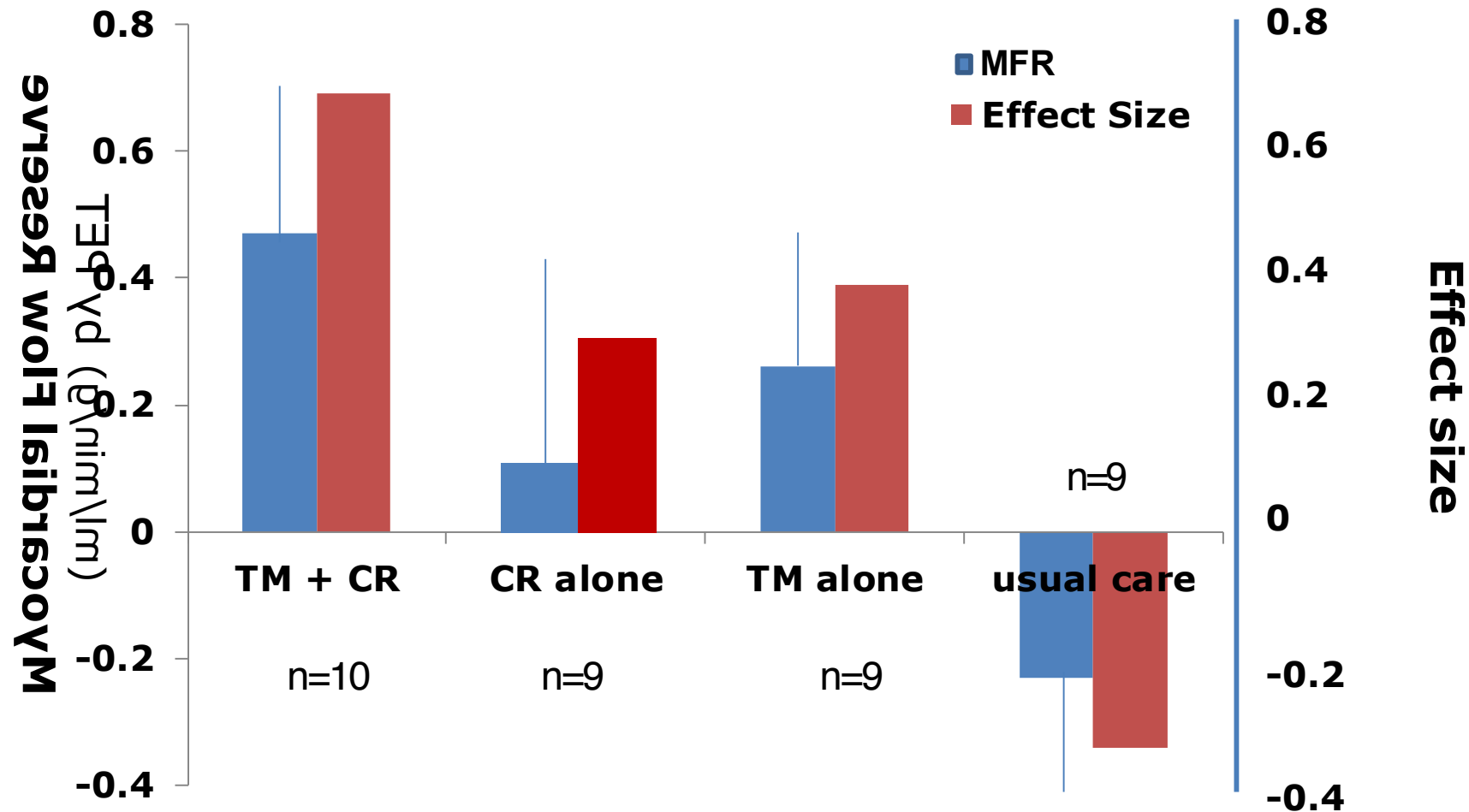
# Prevention of Left Ventricular Hypertrophy: A Randomized Controlled Trial of Transcendental Meditation and Health Education



**Change in Left Ventricle Mass Index ( $\pm$ Standard Error of Mean) after 6-months of Transcendental Meditation or Health Education**

Reference. Schneider, R. H., Myers, H. F., Marwaha, K., Rainforth, M. A., Salerno, J. W., Nidich, S. I., . . . Norris, K. C. (2019). Stress Reduction in the Prevention of Left Ventricular Hypertrophy: A Randomized Controlled Trial of Transcendental Meditation and Health Education in Hypertensive African Americans. *Ethnicity & Disease*, 29(4), 577 - 586.

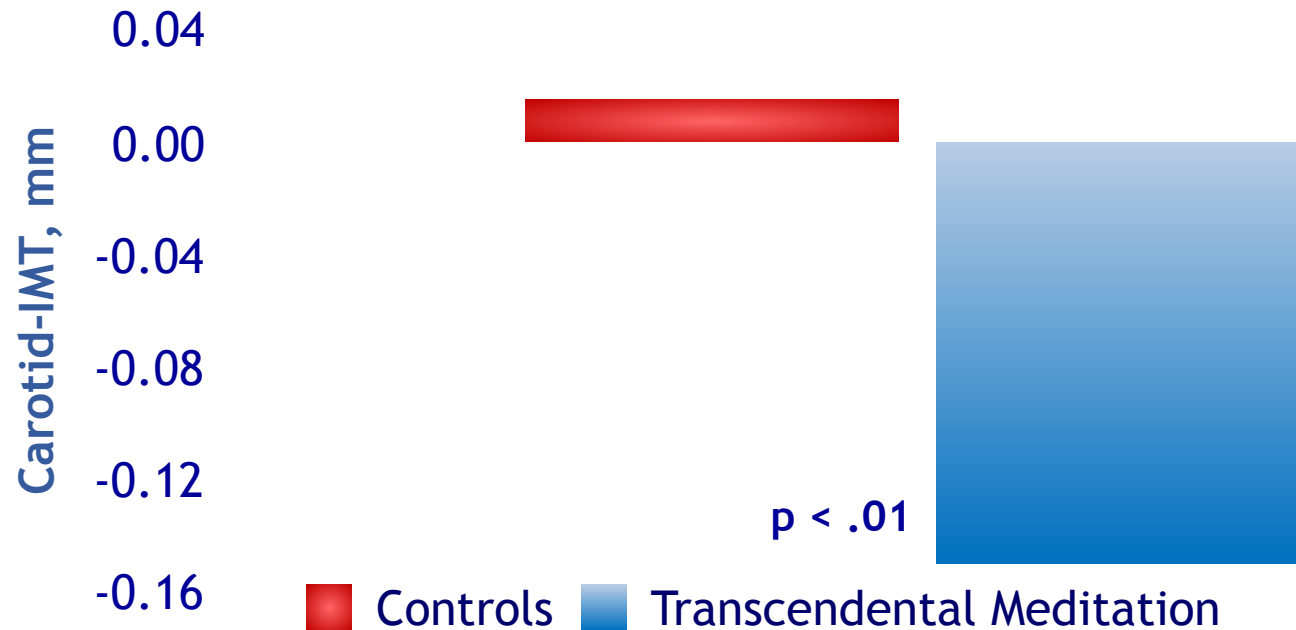
# Enhanced Cardiac Rehabilitation through TM



Reference. Bokhari S, Schneider R, Salerno J, Rainforth M, Gaylord-King C, Nidich S. Effects of cardiac rehabilitation with and without meditation on myocardial blood flow using quantitative positron emission tomography: A pilot study. *Journal of Nuclear Cardiology*. 2019(Sept 16):1-12 (online).

# Reduced Risk of Atherosclerosis

through the *Transcendental Meditation* Technique



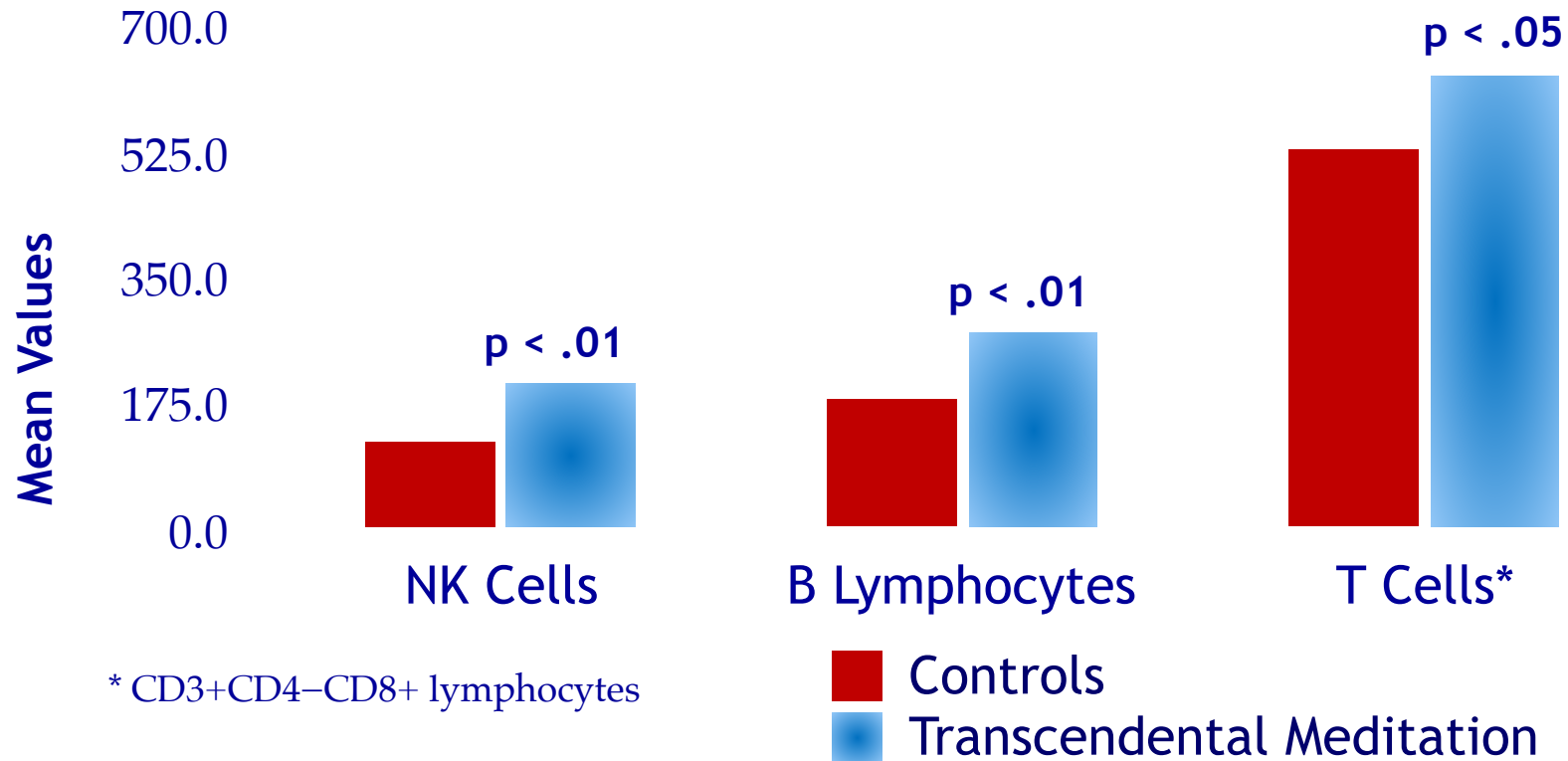
TM, along with a heart-healthy Ayurvedic diet, exercise, and herbal food supplements, significantly decreases blockage to the carotid artery (carotid-IMT), a correlate of atherosclerosis in the heart and brain.

Reference. Walton, K. G., B. Olshansky, E. Helene, and R. H. Schneider. "Trials of Maharishi AyurVeda for Cardiovascular Disease: A Pooled Analysis of Outcome Studies with Carotid Intima-Media Thickness." *Journal of Preventive Cardiology* 4, no. 1 (2014): 615-23.



# Stronger Immune System

through the *Transcendental Meditation* Technique

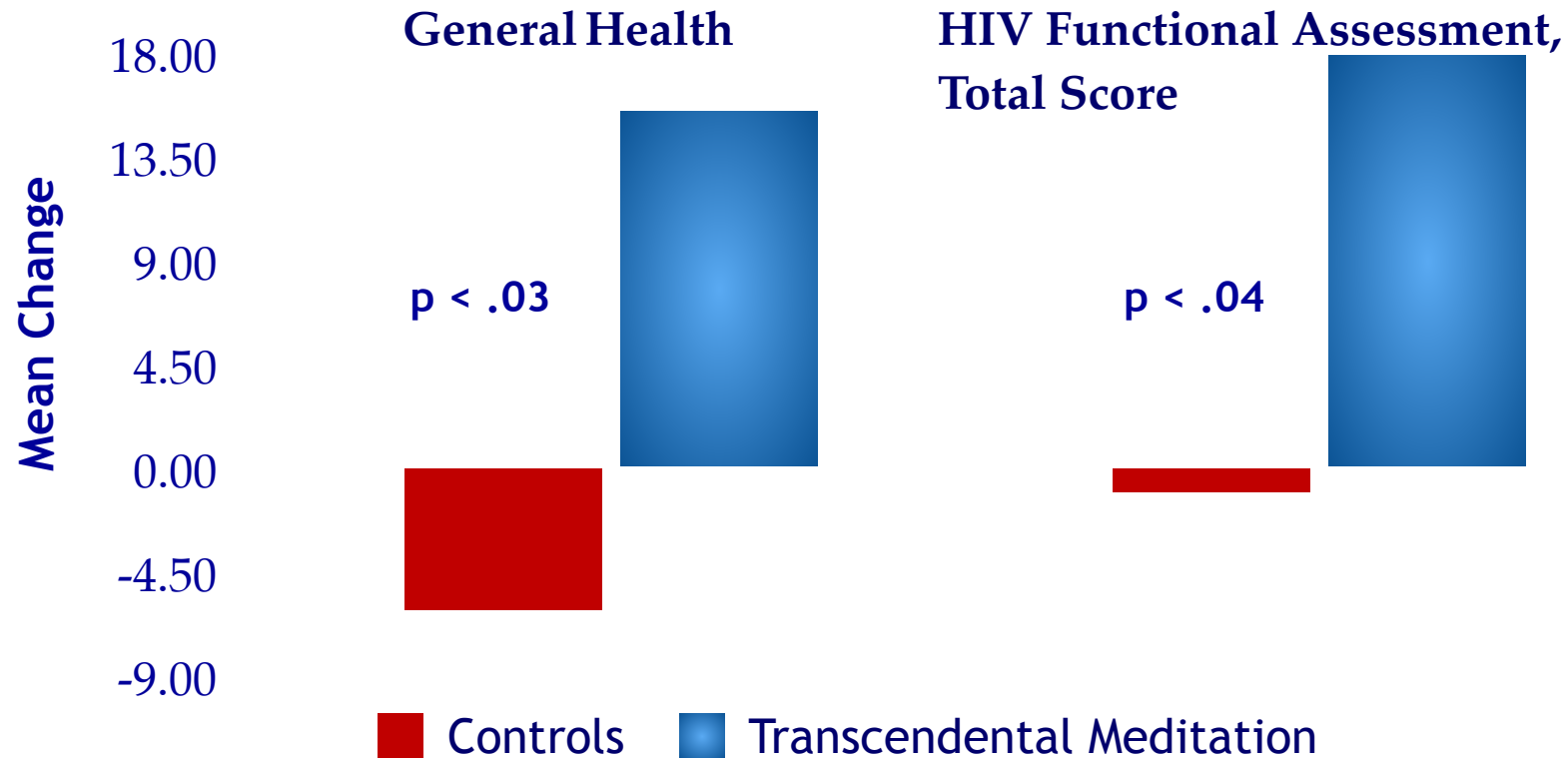


**TM increases white blood cells that defend the body from infection and cancer.**

Reference. Infante, Jose R, Fernando Peran, Juan I Rayo, Justo Serrano, Maria L Dominguez, Lucia Garcia, Carmen Duran, and Ana Roldan. "Levels of Immune Cells in Transcendental Meditation Practitioners." *International Journal of Yoga* 7, no. 2 (2014): 147-51

# Increased Vitality in HIV Patients

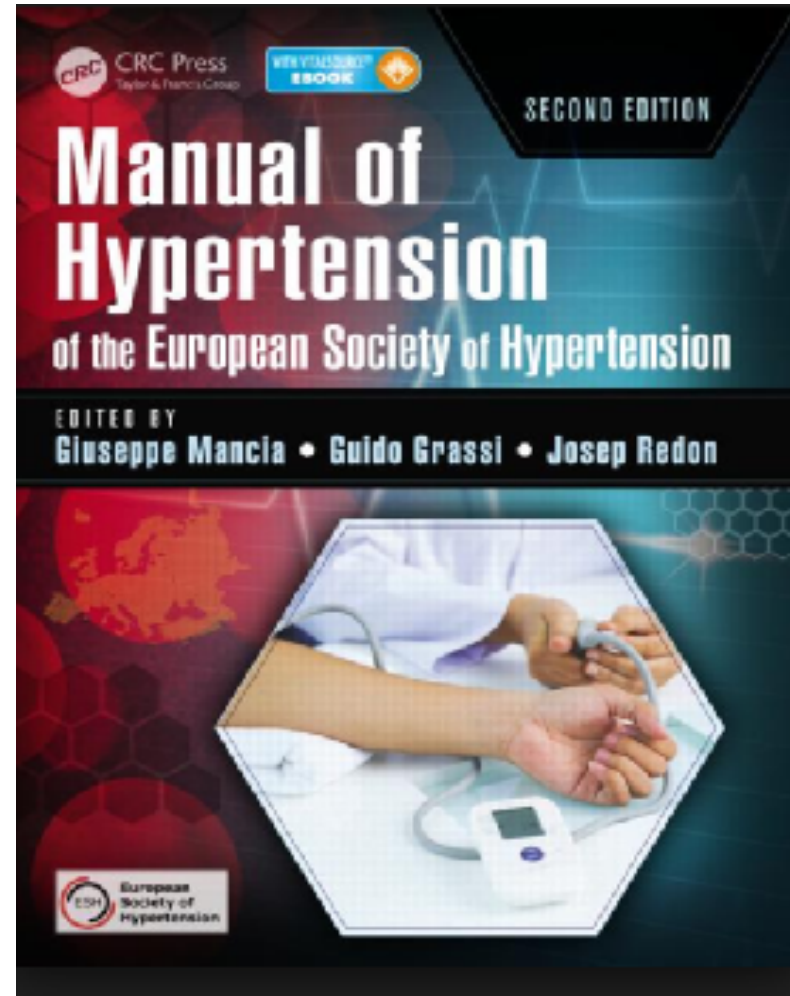
through the *Transcendental Meditation* Technique



**The TM technique improves general health as well as quality of life and health issues specific to HIV.**

Reference. Chhatre, Sumedha, David S. Metzger, Ian Frank, Jean Boyer, Edward Thompson, Sanford Nidich, Luis J. Montaner, and Ravishankar Jayadevappa. "Effects of Behavioral Stress Reduction Transcendental Meditation Intervention in Persons with HIV." *AIDS Care* 25, no. 10 (2013): 1291-97.

# New Chapter on Stress, Transcendental Meditation and Hypertension



Komal Marwaha, MD, PhD Cand. and Robert Schneider, MD, FACC, 2018

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

**Story #1: TM Improves Gene Expression → Health and Longevity**

**Conclusion #1. The many documented benefits of TM for improving health and reducing biological aging may be explained on the level of DNA.**

**TM appears to improve the way the DNA expresses itself such that it promotes better health and longevity.**

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #2: TM Increases Brain Integration -> Improved Academic Outcomes

### New Basic Research

- Brain Imaging study (fMRI) confirms TM is a state of restful alertness.
- Study of EEG Microstates describes the mechanics of how TM normalizes stresses in the body to create normal brain functioning—> enlightenment.
- Studies on the Brain Integration Scale of cosmic consciousness find it is associated with success in many fields.
- Longitudinal study in college students shows that TM increases scores on the Brain Integration Scale.
- The same longitudinal study in college students shows that TM decreases sleepiness.
- Longitudinal study on administrators and staff shows that TM increases scores on the Brain Integration Scale.
- Paper on cosmic consciousness is presented at a major scientific conference in New York.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

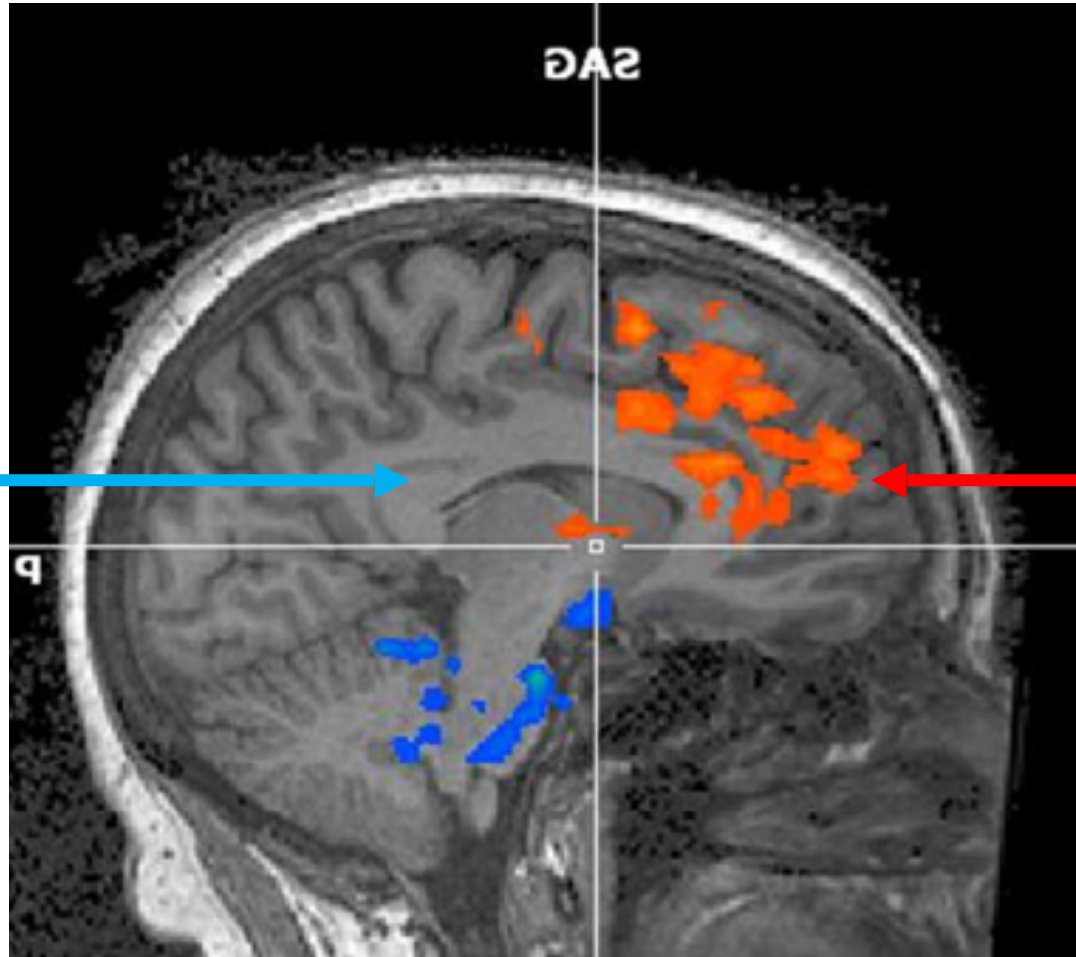
## Story #2: TM Increases Brain Integration -> Improved Academic Outcomes

### New Applications

- TM improves school outcomes.
- TM reduces the number of high school dropouts.
- TM increases the percentage graduating.
- TM Increases the percentage accepted to college and post-secondary education.

# fMRI Study of Restful Alertness: The Pattern of Brain Blood Flow *During* TM

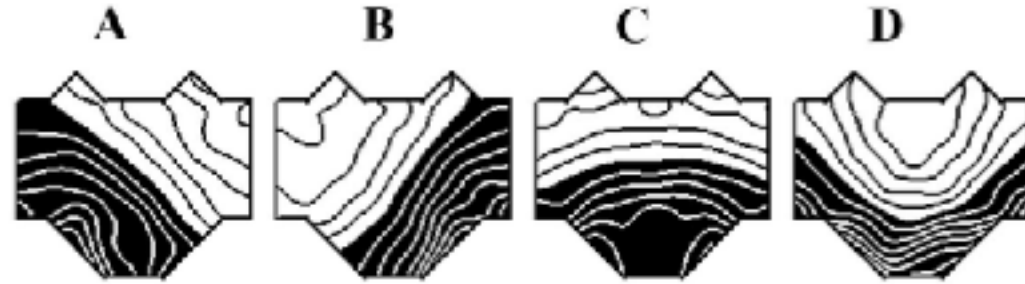
**Decreased activity in the brain stem:  
Restfulness-  
decreased respiration,  
heart rate,  
etc.**



**Increased activity in frontal executive cortex:  
Alertness,  
inner awareness**

Reference. Mahone, Michelle C., Travis, Fred , Gevirtz, Richard, & Hubbard, David (2018). fMRI during Transcendental Meditation practice. *Brain and Cognition*, Epub 2018 Mar 2.

# EEG Microstates: The “Atoms” of Thought and Emotions



**Microstate class topographies.** Equipotential area maps are shown. Head seen from above, nose up, left ear left. The isopotential contour maps show the areas of opposite polarity in black and white. Here is some of what is known about them.

Class A: relates to visualization.

Class B: relates to verbalization.

Class C: relates to interoceptive and autonomic processes.

Class D: relates to reality testing.

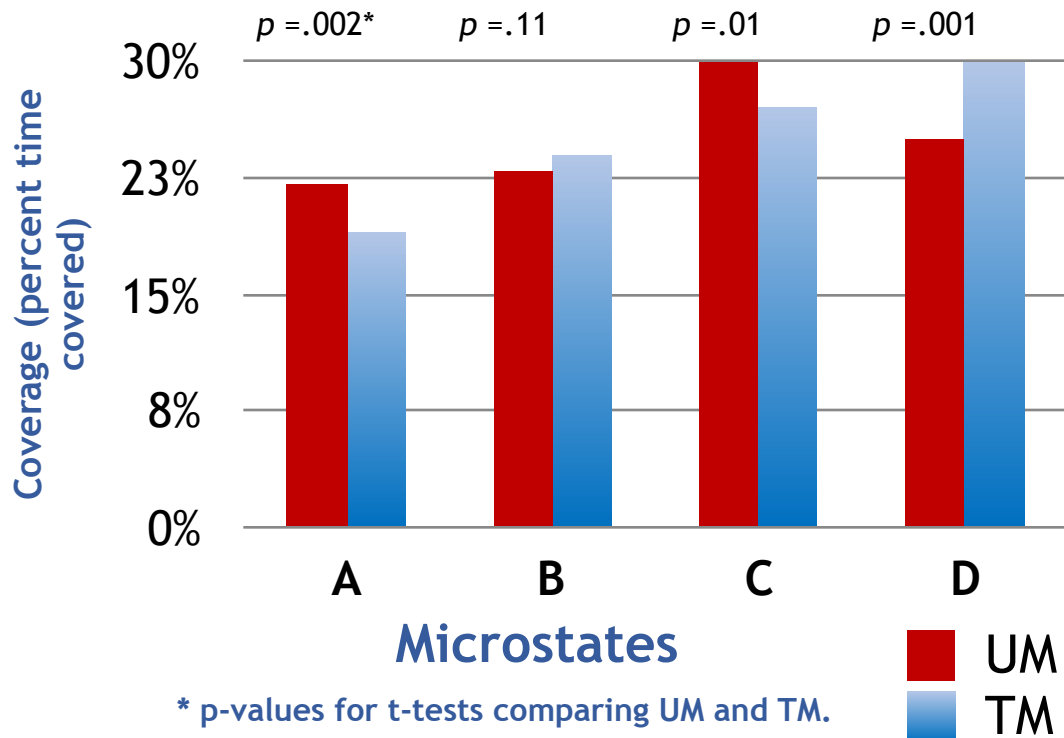
**Reference.** Faber, P. L., Travis, F., Milz, P., & Parim, N. (2017). EEG microstates during different phases of Transcendental Meditation practice. *Cognitive Processes*, Published online: 27 April, 2017. doi:10.1007/s10339-017-0812-y



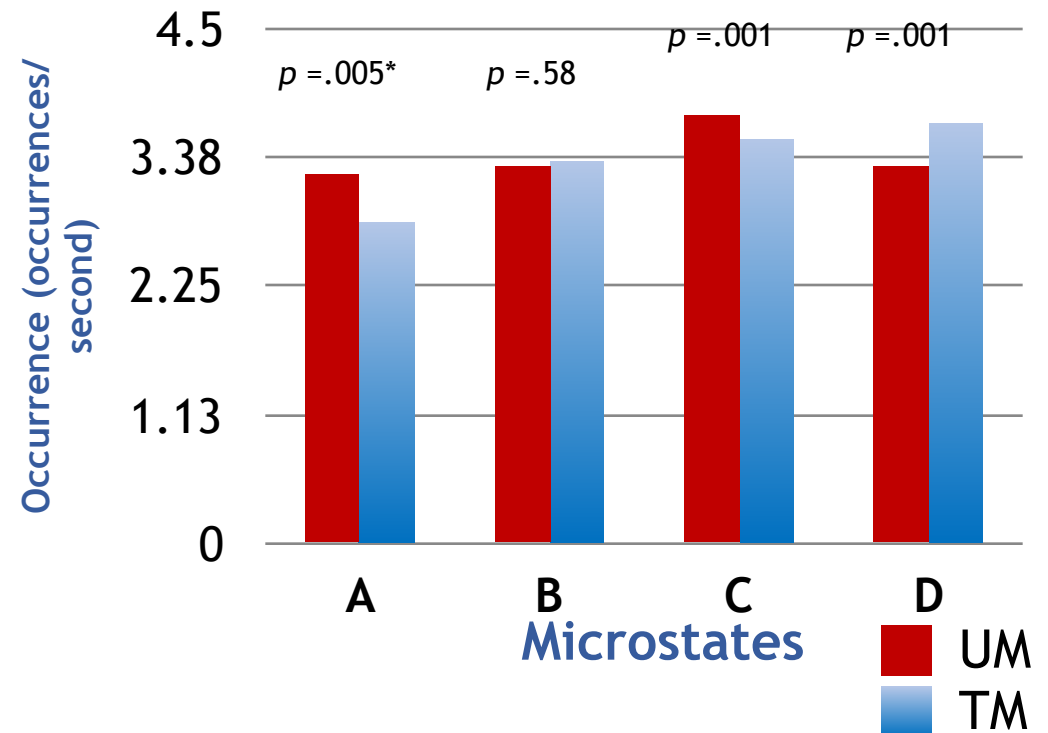
# EEG Microstates : Comparison of Transcending and Undirected Mentation

During the *Transcendental Meditation* Technique

## Coverage



## Occurrence



Reference. Faber, P. L., Travis, F., Milz, P., & Parim, N. (2017). EEG microstates during different phases of Transcendental Meditation practice. *Cognitive Processes*, Published online: 27 April, 2017. doi:10.1007/s10339-017-0812-y

# What Science Tells Us About Transcending and Undirected Mentation (i.e., the rise of thoughts during the practice of TM)

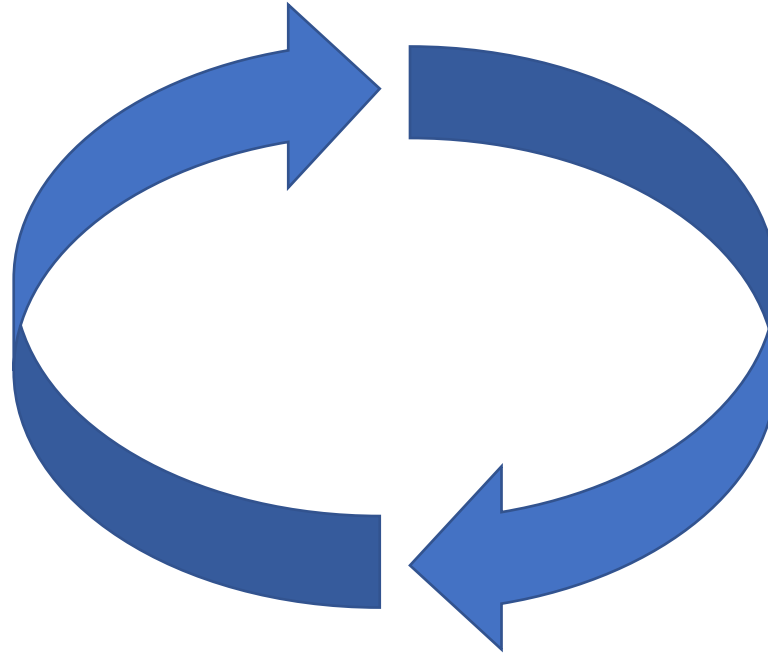
Undirected Mentation	Transcending
Faster breathing	Slower breathing
Decreased EEG coherence	Increased EEG coherence
Increased arousal (sympathetic nervous system activity)	Decreased arousal (sympathetic nervous system activity)
More microstate A - visualization, thoughts	Less microstate A- less visualization, mental quiescence
No difference in microstate B	No difference in microstate B
More microstate C, thoughts from internal processes	Less microstate C
Less microstate D, undirected thought	More microstate D, executive awareness of thoughts

References Travis, F. T. (2001). Autonomic and EEG patterns distinguish transcending from other experiences during Transcendental Meditation practice. *International Journal of Psychophysiology*, 42(1), 1-9.

Faber, P. L., Travis, F., Milz, P., & Parim, N. (2017). EEG microstates during different phases of Transcendental Meditation practice. *Cognitive Processes*, Published online: 27 April, 2017. doi:10.1007/s10339-017-0812-y

# The TM Stress Pump

**Undirected Mentation  
(rise of thoughts during TM)  
Normalization of Stress**



**Transcending  
Restful  
Alertness**

In the Transcendental Meditation process, the mind automatically transcends to finer levels of thought, settling the body into a unique state of restful alertness, characterized by a marked reduction of arousal and global integration of brain functioning. In this state of restful alertness, the body's intrinsic self-repair feedback loops detect and repair imbalances, creating physiological activity that creates undirected mentation (thoughts). When the physical activity of stress normalization lightens up, the person becomes aware that he or she was off on thoughts and comes back to begin the transcending process again for another round of detecting and repairing stress in the system, "pumping" stresses out of the system.

# Increased Brain Integration for Success

through the *Transcendental Meditation* Technique

**TM and  
TM-Sidhi®  
Programs**



**Increased Brain Integration**

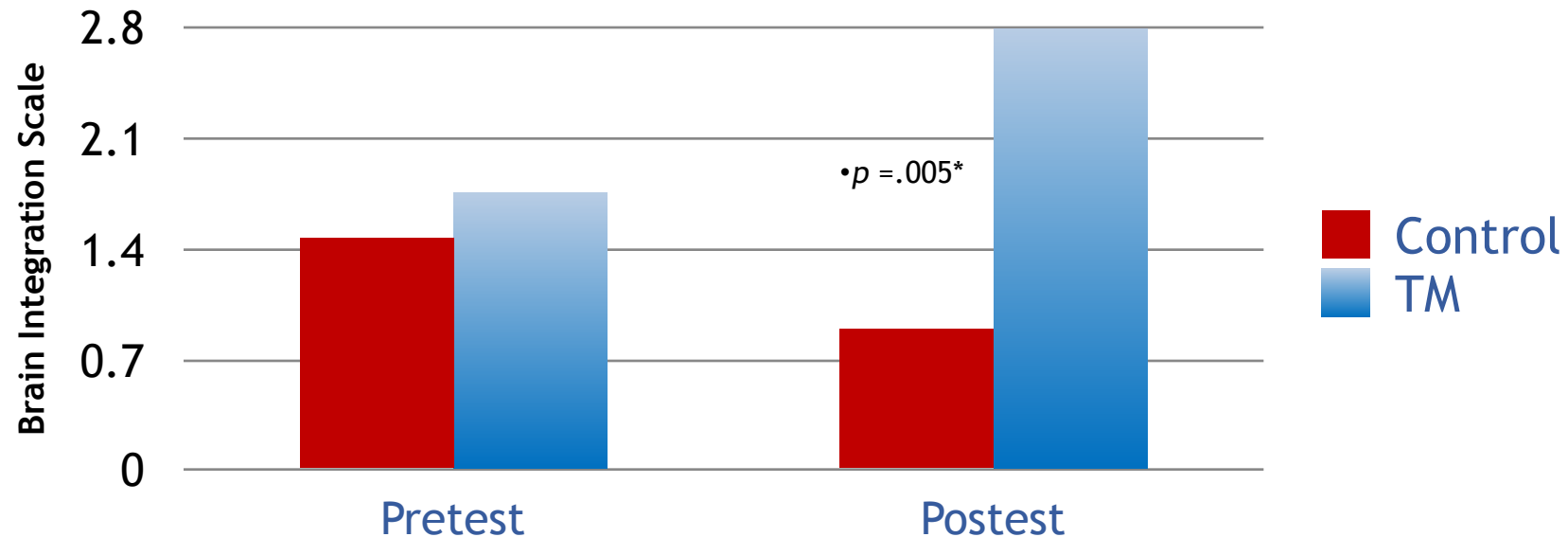
- **Top Managers**
- **World Class Athletes**
- **Professional Musicians**
- **Successful Police**
- **Creativity**

**The TM and TM-Sidhi programs increase brain integration, which is the hallmark of creativity and success in many professions.**

References. *International Journal of Psychophysiology*. 71(2), 170-176 (2009) Management, Spirituality & Religion 214, 230-244 (2014) Creativity Research Journal 26 (2), 239-243 (2014)

# Increased Brain Integration in College Students:

A Randomized Controlled Trial of  
the *Transcendental Meditation* technique



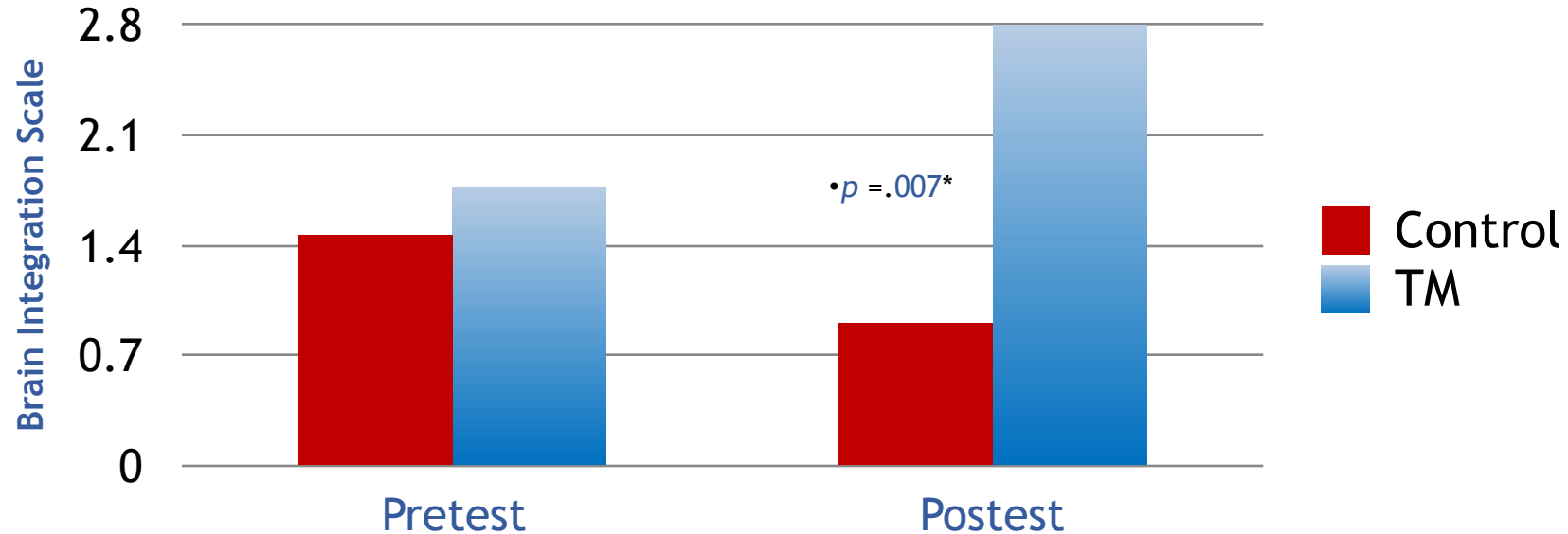
\* The p-value compares change in TM compared to change in controls.

A 10-week randomized controlled trial of 38 college students found that those in the TM group increased on the Brain Integration Scale by 59%. Controls who waited until after the experiment to learn TM decreased by 38%, probably because posttest was during the highly stressful exam week.

**Reference.** Travis FT, Haaga D, Hagelin JS, Tanner M, Nidich SI, King CG, Grosswald, S, Rainforth, M, and Schneider, RH. Effects of Transcendental Meditation practice on brain functioning and stress reactivity in college students. *International Journal of Psychophysiology*. 2009;71(2):170-6.

# Decreased Sleepiness in College Students:

## A Randomized Controlled Trial of the *Transcendental Meditation* technique



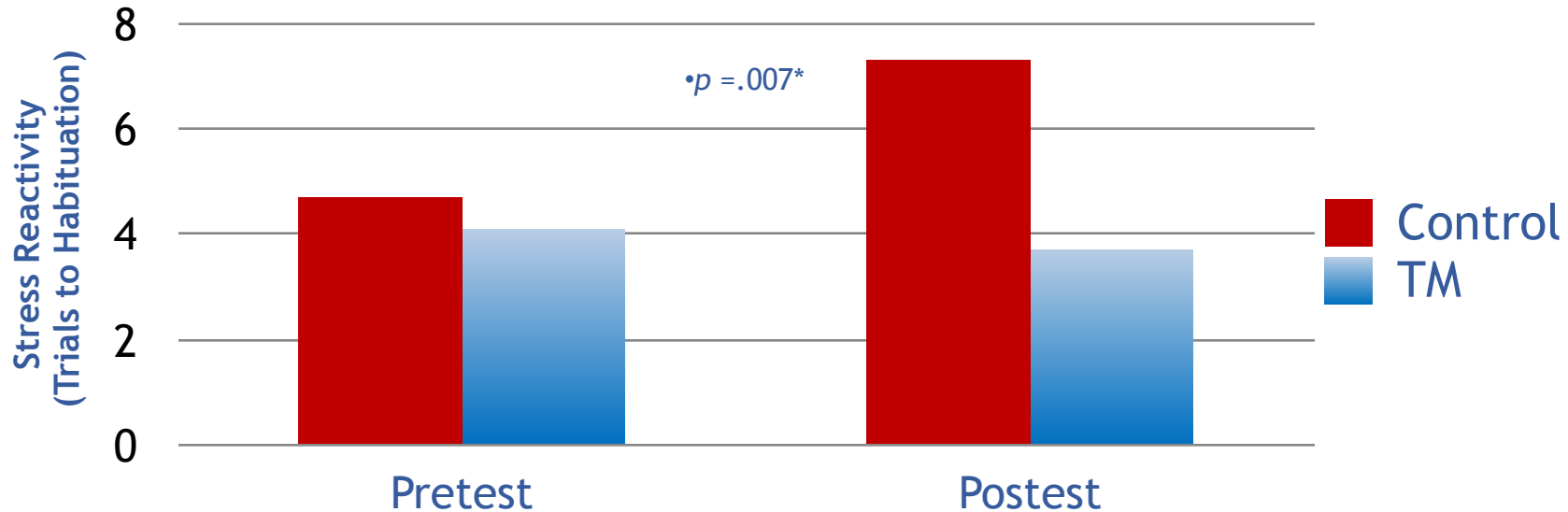
\* The p-value compares change in TM compared to change in controls.

A 10-week randomized controlled study of 38 college students found that those in the TM group increased on the Brain Integration Scale by 59%. Controls decreased over the same period 38%, probably because posttest was during the highly stressful exam week.

**Reference.** Travis FT, Haaga D, Hagelin JS, Tanner M, Nidich SI, King CG, Grosswald, S, Rainforth, M, and Schneider, RH. Effects of Transcendental Meditation practice on brain functioning and stress reactivity in college students. *International Journal of Psychophysiology*. 2009;71(2):170-6.

# Reduced Stress Reactivity in College Students:

A Randomized Controlled Trial of  
the *Transcendental Meditation* technique

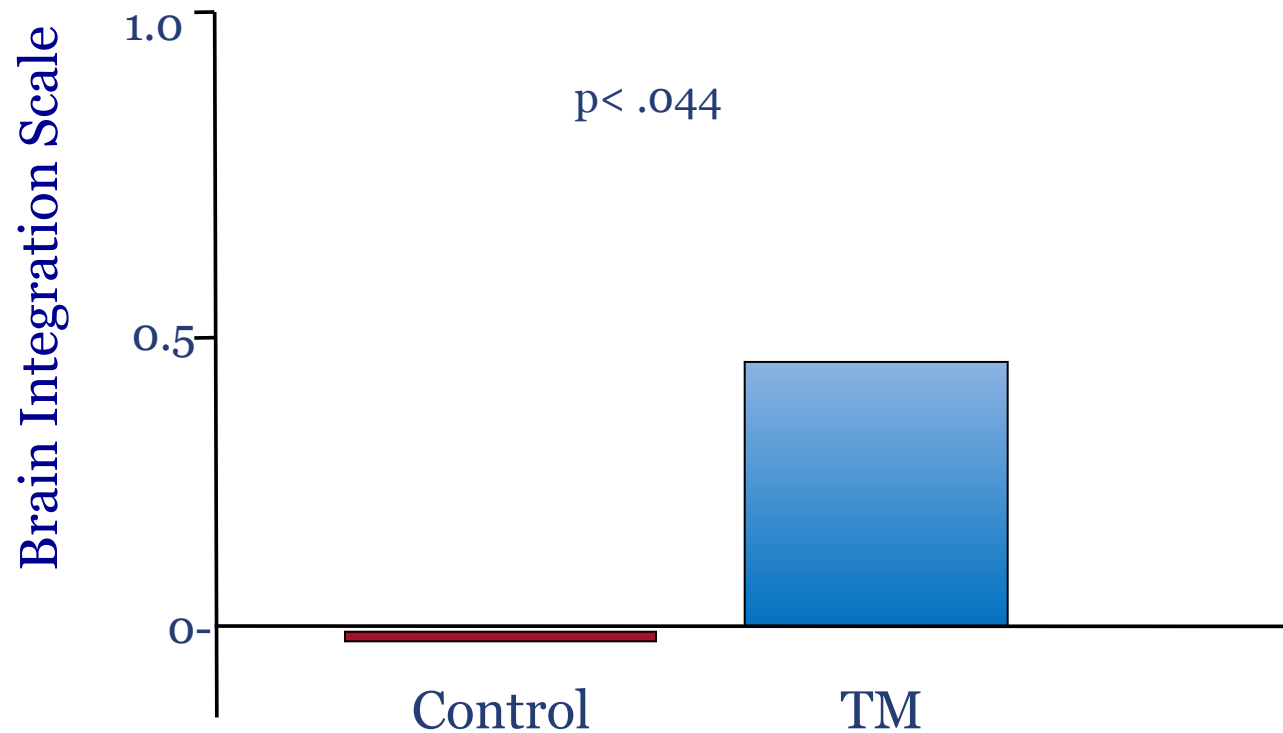


\* The p-value compares change in TM compared to change in controls.

The same 10-week randomized controlled trial of college students that found TM increases brain integration also found that it reduces stress reactivity. The TM group decreased by 21% compared to an increase of 55% by controls, a 76% difference.

**Reference.** Travis FT, Haaga D, Hagelin JS, Tanner M, Nidich SI, King CG, Grosswald, S, Rainforth, M, and Schneider, RH. Effects of Transcendental Meditation practice on brain functioning and stress reactivity in college students. *International Journal of Psychophysiology*. 2009;71(2):170-6.

# Increased Brain Integration in Administrators and Staff: A Randomized Controlled Study



Reference: Travis, Valosek, L., Konrad, A., Link, J., Salerno, J., Scheller, R., Nidich, S. Effect of meditation on psychological distress and brain functioning: A randomized controlled study. *Brain and Cognition*, 2018, 125, 100-105.

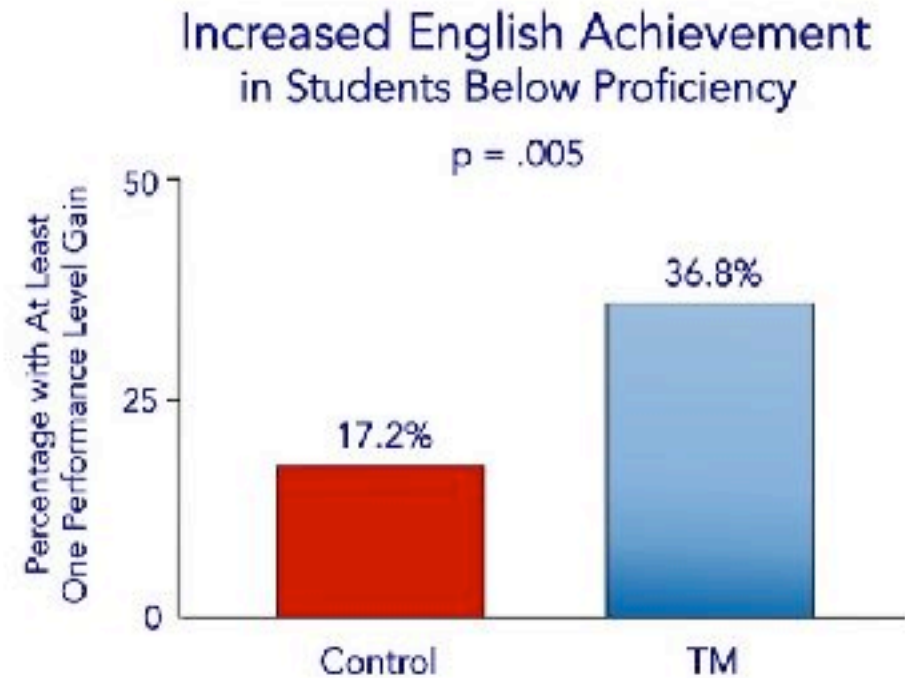
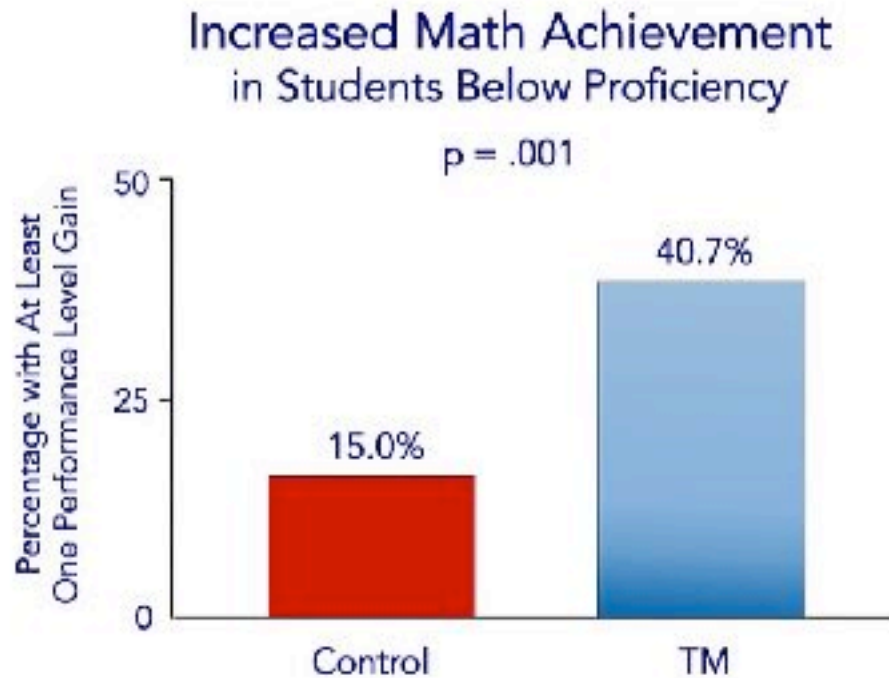


# Development of Cosmic Consciousness through the *Transcendental Meditation* Technique

	Transcendental Consciousness	Cosmic Consciousness
<b>Subjective</b>	Transcending time, space, and body sense	Inner self-awareness coexisting with waking, sleeping, and dreaming, greater emotional stability, 24-hour bliss, more effective activity
<b>Objective</b>	Slowing of the breath, heightened $\alpha 1$ (8–10 Hz) frontal EEG coherence	Coexistence of $\alpha 1$ EEG coherence (inner awareness) with delta EEG of deep sleep

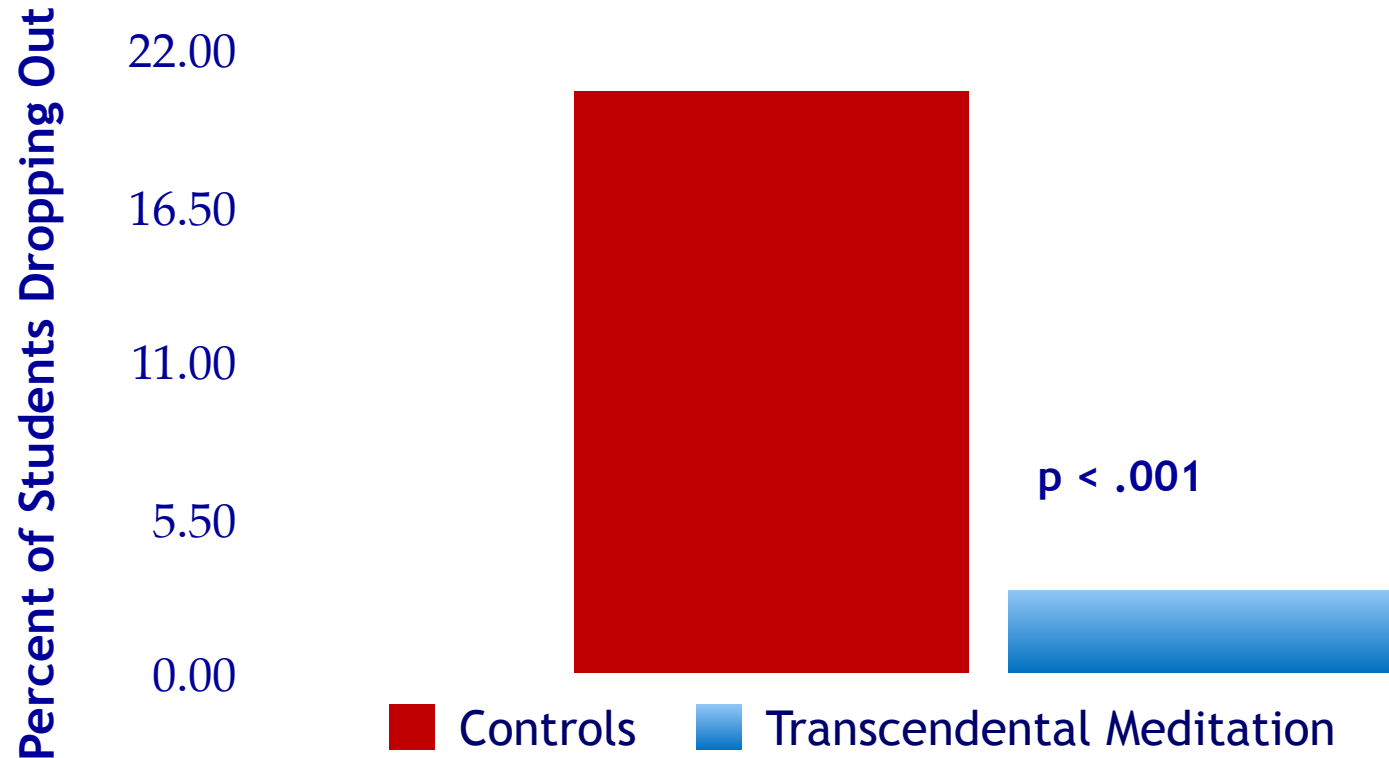
**Reference:** Travis, F. "Transcendental Experiences During Meditation Practice." *Annals of the New York Academy of Sciences* 1307, no. *Advances in Meditation Research: Neuroscience and Clinical Applications* (2014): 1-8.

# Improved Academic Performance



Reference. Nidich S, Mjasiri S, Nidich R, Rainforth M, Grant J, Valosek L, Chang W, Zigler RL. Academic achievement and Transcendental Meditation: a study with at-risk urban middle school students. *Education*, 131(3): 556-564 (2011).

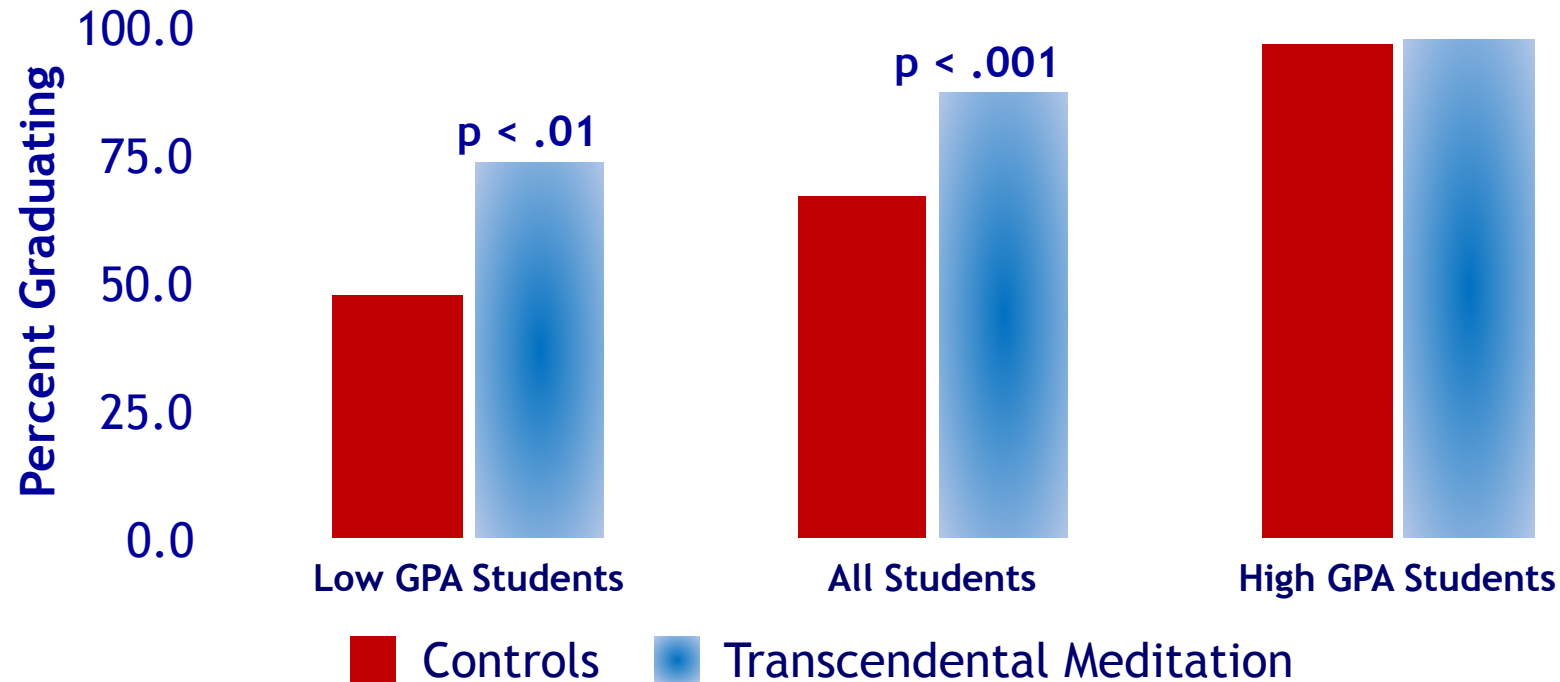
# Decreased High School Drop Out Rate through the *Transcendental Meditation* Technique



**TM practice decreased high school dropout rate by 86%, from 20.5% in non-meditators to only 2.9% in meditators.**

Reference. Colbert, R. D., and S. Nidich. "Effect of the Transcendental Meditation Program on Graduation, College Acceptance and Dropout Rates for Students Attending an Urban Public High School." *Education* 133, no. 4 (2013): 495-501.

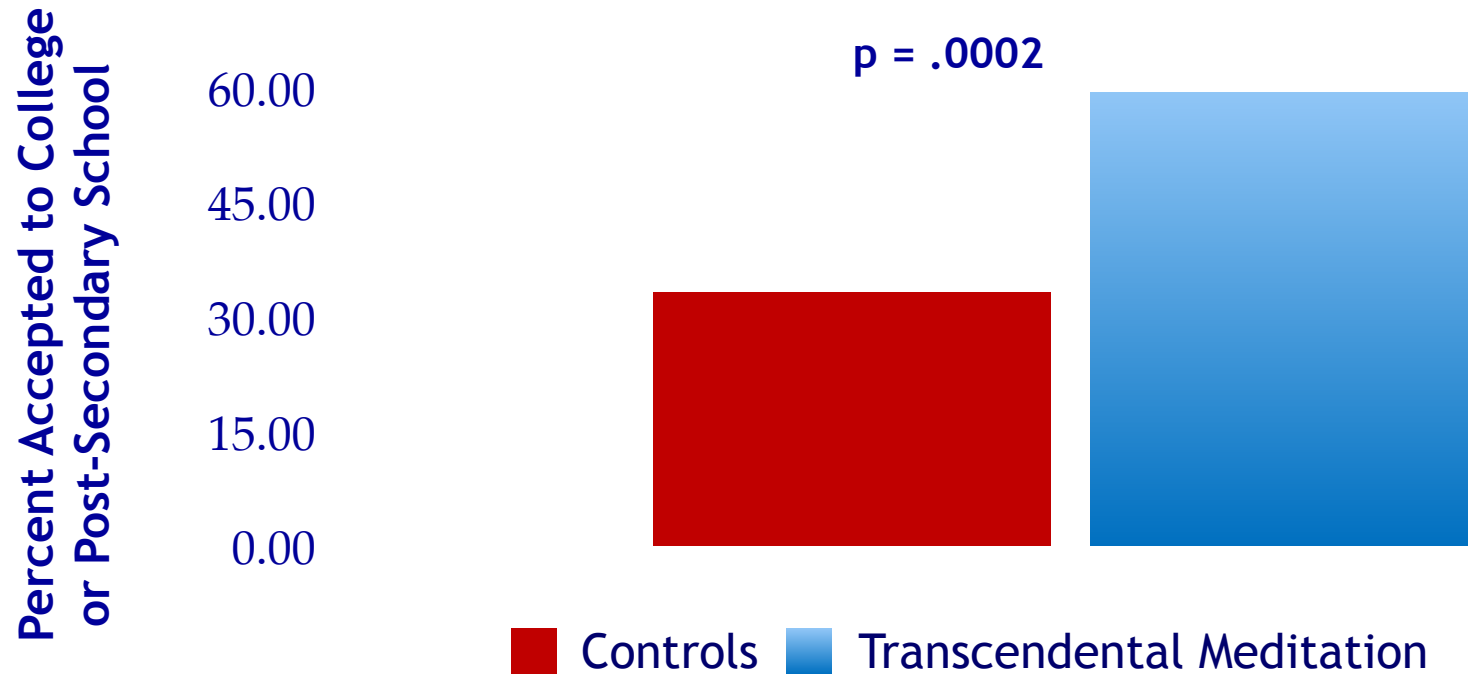
# Increased Percentage Graduating through the *Transcendental Meditation* Technique



**Practice of the TM technique increased the percentage of high school students graduating, especially those with low grade point averages.**

Reference. Colbert, R. D., and S. Nidich. "Effect of the Transcendental Meditation Program on Graduation, College Acceptance and Dropout Rates for Students Attending an Urban Public High School." *Education* 133, no. 4 (2013): 495-501.

# Increased Acceptance to College and Post- Secondary School through the *Transcendental Meditation* Technique



The percent of students practicing the TM technique accepted to college or post-secondary school was 59.3% compared to only 33.3% for non-meditator controls.

Reference. Colbert, R. D., and S. Nidich. "Effect of the Transcendental Meditation Program on Graduation, College Acceptance and Dropout Rates for Students Attending an Urban Public High School." *Education* 133, no. 4 (2013): 495-501.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #2: TM Increases Brain Integration -> Improved Academic Outcomes

**Conclusion #2.** The brain integration associated with Cosmic Consciousness has been identified, and it has been shown to be the style of brain integration that is the hallmark of the most successful people in different fields. Randomized controlled studies demonstrate that TM increases the brain integration of enlightenment, which has enormous practical benefits.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #3: TM Is the Most Effective Stress Reduction Technique —> Stress Reduction in Many Different Populations

### New Basic Research

- Reduced major stress-hormone cortisol during waking, indicative of reduced stress.

### New Applications

- Increased social-emotional competencies in sixth-grade students.
- Decreased anxiety and increased resilience in ninth-grade students.
- Increased resilience with more regular TM practice in ninth graders.
- High level of satisfaction with TM in ninth-grade students.
- Reduced teacher burnout.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #3: TM Is the Most Effective Stress Reduction Technique —> Stress Reduction in Many Different Populations

### More New Applications

- Decreased perceived stress and improved emotional intelligence in school administrators and staff.
- Increased self-actualization in school administrators and staff.
- Decreased mood disturbances in family caregivers.
- Decreased burnout, secondary trauma, and increased resilience in nurses.
- Reduced physician burnout.
- Decreased perceived stress and increased self-efficacy in women in Uganda.
- Increased physical and mental health in women in Uganda.



# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #3: TM Is the Most Effective Stress Reduction Technique → Stress Reduction in Many Different Populations

### More New Applications

- Effective treatment for alcohol use disorder.
- Decreased stress, craving for alcohol, and heavy drinking.
- Decreased stress in freshmen military cadets.
- Decreased depression in freshmen military cadets.
- Increased constructive thinking (greater resilience, behavioral and emotional coping) in freshmen military cadets.
- Increased situational awareness: Decreased hypervigilance, greater attentiveness to relevant stimuli, and decreased attentional processing of irrelevant stimuli.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #3: TM Is the Most Effective Stress Reduction Technique —> Stress Reduction in Many Different Populations

### More New Applications

- Decreased PTSD symptoms and depression in veterans published in major medical journal, The Lancet Psychiatry.
- More clinically meaningful reductions in PTSD symptoms and depression in veterans published in major medical journal, The Lancet Psychiatry.
- More rapid reduction in PTSD symptoms in veterans through TM than Prolonged Exposure Therapy or Health Education.
- More rapid reduction in depression in veterans through TM than Prolonged Exposure Therapy or Health Education

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #3: TM Is the Most Effective Stress Reduction Technique → Stress Reduction in Many Different Populations

### More New Applications

- Greater reduction in PTSD symptoms than Adopted Mantra Meditation or Patient-Centered Care.
- Decrease in PTSD symptoms in veterans to below clinical levels in one month.
- Greater and more rapid reduction in PTSD symptoms with twice-a-day TM compared to once-a-day TM.
- Clinically significant decreases in PTSD symptoms in South-African college students in 15 days and to non-symptomatic levels on 105 days.
- Clinically significant decreases in depression in South-African college students in 15 days with continued reductions in 105 days.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #3: TM Is the Most Effective Stress Reduction Technique —> Stress Reduction in Many Different Populations

### More New Applications

- Decreased PTSD symptoms in Congolese war refugees to non-symptomatic levels in one month.
- Clinically significant decreases in PTSD symptoms in Congolese war refugees in 10 days and to non-symptomatic levels in one month.
- Reduced use of psychotropic medication in military personnel with PTSD and anxiety disorders.
- Decreased severity of PTSD and anxiety along with decreased use of psychotropic medication in military personnel.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

**Story #3: TM Is the Most Effective Stress Reduction Technique →  
Stress Reduction in Many Different Populations**

## More New Applications

- Decreased PTSD in female prison Inmates.
- Decreased Trauma symptoms in male prison inmates.
- Decreased PTSD in male prison inmates.
- Decreased stress levels after the earthquake-tsunami disaster of 2011 in Japan.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

## Story #3: TM Is the Most Effective Stress Reduction Technique → Stress Reduction in Many Different Populations

### More New Applications

- Meta-analysis: Greater anxiety reduction with TM® than mindfulness.
- Meta-analysis: Greater decrease in negative emotions through TM than mindfulness or other meditations.
- Meta-Analysis: Greater decrease in trait anxiety through TM than mindfulness or other meditations.
- Meta-Analysis: Greater decrease in neuroticism through TM than mindfulness or other meditations.

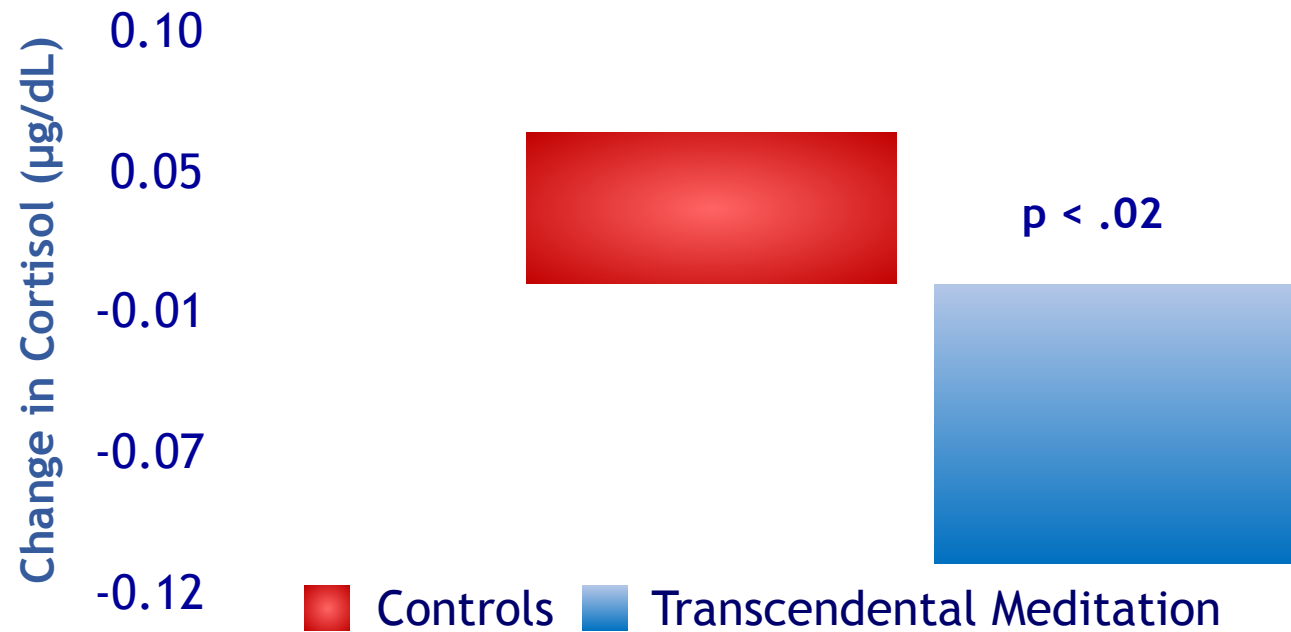
# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique

**Story #3: TM Is the Most Effective Stress Reduction Technique —>  
Stress Reduction in Many Different Populations**

## More New Applications

- Meta-Analysis: Greater increase in self-realization through TM than mindfulness or other meditations.
- Meta-Analysis: Comparisons of TM, mindfulness, and other meditations on psychological variables
- Meta-Analysis: Meta-Analysis: Comparison of mindfulness, other meditations, and TM on index of six variables.

# Decreased Stress: Reduced Cortisol Waking Response (CAR) through the *Transcendental Meditation* Technique

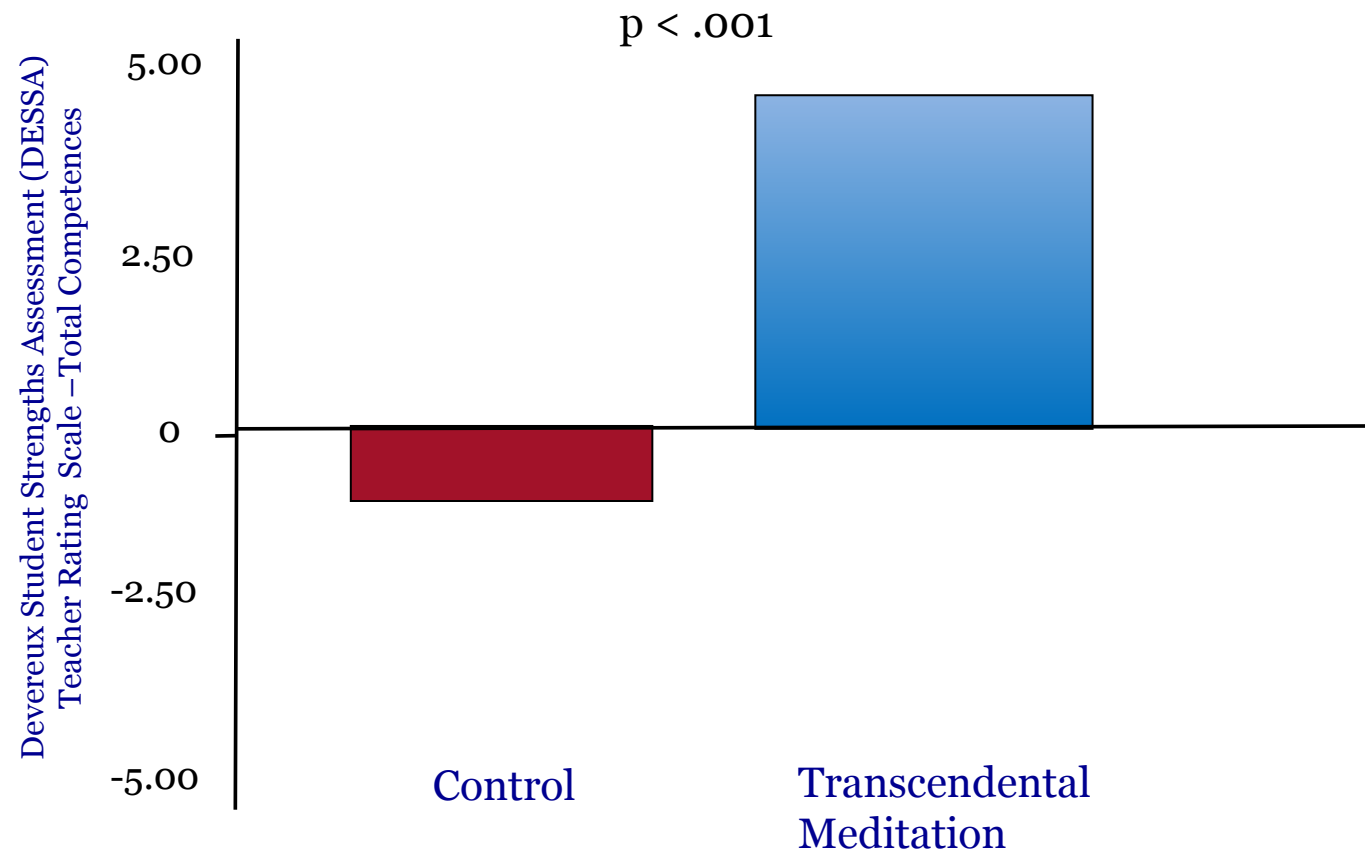


A randomized controlled study of 27 college students found that four weeks of TM practice significantly reduced the level of the major stress hormone cortisol when waking up from a night's sleep compared to controls, indicating reduced stress.

Reference. Klimes-Dougan, Bonnie , Shen Chong, Li , Samikoglu, Ali , Thai, Michelle , Amatya, Palistha , Cullen, Kathryn R. , & Lim, Kelvin O. . (2019). Transcendental Meditation and Hypothalamic-Pituitary-Adrenal Axis functioning: A pilot, randomized controlled trial with young adults. *Stress: The International Journal on the Biology of Stress*. doi:doi.org/10.1080/10253890.2019.1656714



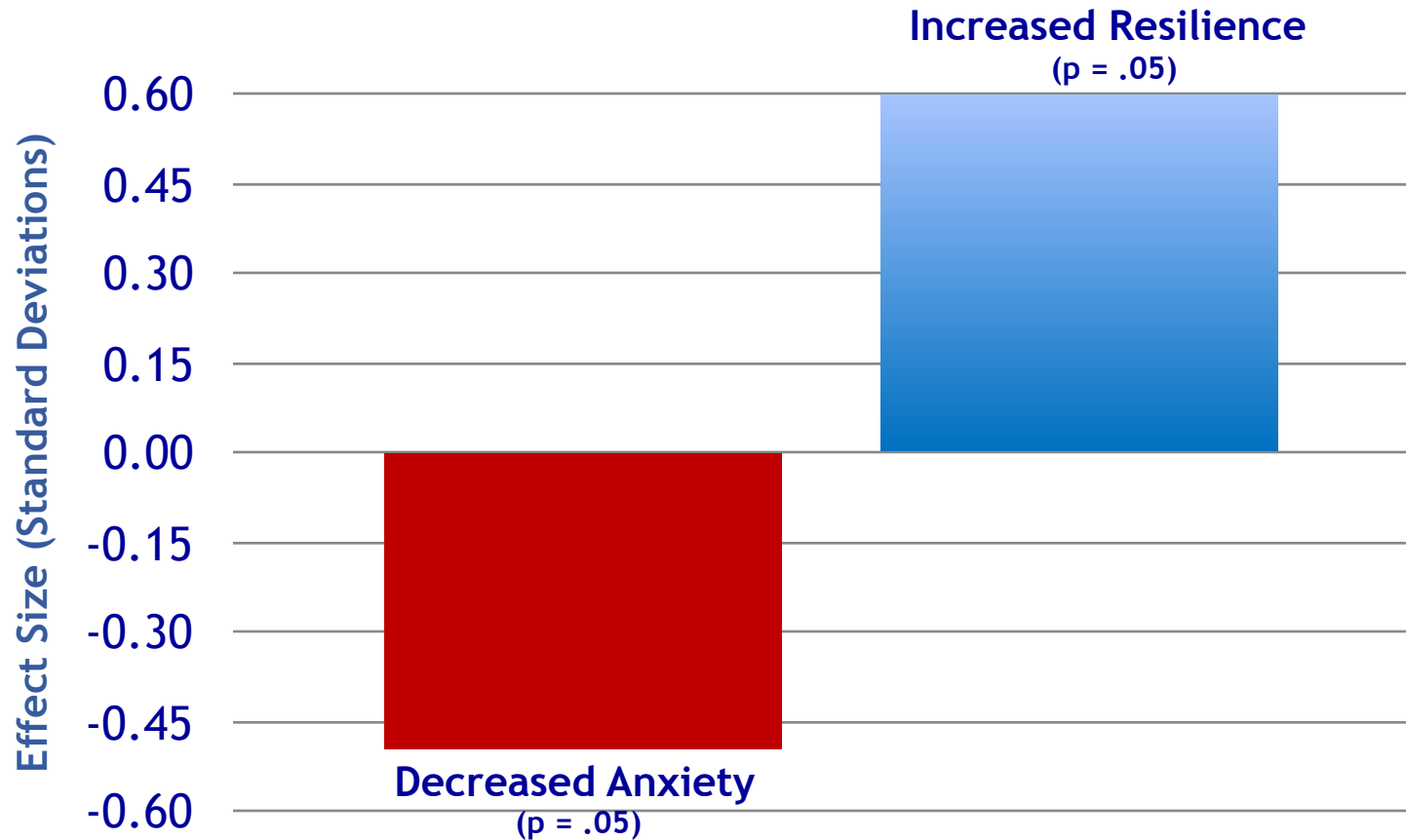
# Increased Social-Emotional Competencies in Sixth-Grade Students: A Matched Controlled Study



Reference. Valosek, Laurent, Nidich, Sanford, Wendt, Staci, Grant, Jamie, & Nidich, Randi. (2019). Effect of meditation on social-emotional learning in middle school students. *Education*, 139(3), 111-119.

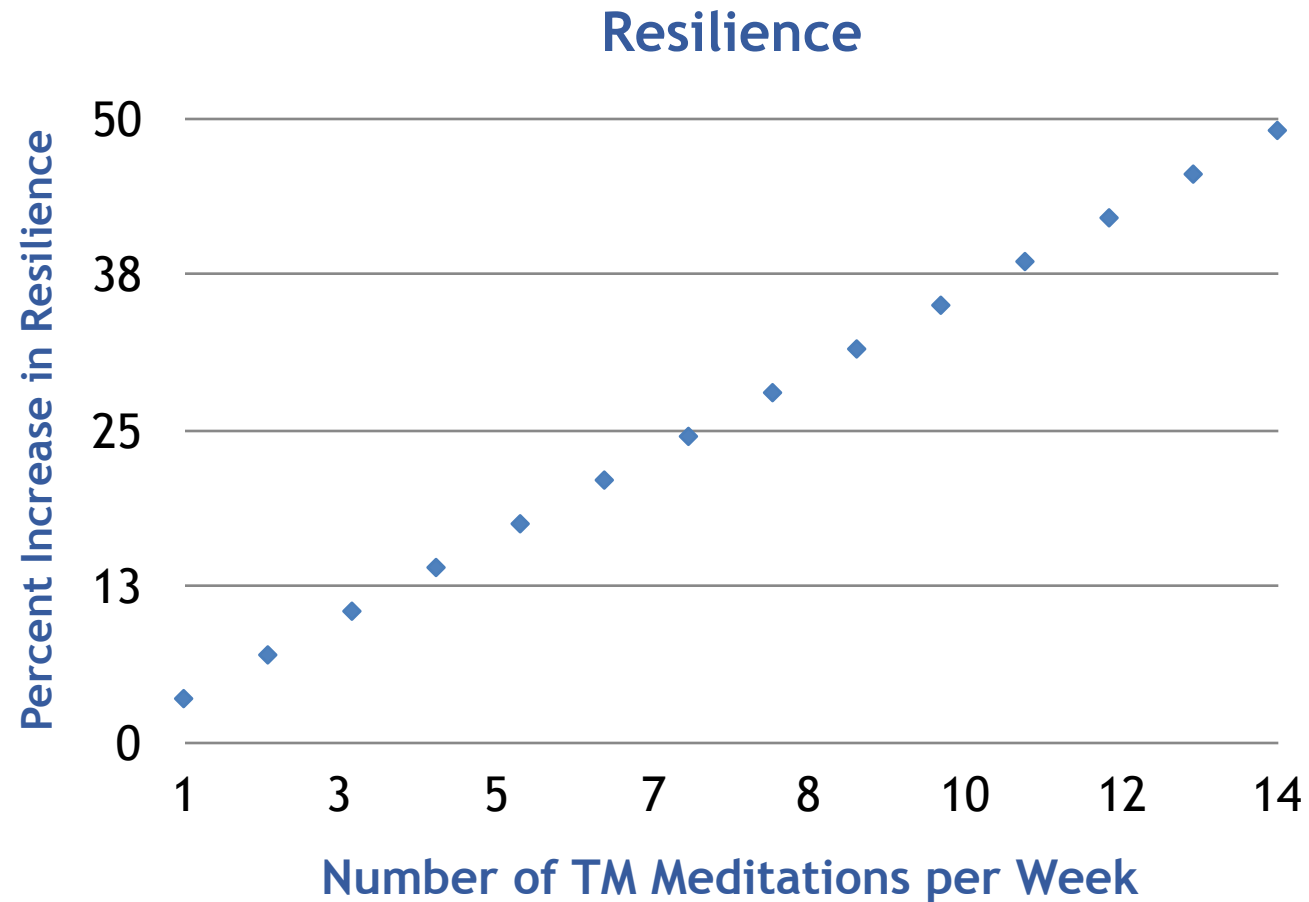
# Decreased Anxiety and Increased Resilience in Ninth-Grade Students

through the *Transcendental Meditation* Technique



Reference. S. Wendt, Hips J., Abrams A., et al. "Practicing Transcendental Meditation in high schools: Relationship to well-being and academic achievement among students." *Contemporary School Psychology* July 22 (2015).

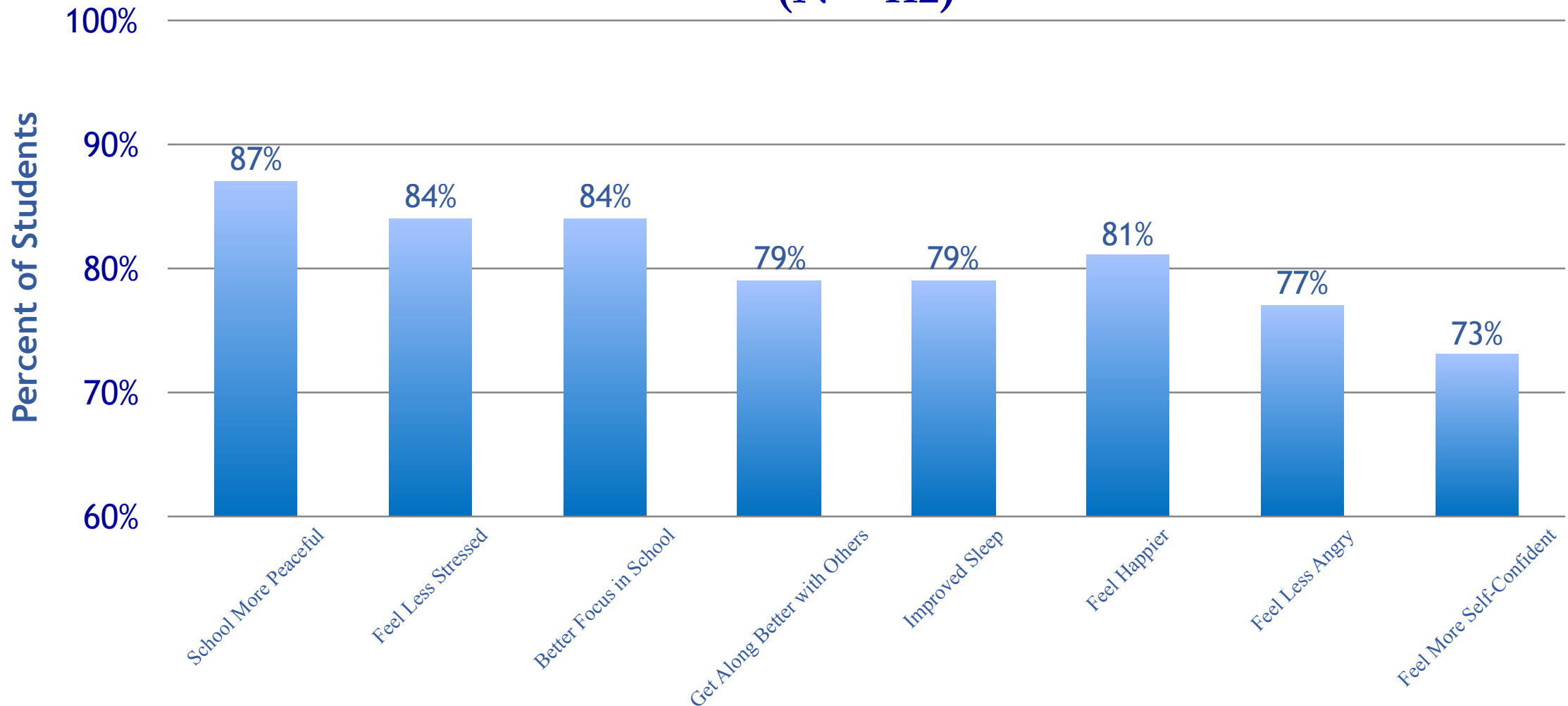
# Increased Resilience with More Regular TM Practice in Ninth Graders



Reference. S. Wendt, Hipps J., Abrams A., et al. "Practicing Transcendental Meditation in high schools: Relationship to well-being and academic achievement among students." *Contemporary School Psychology* July 22 (2015).

# High Level of Satisfaction with TM Program in Ninth-Grade Students

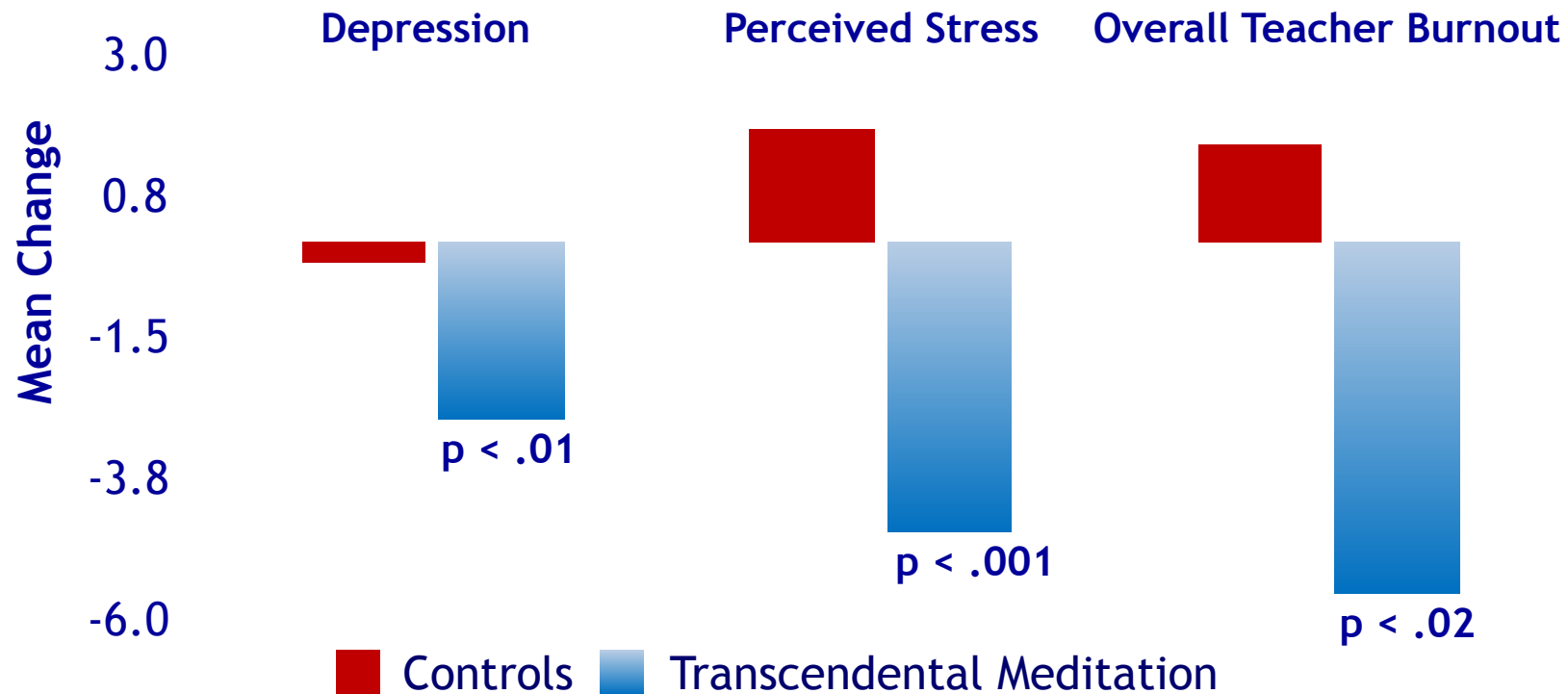
(N = 112)



Reference. S. Wendt, Hipps J., Abrams A., et al. "Practicing Transcendental Meditation in high schools: Relationship to well-being and academic achievement among students." *Contemporary School Psychology* July 22 (2015).

# Reduced Teacher Burnout

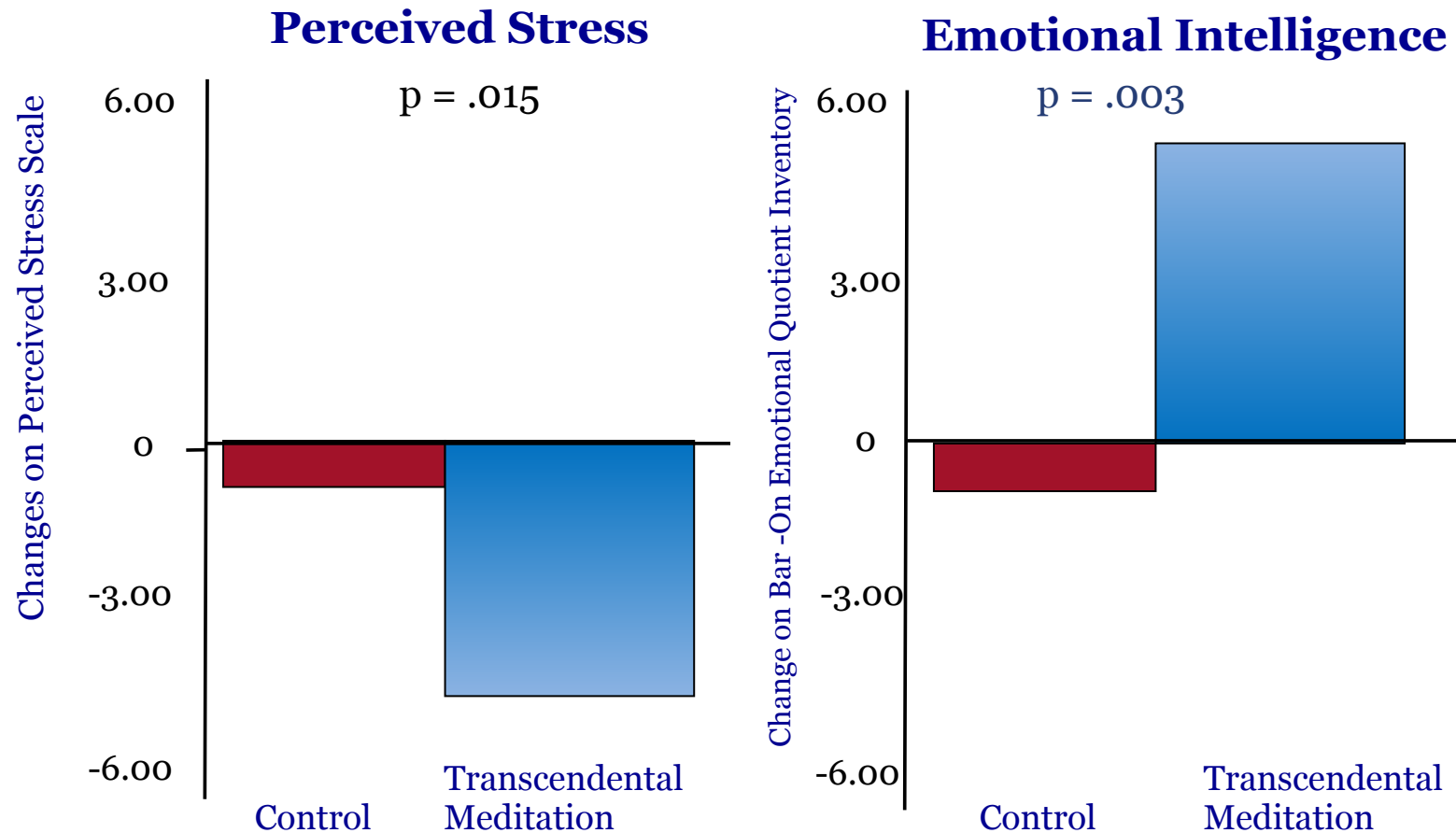
through the *Transcendental Meditation* Technique



**TM decreases depression, stress, and burnout in teachers.**

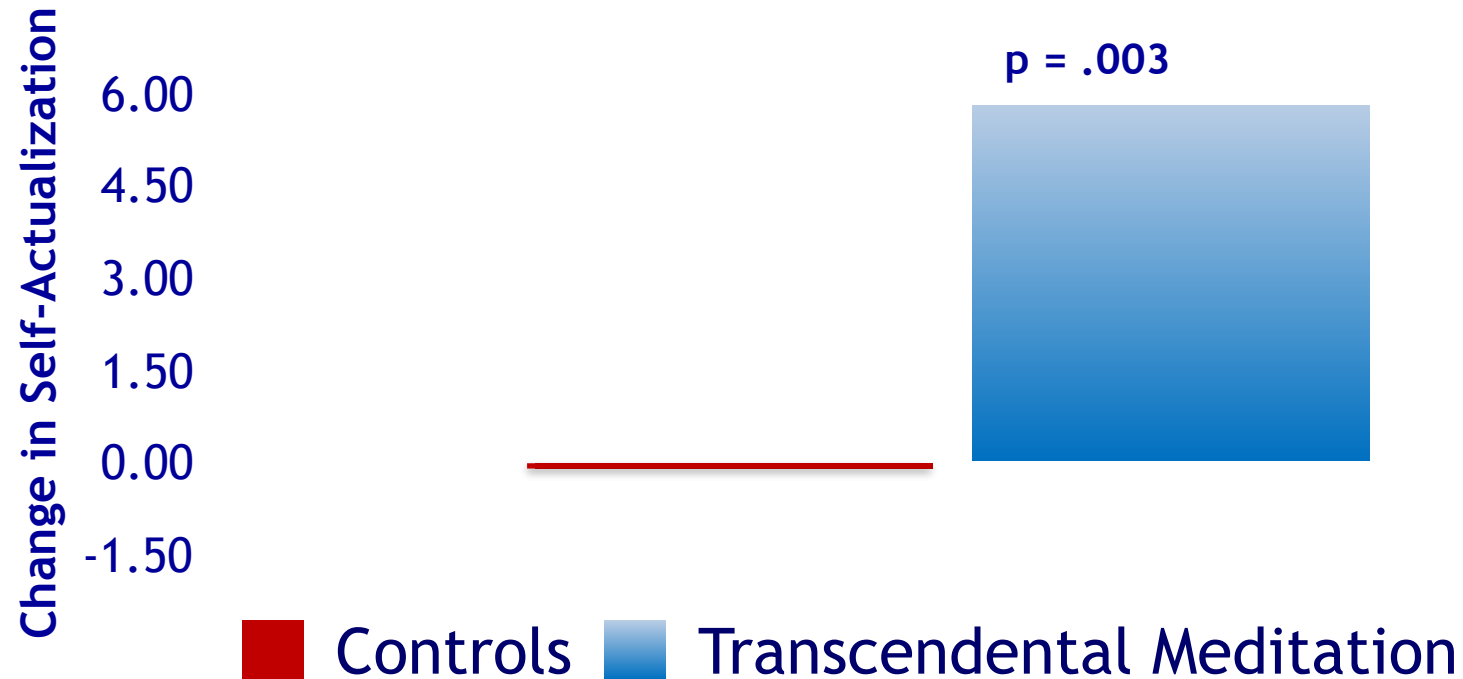
Reference. Elder, Charles , Sanford Nidich, Francis Moriarty, and Randi Nidich. "Effect of Transcendental Meditation on Employee Stress, Depression, and Burnout: A Randomized Controlled Study." *The Permanente Journal* 18, no. 1 (2014): 19-23.

# Decreased Perceived Stress and Improved Emotional Intelligence in School Administrators and Staff: A Randomized Controlled Study



Reference: Valosek, L., Link, J., Mills, P., Konrad, A., Rainforth, M., & Nidich, S. . (2018). Effect of meditation on emotional intelligence and perceived stress in the workplace: A randomized controlled study. *The Permanente Journal*(E-pub: 10/29/2018). doi:10.7812/TPP/17-172

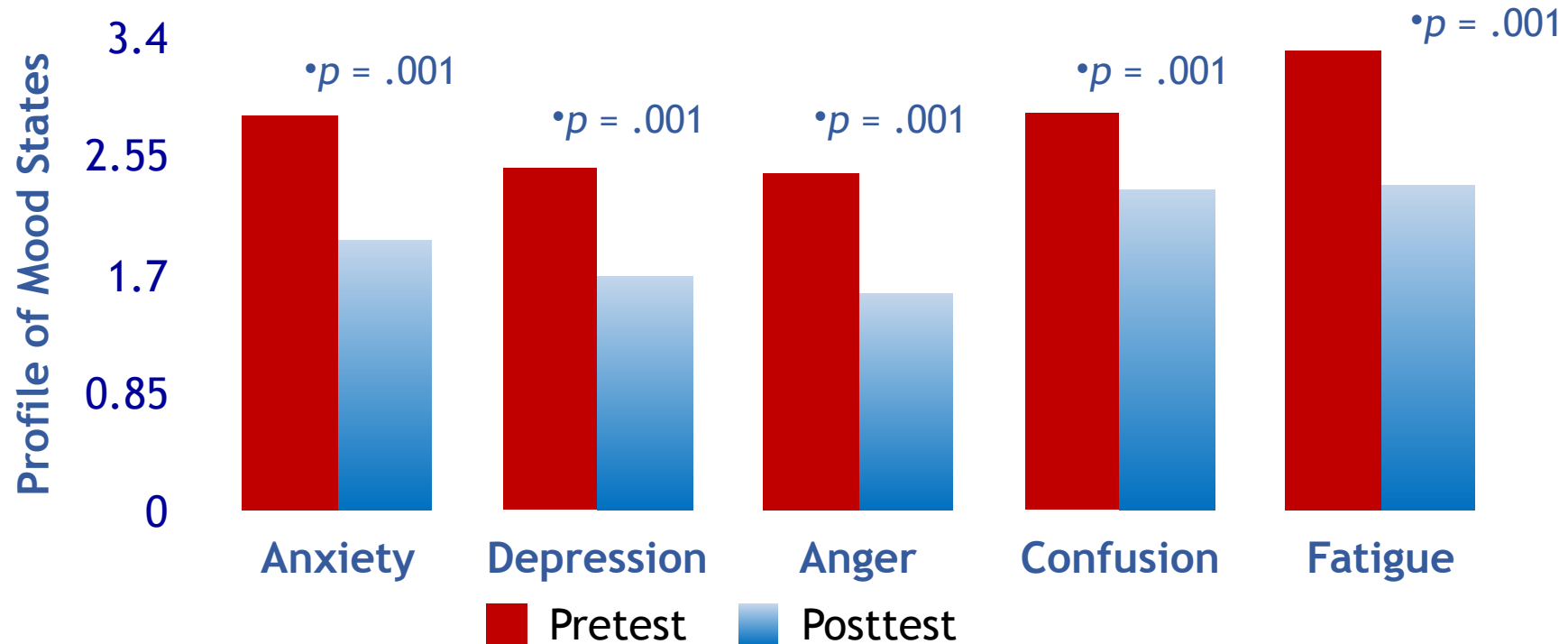
# Increased Self-Actualization in School Administrators and Staff: A Randomized Controlled Study



Reference: Valosek, L., Link, J., Mills, P., Konrad, A., Rainforth, M., & Nidich, S. . (2018). Effect of meditation on emotional intelligence and perceived stress in the workplace: A randomized controlled study. *The Permanente Journal*(E-pub: 10/29/2018). doi:10.7812/TPP/17-172

# Decreased Mood Disturbances in Family Caregivers

through the *Transcendental Meditation* technique

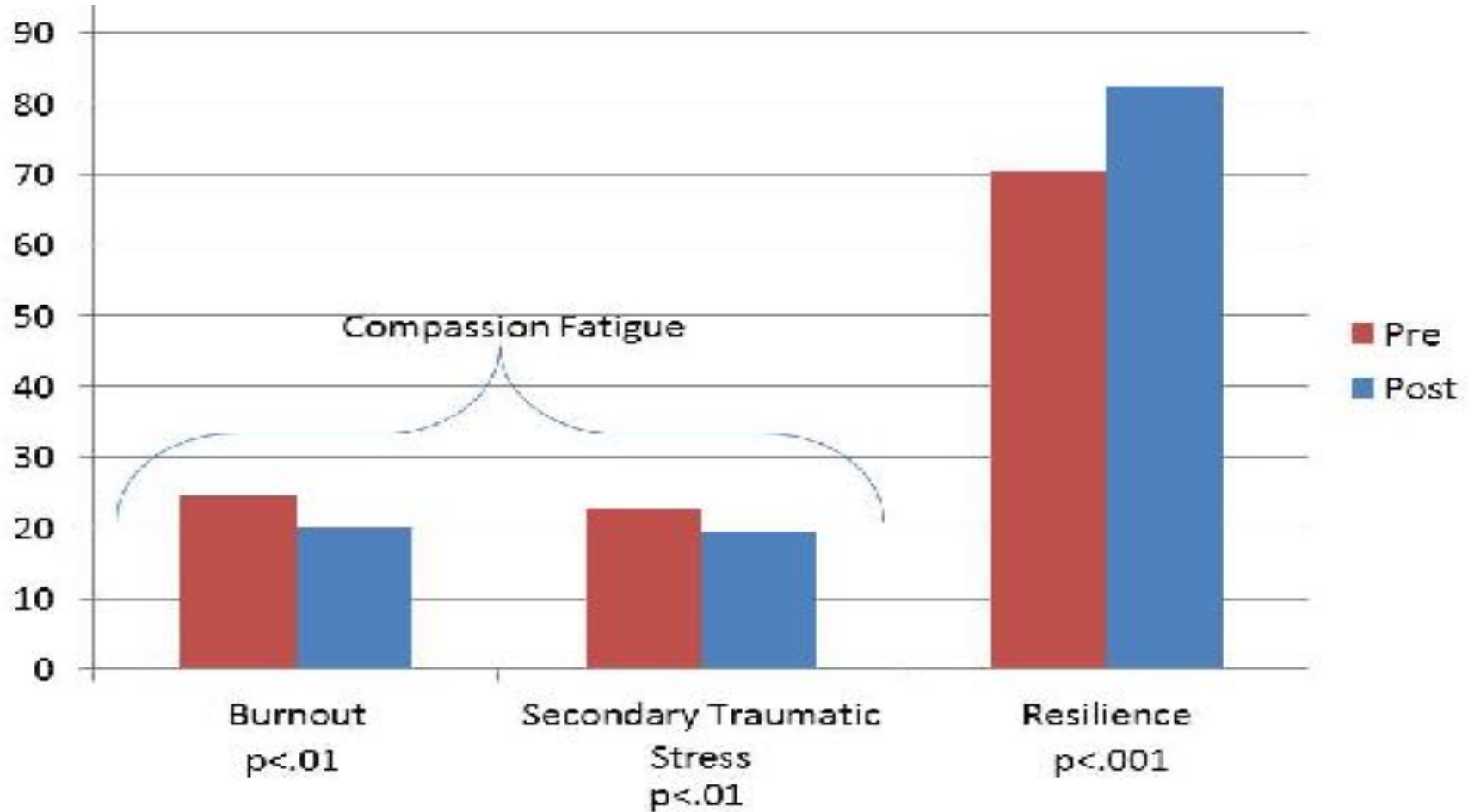


Two months of regular practice of the Transcendental Meditation technique reduced caregivers' anxiety by 31%, depression by 31%, anger by 36%, confusion by 19%, and fatigue by 29%.

Reference. Nidich S, Nidich RJ, Salerno J, Hadfield B, Elder C. Stress reduction with the Transcendental Meditation program in caregivers: A pilot study. *International Archives of Nursing and Health Care Perspectives*. 2015;1(011): 1-4.

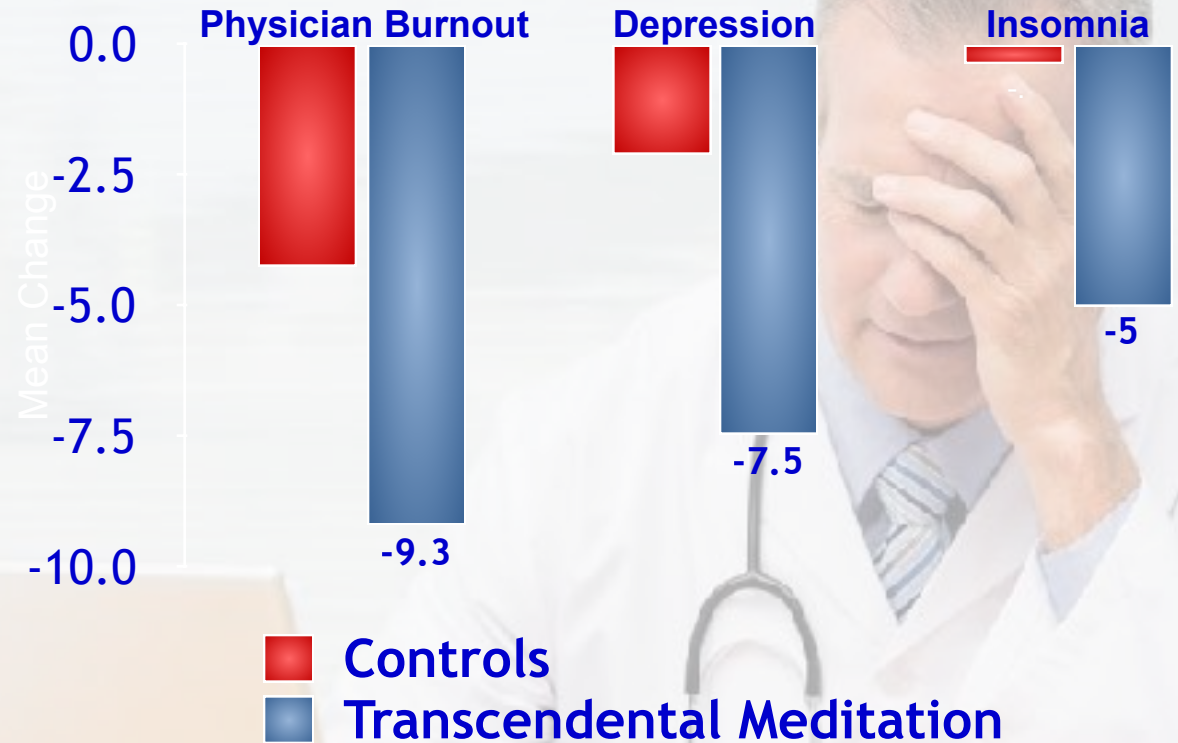


# Decreased Burnout, Secondary Trauma, and Increased Resilience in Nurses



Reference. Bonamer, J. R., & Aquino-Russell, C. (2019 May/April). Self-care strategies for professional development: Transcendental Meditation reduces compassion fatigue and improves resilience for nurses. *Journal for nurses in professional development*, 35(2), 93-97. doi:10.1097/NND.0000000000000522

## Reduced Physician Burnout through the Transcendental Meditation Technique

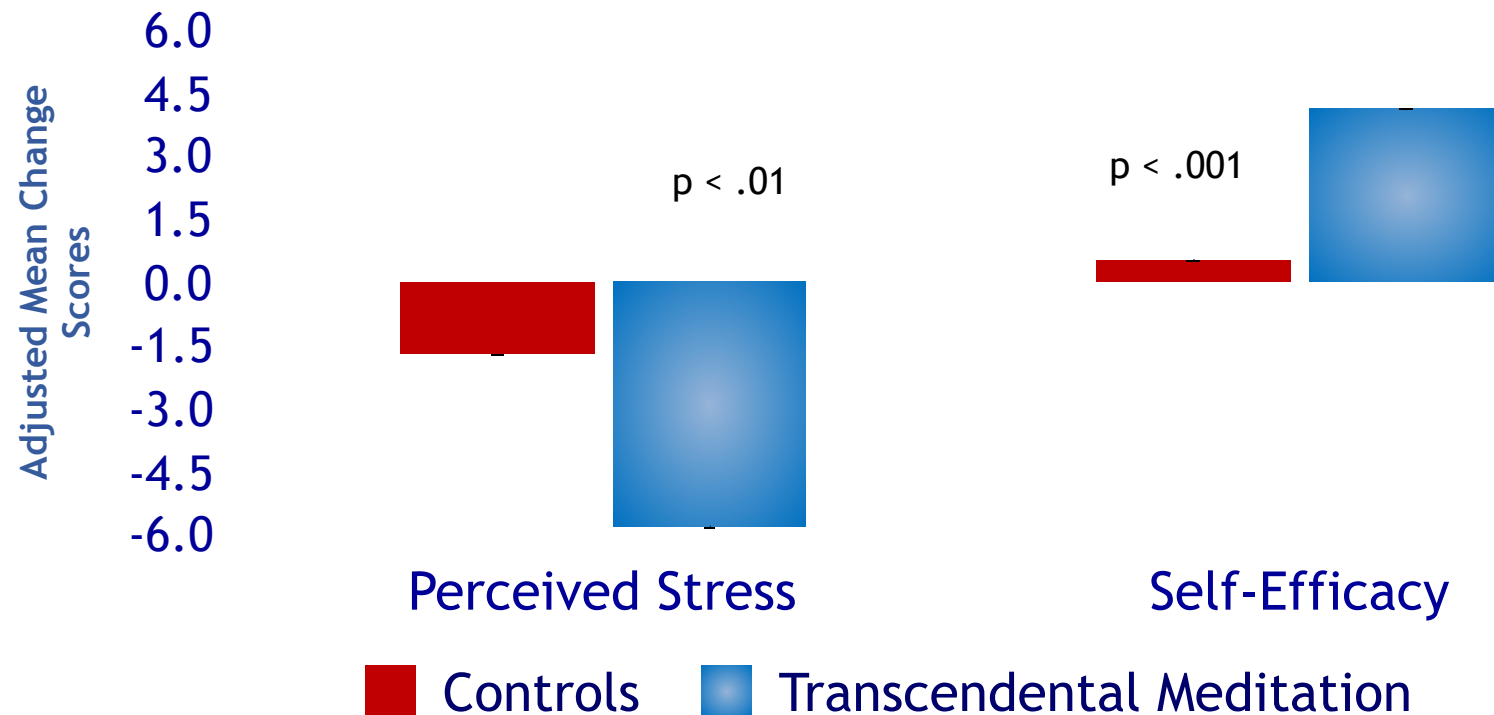


**TM decreases depression, stress, and burnout in physicians**

Loiselle M, et al. Effect of Transcendental Meditation on Physician Burnout, Depression, and Insomnia: A Randomized Controlled Study. In preparation for publication, 2018.

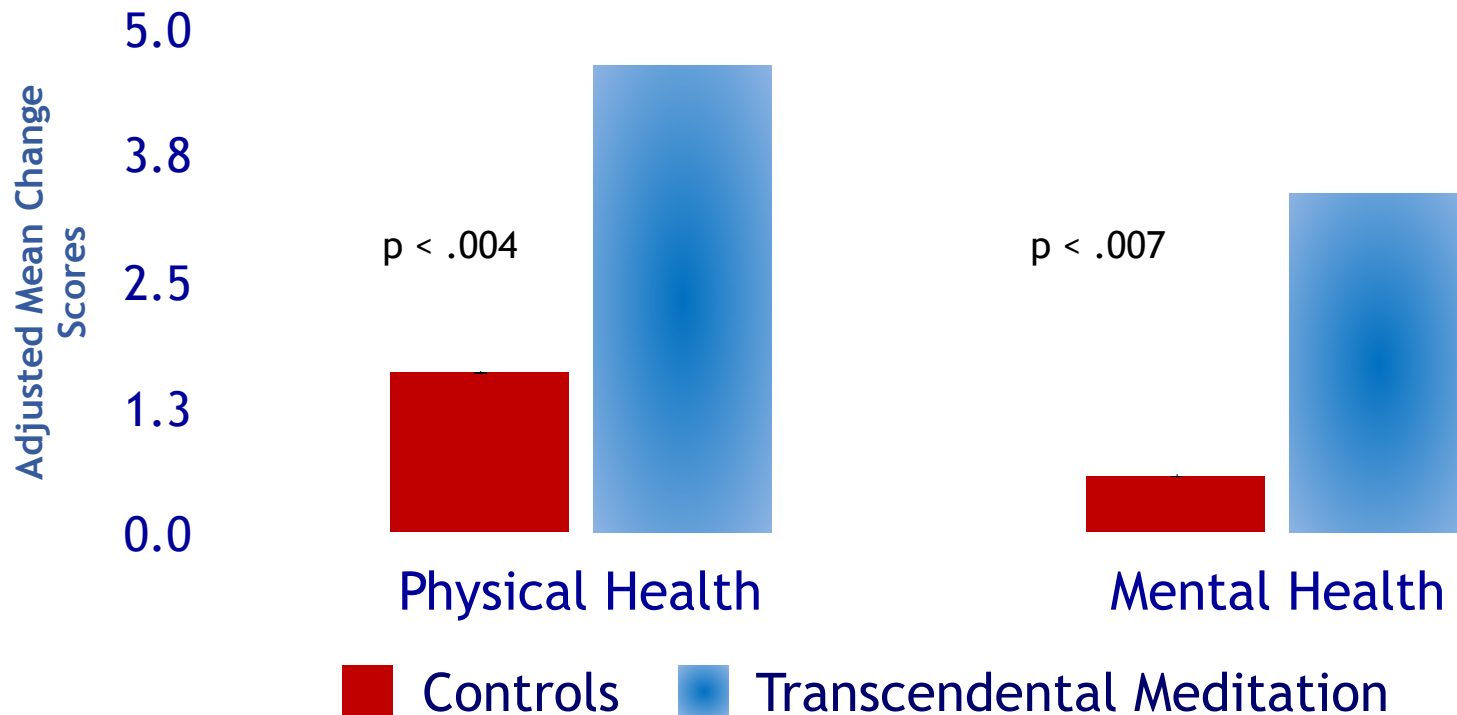
# Decreased Perceived Stress and Increased Self-Efficacy in Women in Uganda

## *A Controlled Trial*



**Reference.** Goldstein, L., Nidich, S., Goodman, R., & Goodman, D. H. (2018). The effect of Transcendental Meditation on self-efficacy, perceived stress, and quality of life of mothers in Uganda. *Health Care for Women International*. [doi.org/10.1080/07399332.2018.1445254](https://doi.org/10.1080/07399332.2018.1445254)

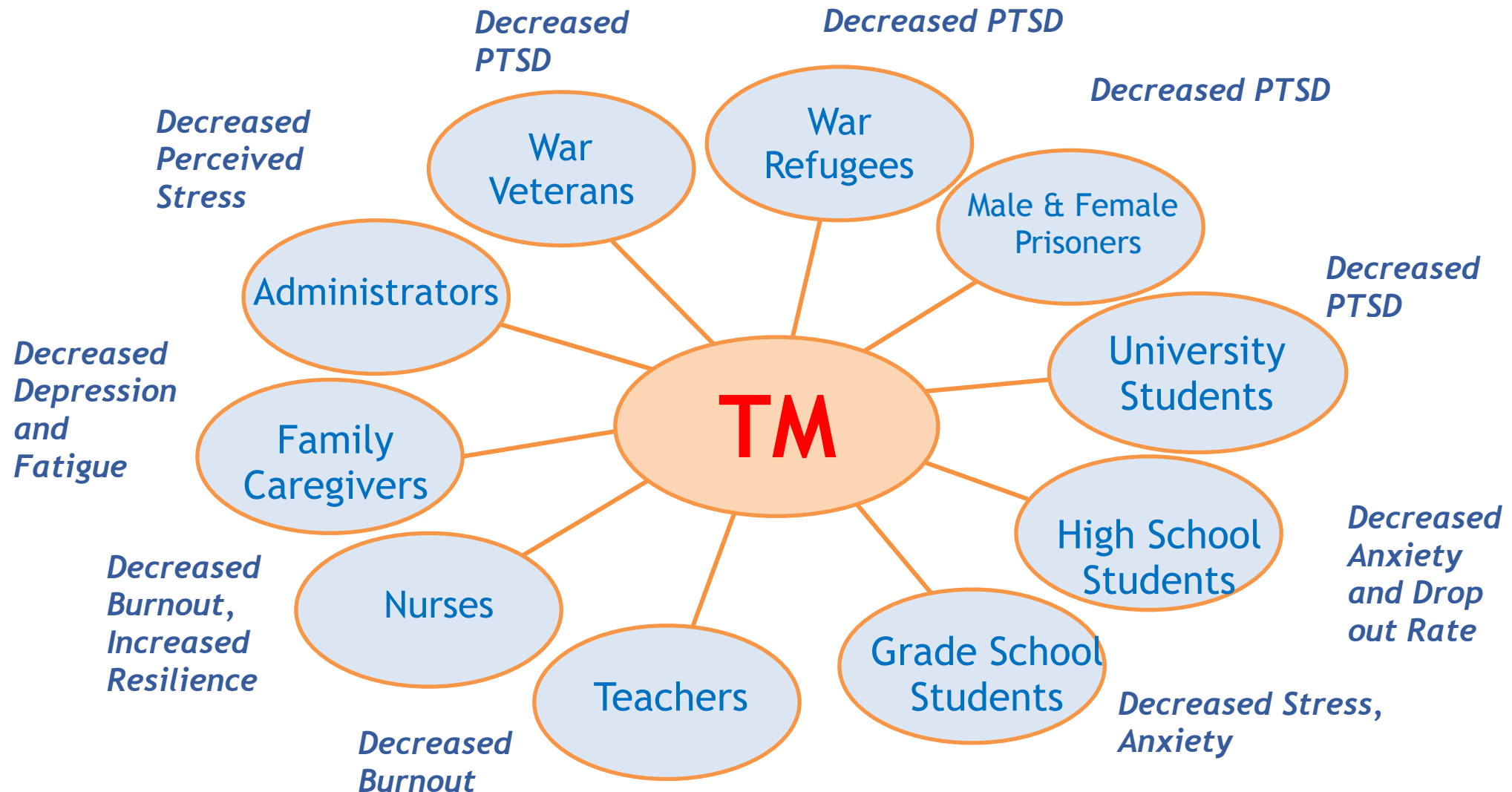
# Increased Physical and Mental Health in Women in Uganda *A Controlled Trial*



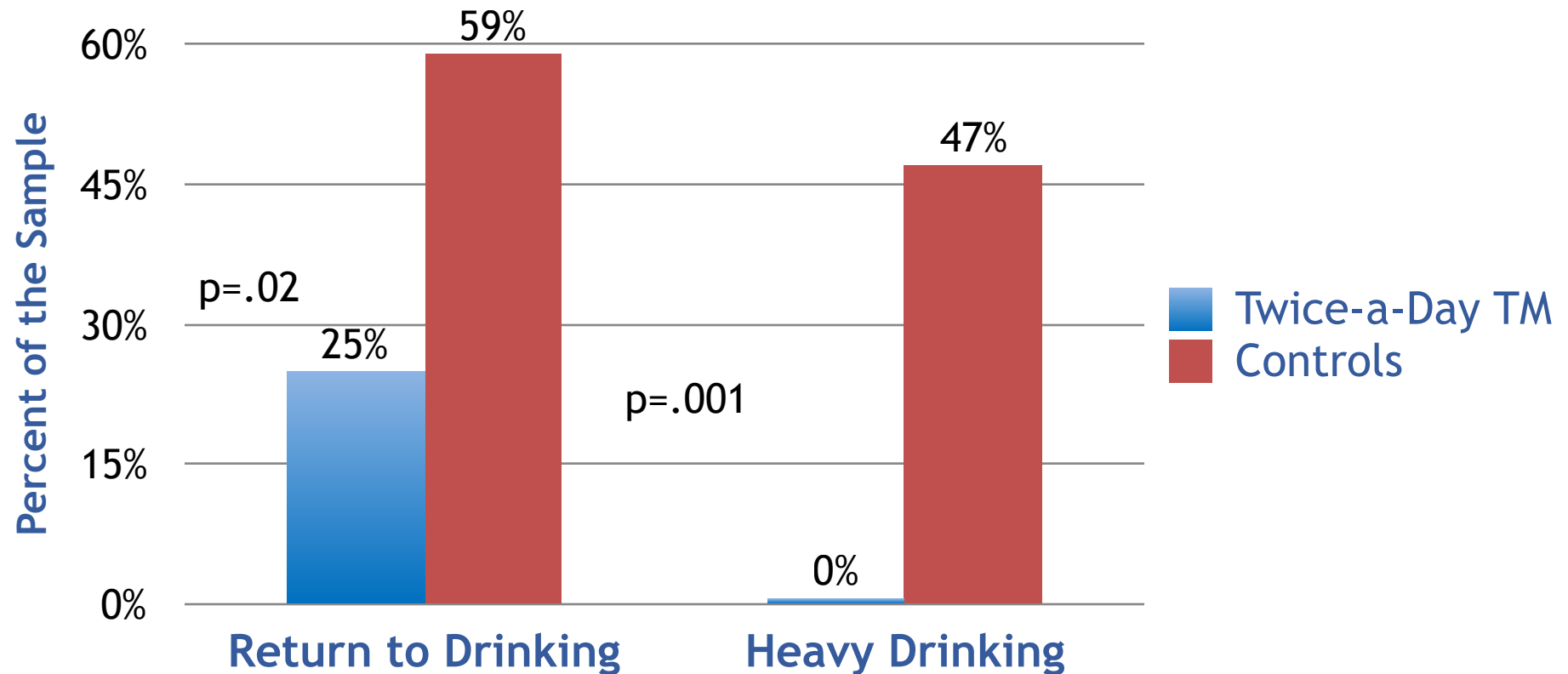
**Reference.** Goldstein, L., Nidich, S., Goodman, R., & Goodman, D. H. (2018). The effect of Transcendental Meditation on self-efficacy, perceived stress, and quality of life of mothers in Uganda. *Health Care for Women International*. [doi.org/10.1080/07399332.2018.1445254](https://doi.org/10.1080/07399332.2018.1445254)

# Summary: Reduced Stress for Different Populations

Research published in peer-reviewed journals finds that TM reduces stress in all populations studied.



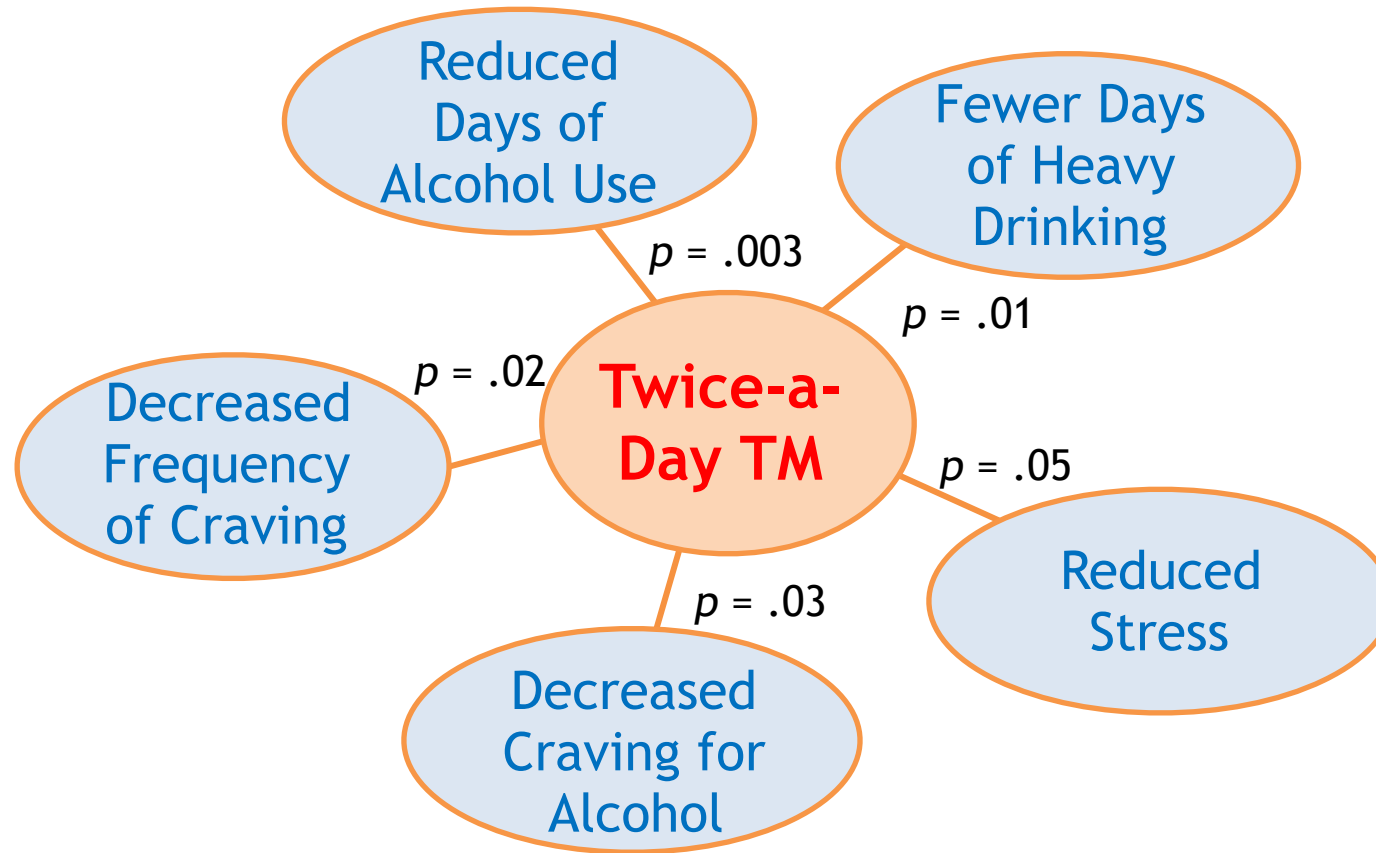
# Effective Treatment for Alcohol Use Disorder: Decreased Return to Drinking and Elimination of Heavy Drinking



**Twice-a-day TM reduces return to drinking and eliminates heavy drinking in patients being treated for alcohol use disorder.**

Reference. Gryczynski, J., Schwartz, R. P., Fishman, M. J., Nordeck, C. D., Grant, J., Nidich, S., et al. (2018). Integration of Transcendental Meditation® (TM) into alcohol use disorder (AUD) treatment. *Journal of Substance Abuse*, Available online.

# Decreased Stress, Craving for Alcohol, and Heavy Drinking



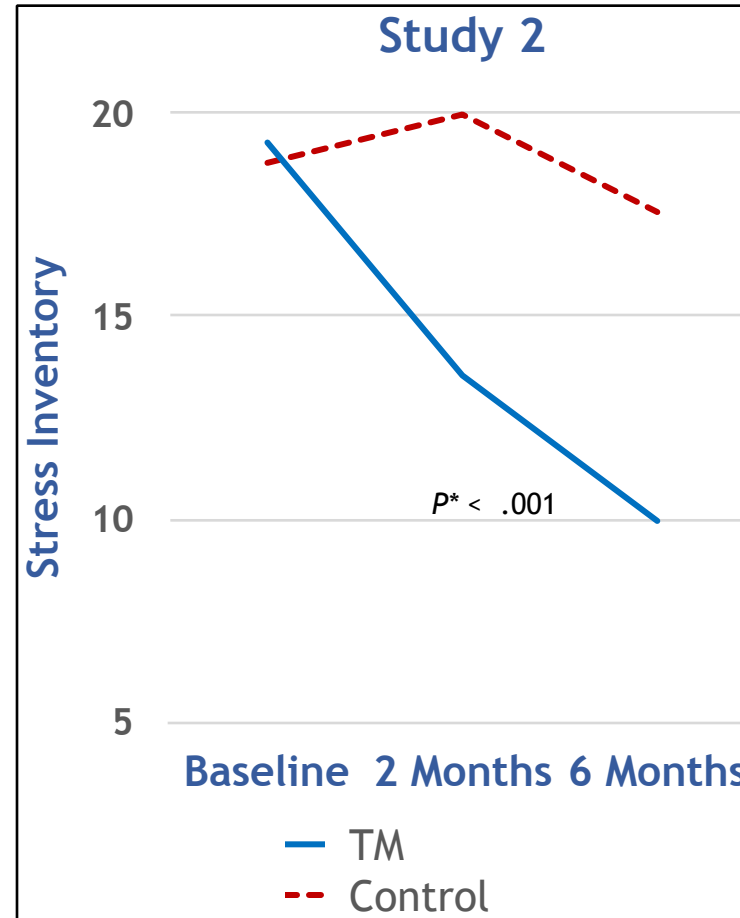
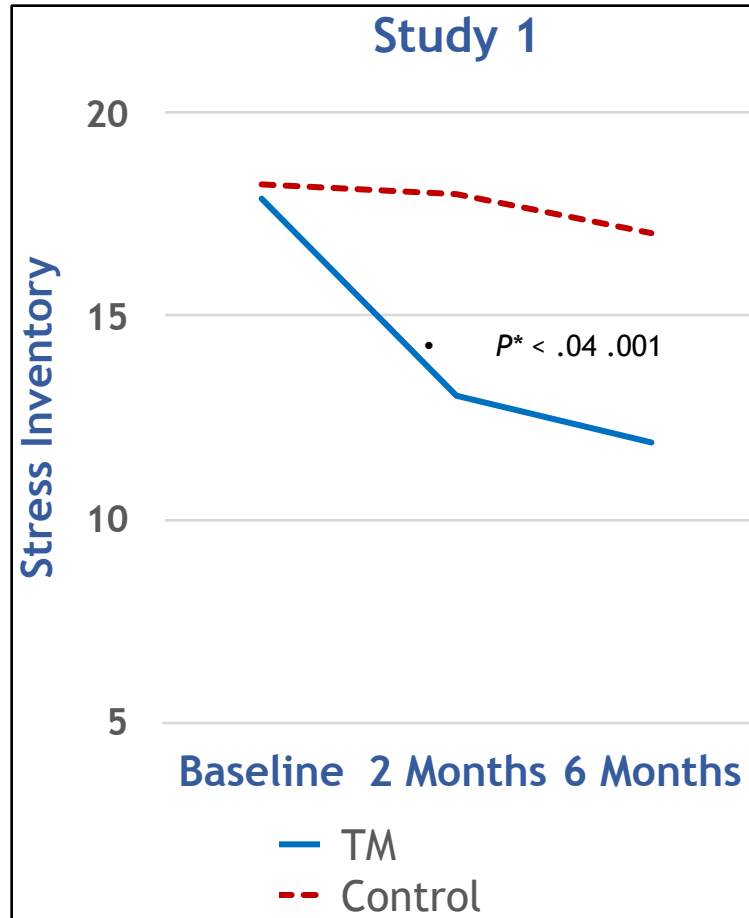
Reference. Gryczynski, J., Schwartz, R. P., Fishman, M. J., Nordeck, C. D., Grant, J., Nidich, S., et al. (2018). Integration of Transcendental Meditation® (TM) into alcohol use disorder (AUD) treatment. *Journal of Substance Abuse*, Available online.



Freshmen (Rook) Cadets at Norwich University

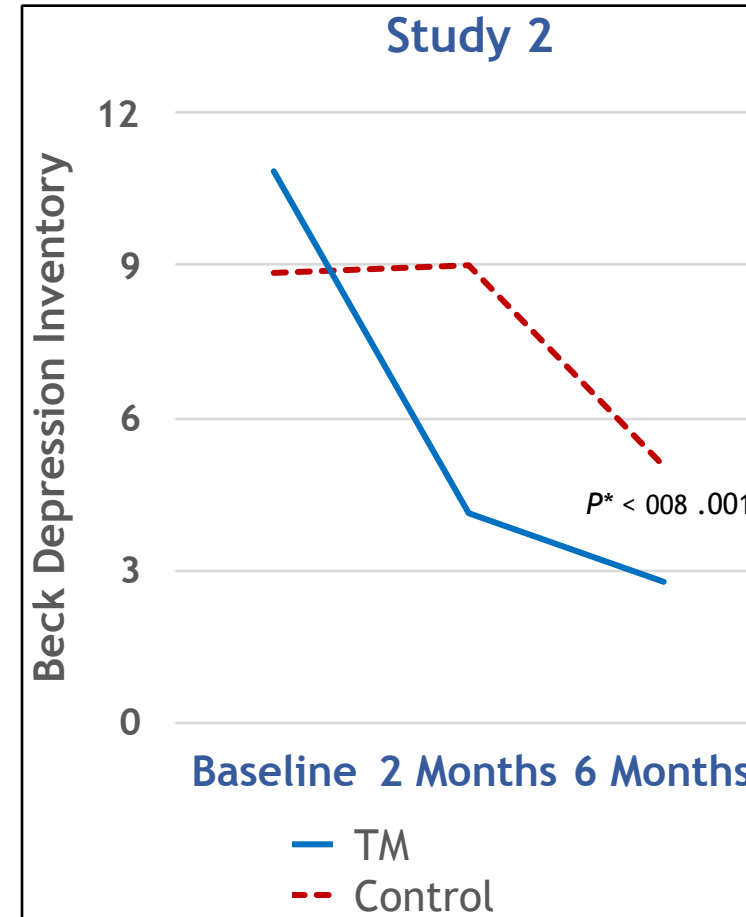
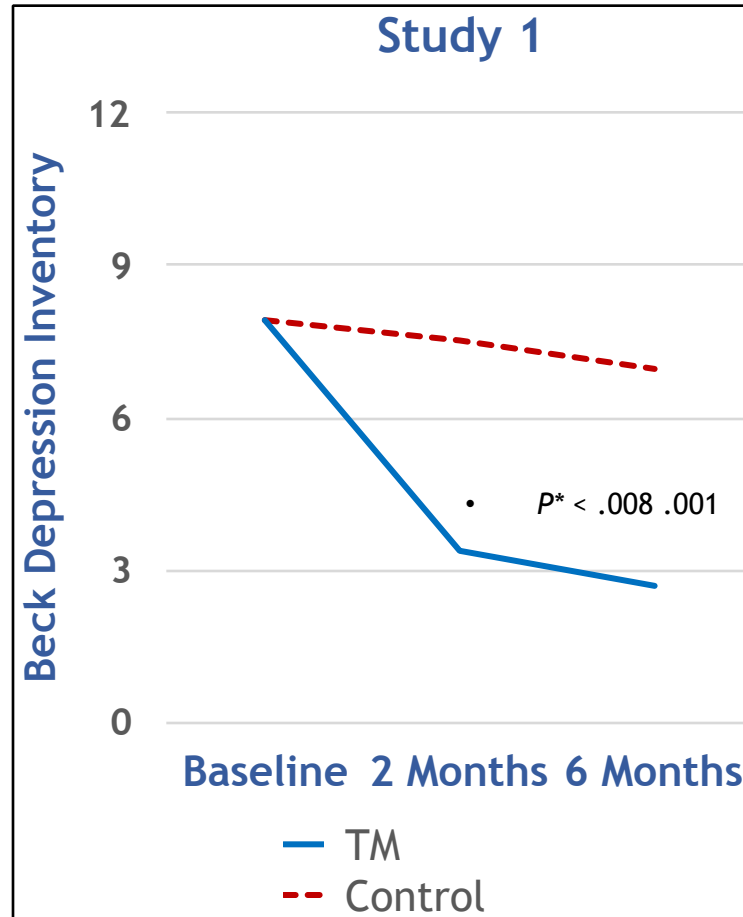


# Decreased Stress in Freshmen Military Cadets



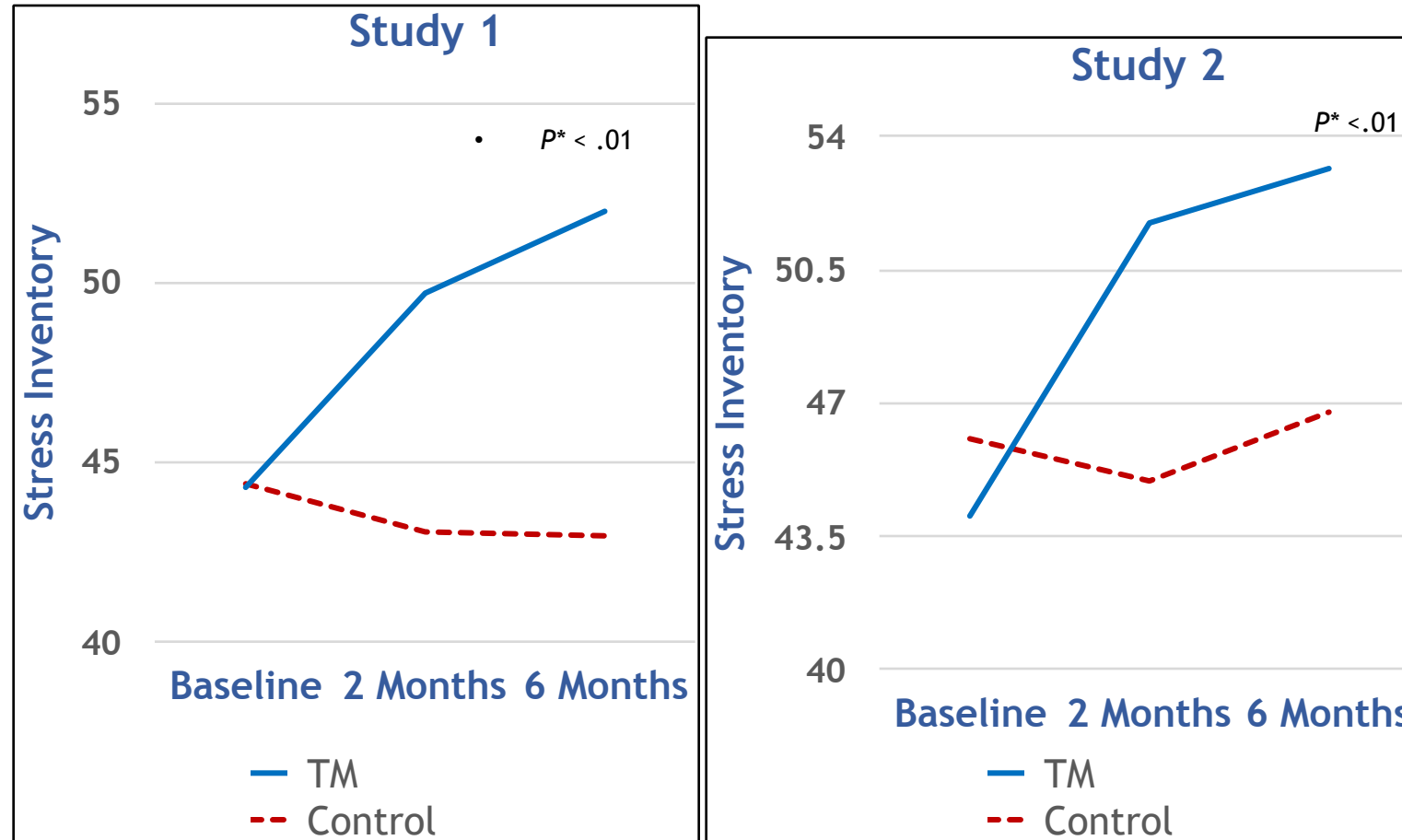
Reference. Bandy, Carole L. , Fleming, Kevin K. , & Dulmage, John (2013). *Meditation training in rook cadets increases resilience*. Paper presented at the 25th Annual Conference of the Association for Psychological Science, May 23-26 Washington, D.C.

# Decreased Depression in Freshmen Military Cadets



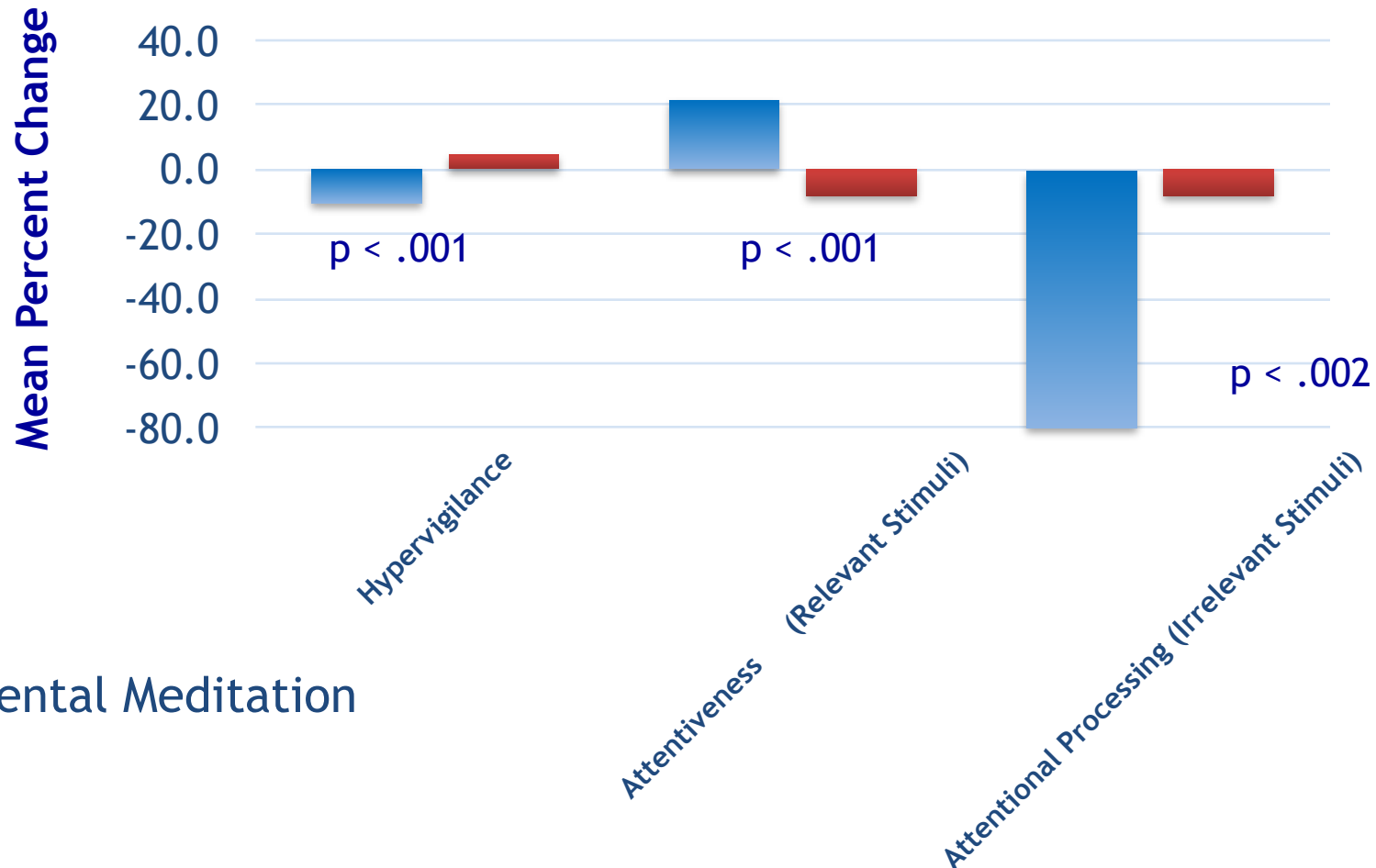
Reference. Bandy, Carole L. , Fleming, Kevin K. , & Dulmage, John (2013). *Meditation training in rook cadets increases resilience*. Paper presented at the 25th Annual Conference of the Association for Psychological Science, May 23-26 Washington, D.C.

# Increased Constructive Thinking (Resilience, Behavioral and Emotional Coping) in Freshmen Military Cadets



Reference. Bandy, Carole L. , Fleming, Kevin K. , & Dulmage, John (2013). *Meditation training in rook cadets increases resilience*. Paper presented at the 25th Annual Conference of the Association for Psychological Science, May 23-26 Washington, D.C.

# Increased Situational Awareness: Decreased Hypervigilance, Greater Attentiveness to Relevant Stimuli, and Decreased Attentional Processing of Irrelevant Stimuli



Reference. Bandy, Carole L. , Fleming, Kevin K. , & Dulmage, John (2013). Meditation training in rook cadets increases resilience. Paper presented at the 25th Annual Conference of the Association for Psychological Science, May 23-26 Washington, D.C.

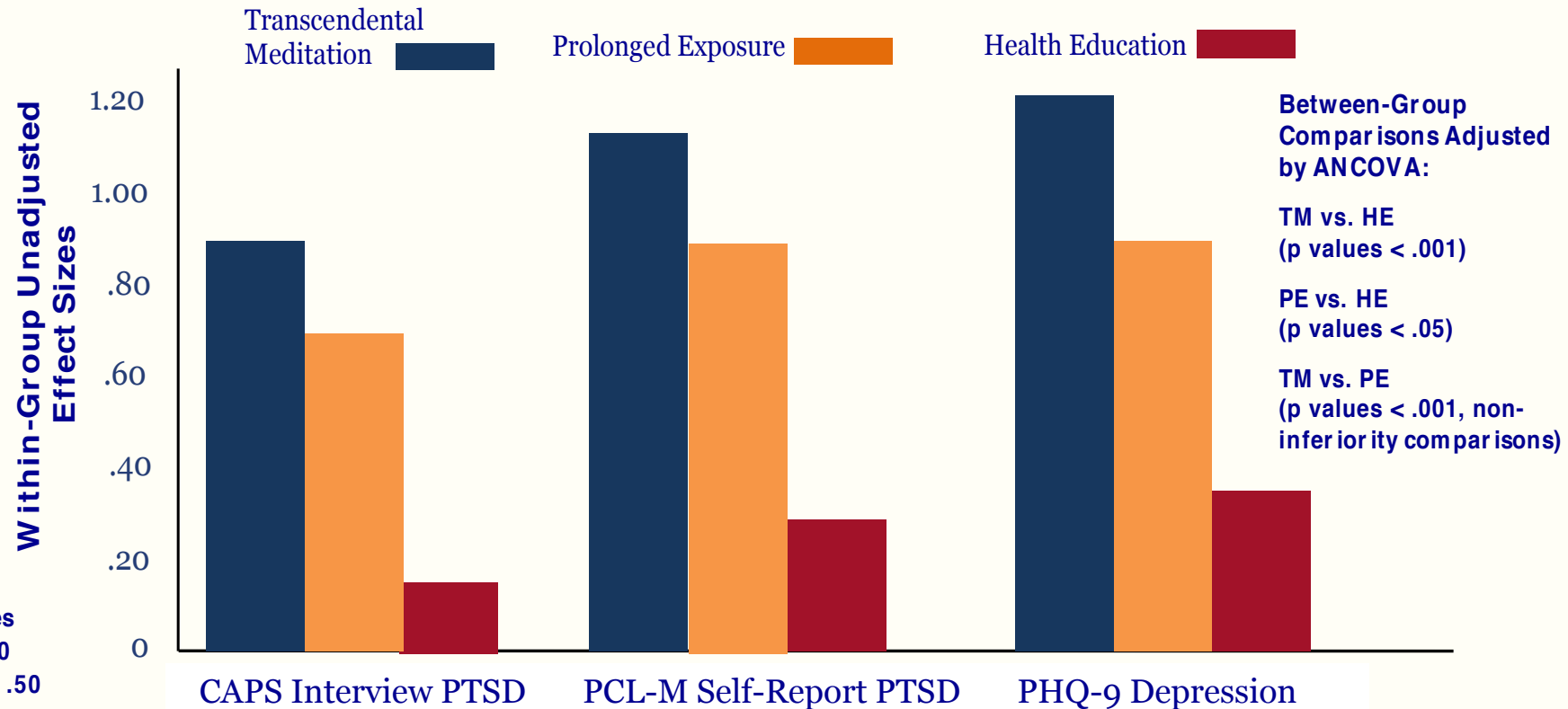
# The Effects of TM on Military Cadets: Summary

- **Greater Emotional Evenness (Decreased Stress, Decreased Depression, Decreased Hypervigilance)**
- **Increased Constructive Thinking (Improved Emotional Coping, Improved Behavioral Coping, Increased Resilience)**
- **Increased Situational Awareness (Increased Attentiveness to Relevant Stimuli, Decreased Attentional Processing of Irrelevant Stimuli)**

Reference. Bandy, Carole L. , Fleming, Kevin K. , & Dulmage, John (2013). *Meditation training in rook cadets increases resilience*. Paper presented at the 25th Annual Conference of the Association for Psychological Science, May 23-26 Washington, D.C.

# Decreased PTSD in Veterans *Published in The Lancet Psychiatry*

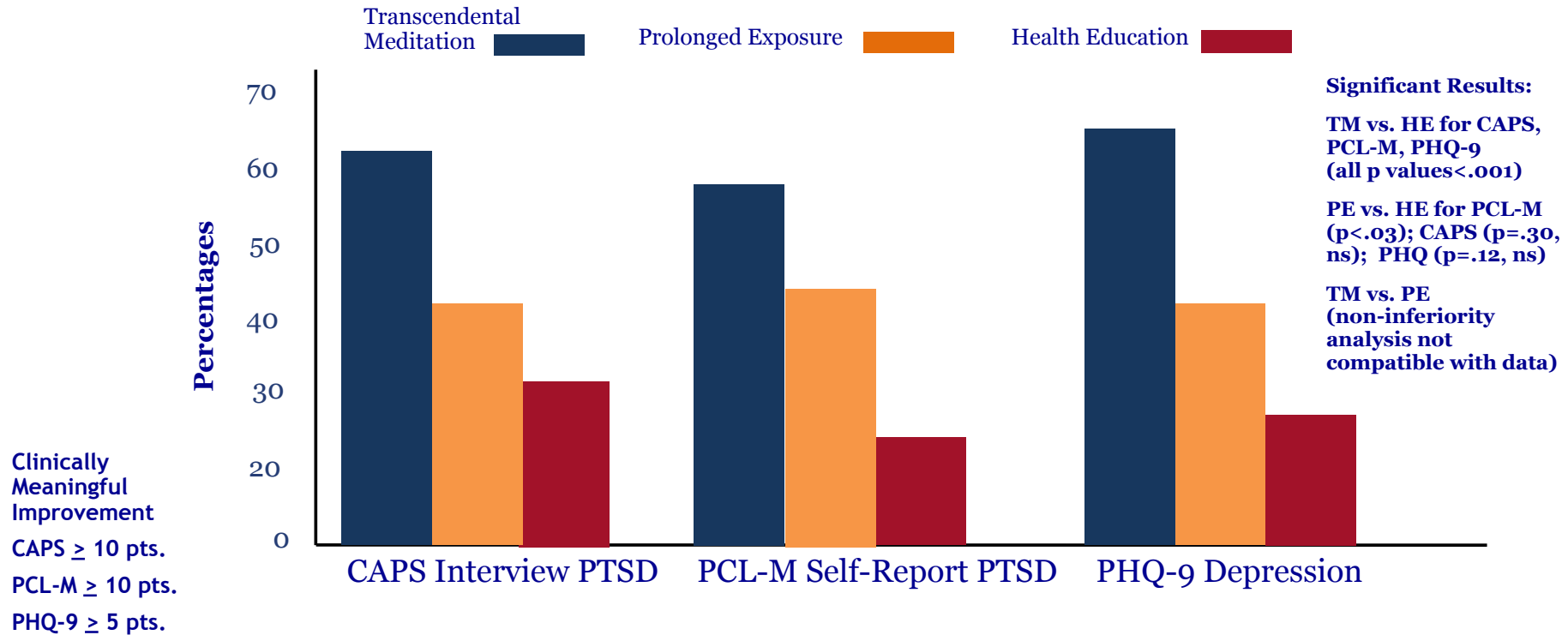
## Reduction in PTSD Symptoms and Depression: Comparison of Transcendental Meditation, Prolonged Exposure and Health Education



Reference: Nidich, S., Mills., P., Rainforth, M., Heppner, P., Schneider, R., Salerno, J., Gaylord-King, C., Rutledge, T. Non-trauma-focused meditation compared to exposure therapy in veterans with post-traumatic stress disorder: a randomized controlled trial. *The Lancet Psychiatry*, online version, Nov. 15, 2018.

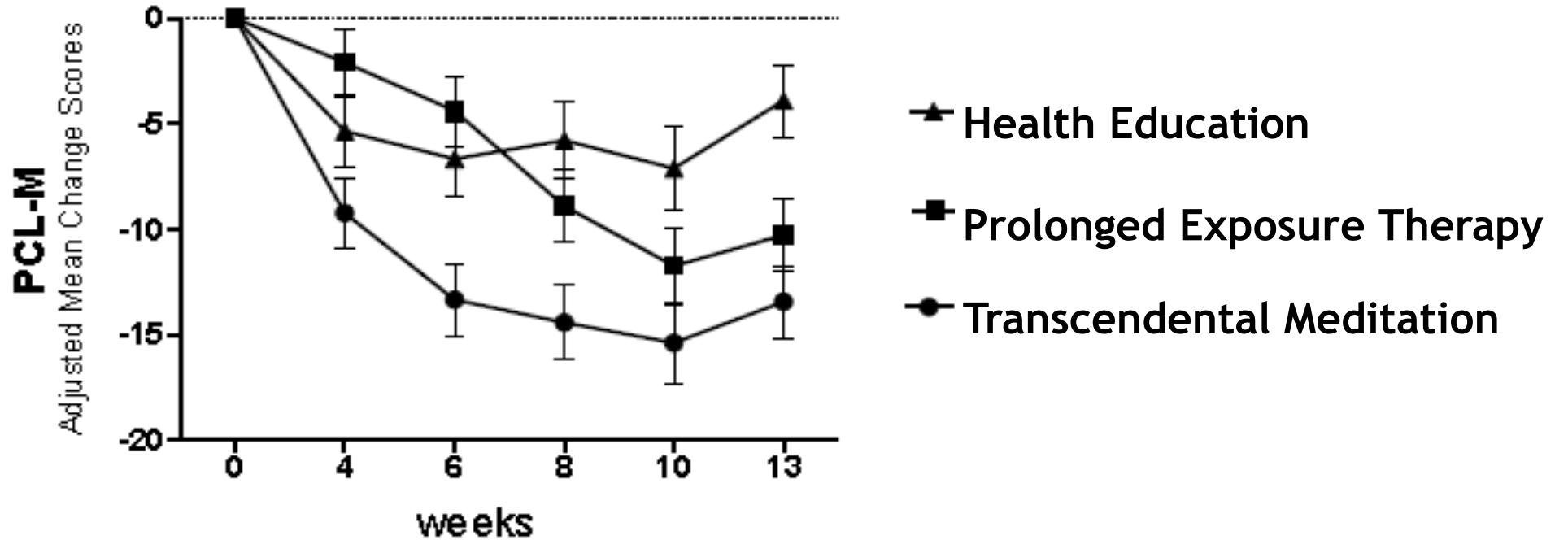
# More Clinically Meaningful Improvements through TM

## Percentages with Clinically Meaningful Improvement: Transcendental Meditation, Prolonged Exposure and Health Education



Reference: Nidich, S., Mills., P., Rainforth, M., Heppner, P., Schneider, R., Salerno, J., Gaylord-King, C., Rutledge, T. Non-trauma-focused meditation compared to exposure therapy in veterans with post-traumatic stress disorder: a randomized controlled trial. *The Lancet Psychiatry*, online version, Nov. 15, 2018.

# More Rapid Reduction in PTSD Symptoms in Veterans through TM



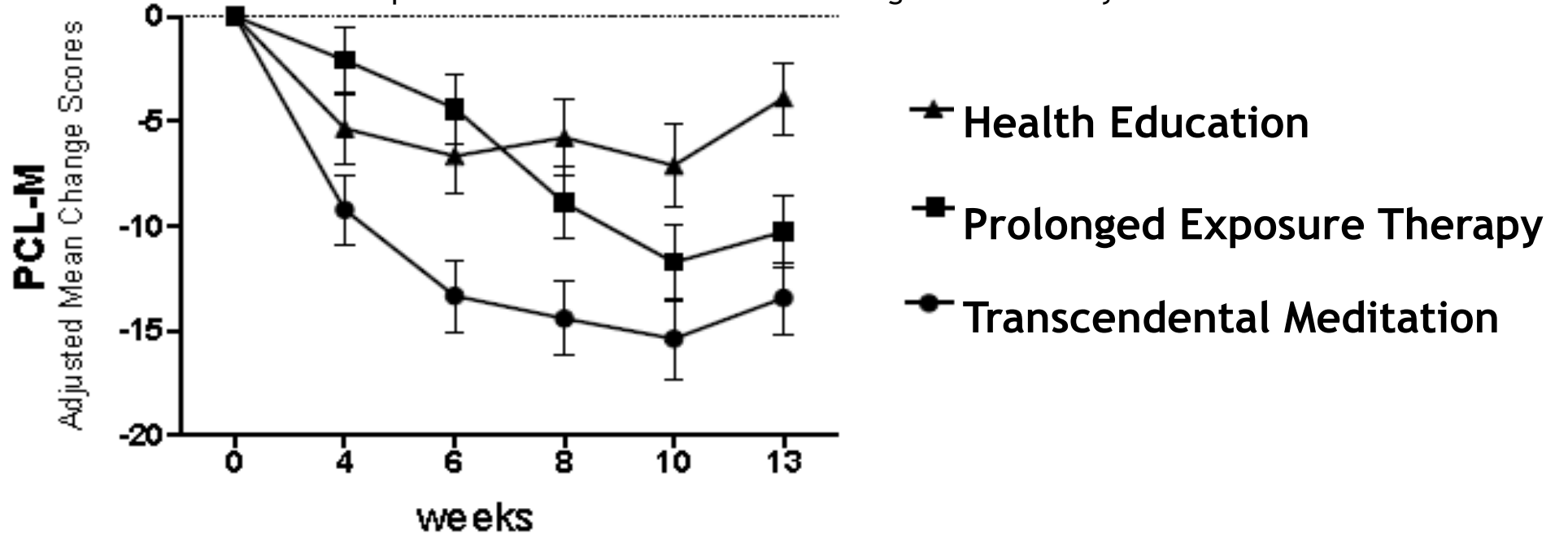
**Note:** PCL-M mean change scores from baseline for weeks 4, 6, 8, 10 and 13 (3-month posttest): TM: -9.23, -13.34, -14.43, -15.40, -13.44, respectively; PE: -2.08, -4.38, -8.89, -11.74, -10.28; and HE -5.34, -6.66, -5.78, -7.10, -3.90. Attendance at interim posttest visits was 84%, 75%, 64% and 45% at the 4-week, 6-week, 8-week and 10-week interim visits, respectively with 81% completing the final 3-month posttest (TM: 78%, PE: 84% and HE: 85%) TM=Transcendental Meditation. PE=Prolonged Exposure. HE=PTSD Health Education

Reference. Nidich, Sanford, Mills, Paul J , Rainforth, Maxwell , Heppner, Pia , Schneider, Robert H , Rosenthal, Norman E , . . . Rutledge, Thomas (2018). Non-trauma-focused meditation versus exposure therapy in veterans with post-traumatic stress disorder: a randomised controlled trial. *The Lancet Psychiatry*, 5(12), 975-986. doi:10.1016/S2215-0366(18)30384-5



# More Rapid Reduction in Depression in Veterans through TM

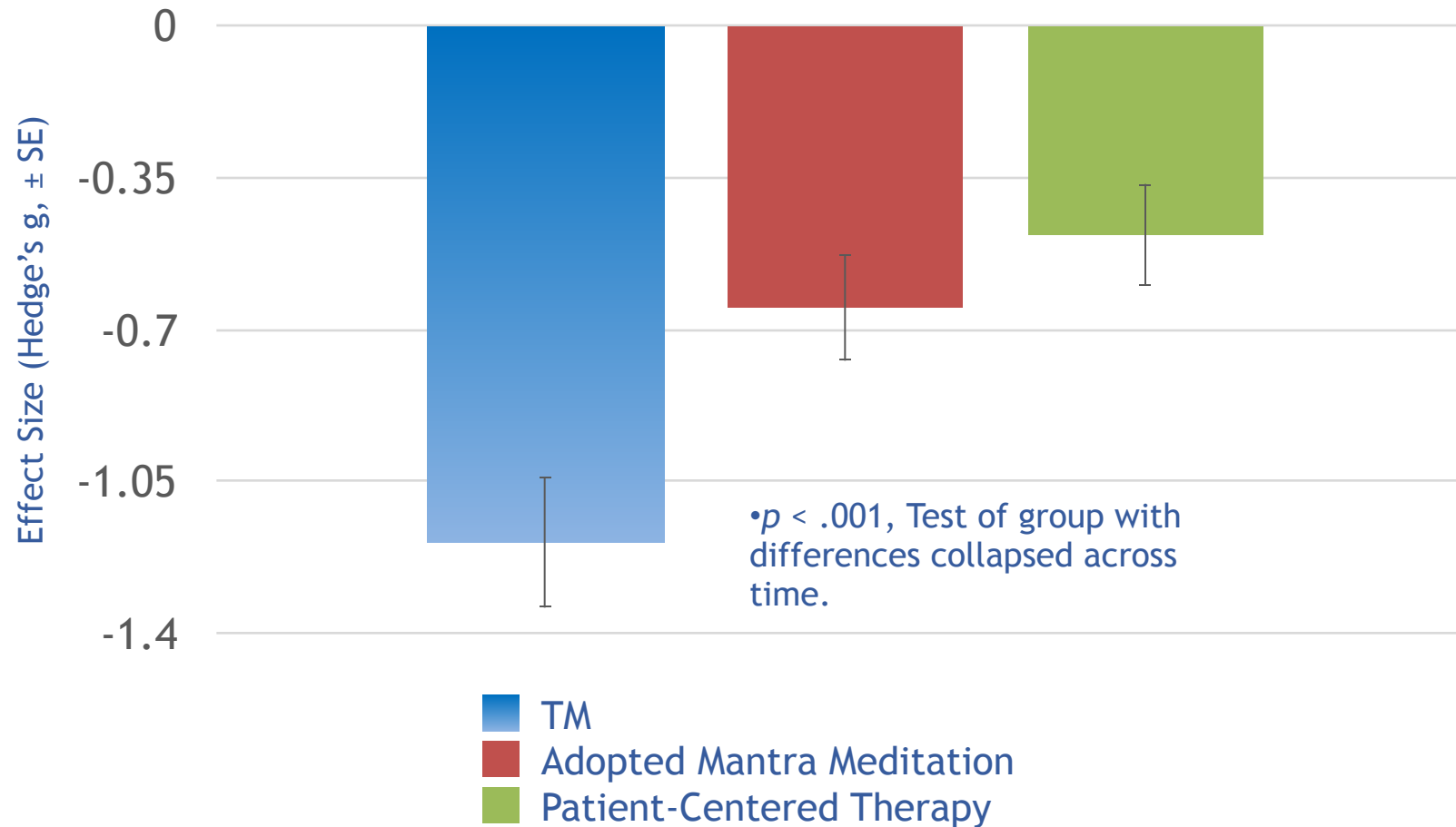
Conducted at the Department of Veterans Affairs San Diego Healthcare System



**Note:** PCL-M mean change scores from baseline for weeks 4, 6, 8, 10 and 13 (3-month posttest): TM: -9.23, -13.34, -14.43 -15.40, -13.44, respectively; PE: -2.08, -4.38, -8.89, -11.74, -10.28; and HE -5.34, -6.66, -5.78, -7.10, -3.90. Attendance at interim posttest visits was 84%, 75%, 64% and 45% at the 4-week, 6-week, 8-week and 10-week interim visits, respectively with 81% completing the final 3-month posttest (TM: 78%, PE: 84% and HE: 85%) TM=Transcendental Meditation. PE=Prolonged Exposure. HE=PTSD Health Education

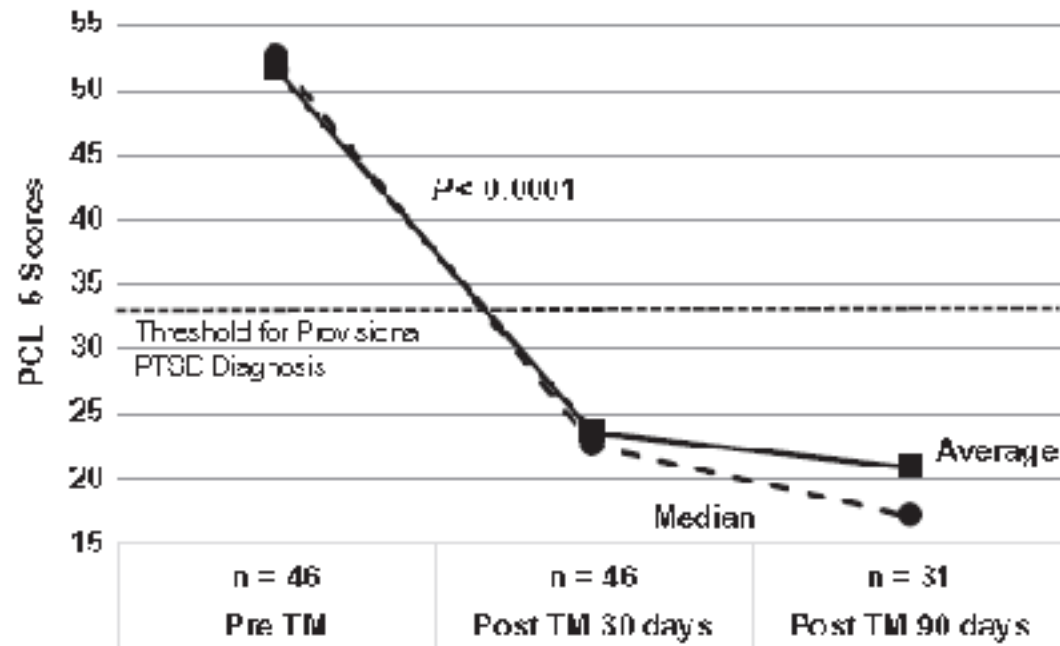
Reference. Nidich, Sanford, Mills, Paul J , Rainforth, Maxwell , Heppner, Pia , Schneider, Robert H , Rosenthal, Norman E , . . . Rutledge, Thomas (2018). Non-trauma-focused meditation versus exposure therapy in veterans with post-traumatic stress disorder: a randomised controlled trial. *The Lancet Psychiatry*, 5(12), 975-986. doi:10.1016/S2215-0366(18)30384-5

## Decreased PTSD Symptoms in Veterans, Saginaw Michigan VA Randomized Controlled Trial



Reference. Heffner, K. L., Caine, E. D., Crean, H., Franus, N., Moynihan, J. A. , & Talbot, N. (2014). *Meditation for PTSD demonstration project: Final report to Mental Health Services, Department of Veteran Affairs*. Retrieved from Rochester, New York: Saginaw, Michigan Study.

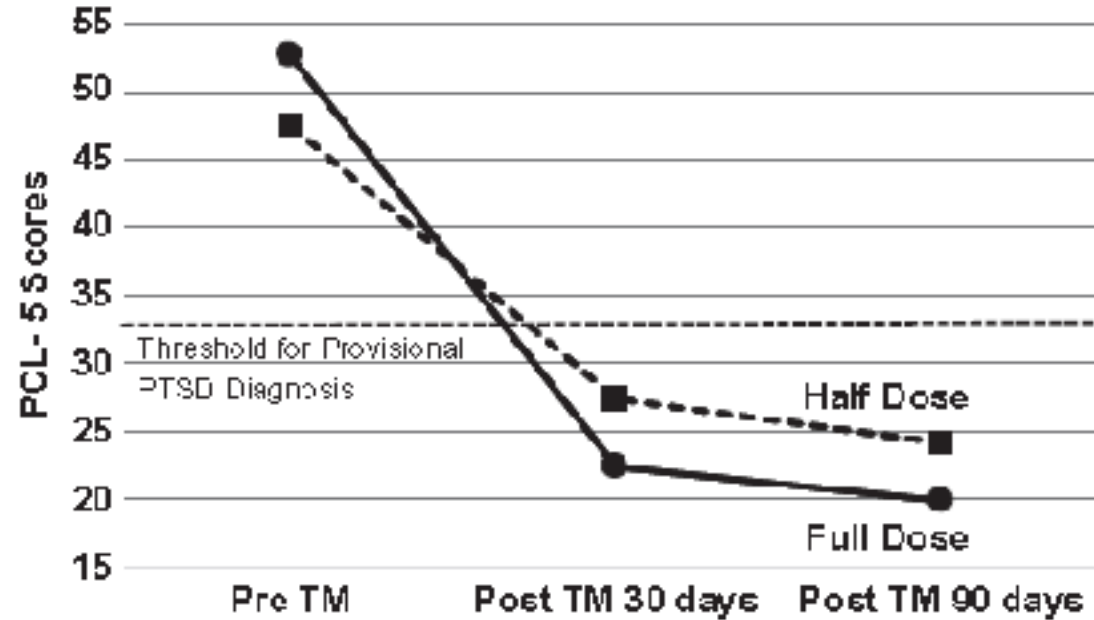
# Decreased PTSD Symptoms In Veterans After 30 Days and 90 Days Through the Transcendental Meditation Technique



**FIGURE 1.** Average and Median PCL-5 Scores Before and After Starting the TM Program.

Reference. Herron RE, Rees B. The Transcendental Meditation Program's Impact on the Symptoms of Post-traumatic Stress Disorder of Veterans: An Uncontrolled Pilot Study. *Military Medicine*. 2017;1:1-7.

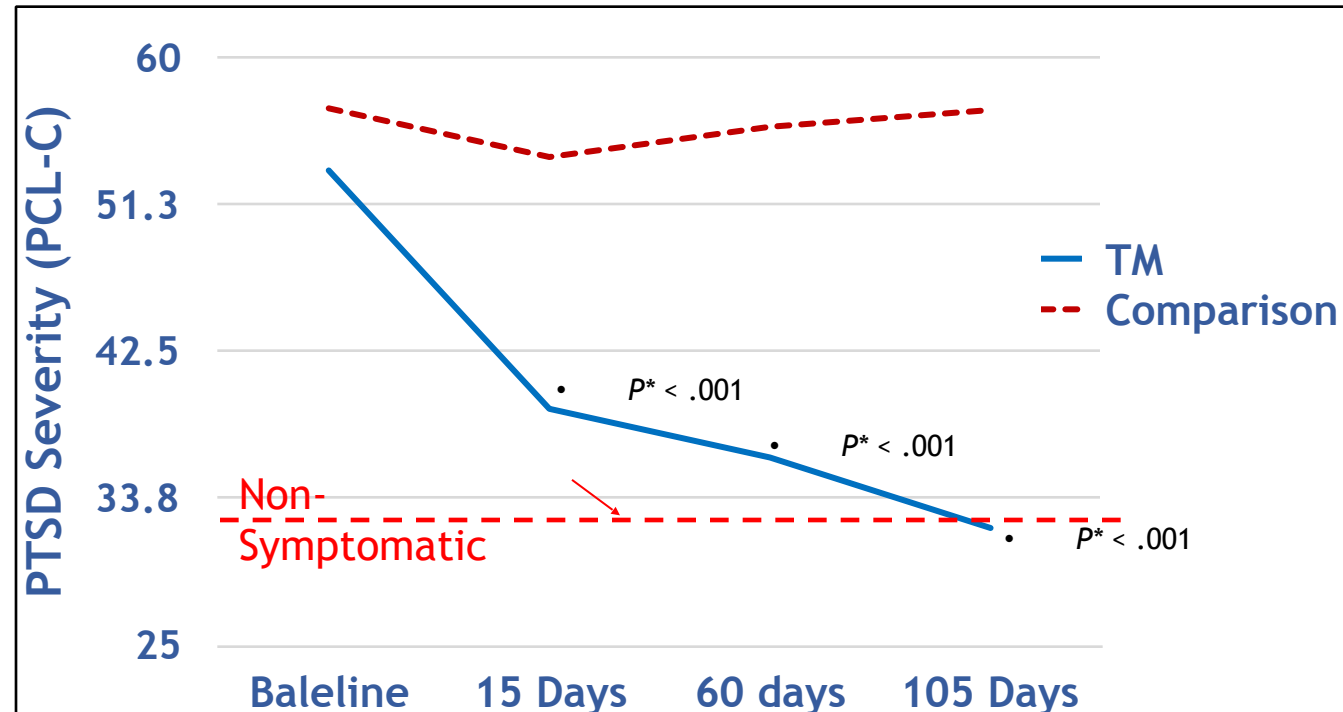
# Greater Reduction in PTSD Symptoms with More Regular TM Practice



**FIGURE 2.** Dose-Response Effect: PCL-5 Averages of Full-Dose and Half Dose Groups.

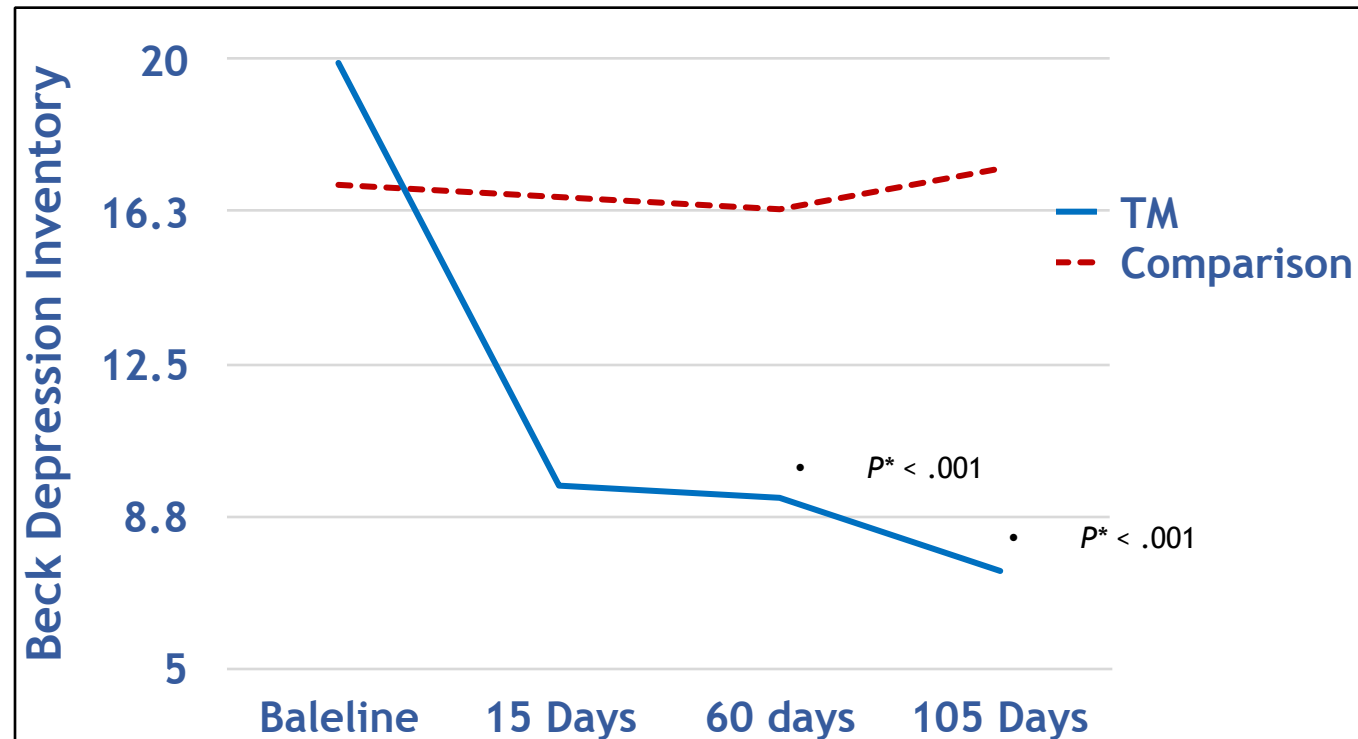
Reference. Herron RE, Rees B. The Transcendental Meditation Program's Impact on the Symptoms of Post-traumatic Stress Disorder of Veterans: An Uncontrolled Pilot Study. *Military Medicine*. 2017;1:1-7.

# Decreased PTSD Symptoms in South-African College Students



Reference. Bandy, C. L., Dillbeck, M. C., Sezibera, Vincent , Taljaard, L., Wilks, M., Shapiro, D., & de Reuck, J. (2019). Reduction of PTSD in South African university students using Transcendental Meditation practice. *Psychological Reports*, February, 1-16. doi:10.1177/0033294119828036

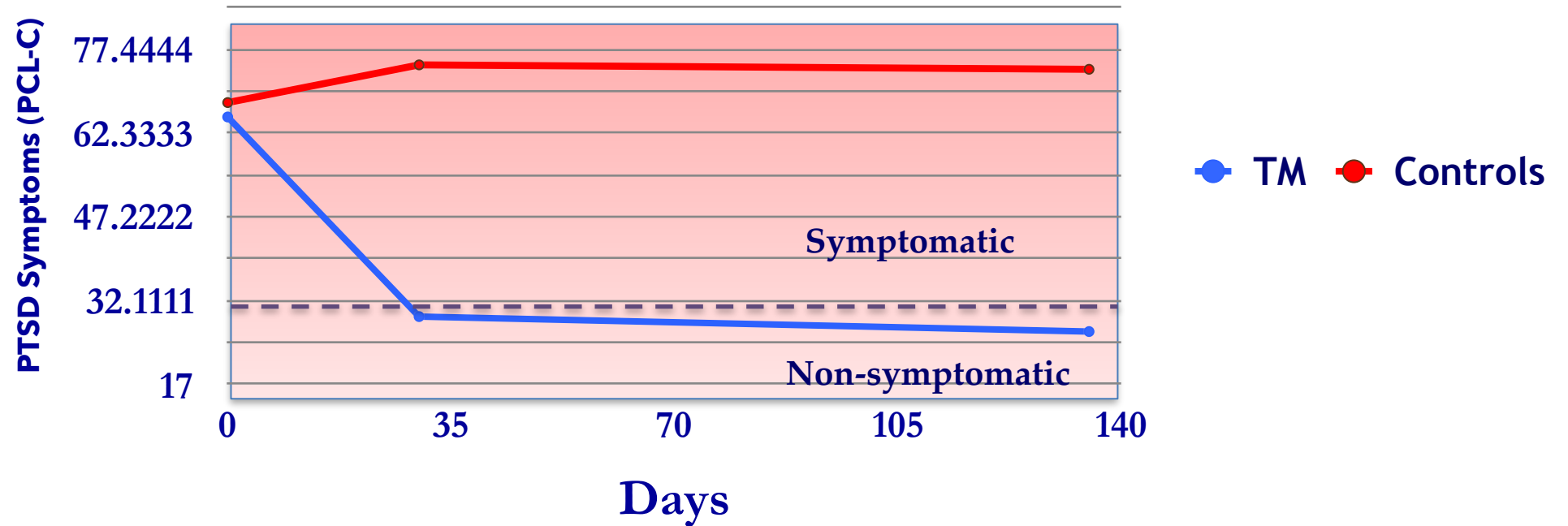
# Decreased Depression in South-African College Students



Reference. Bandy, C. L., Dillbeck, M. C., Sezibera, Vincent, Taljaard, L., Wilks, M., Shapiro, D., & de Reuck, J. (2019). Reduction of PTSD in South African university students using Transcendental Meditation practice. *Psychological Reports*, 0(0), 1-16. doi:10.1177/0033294119828036

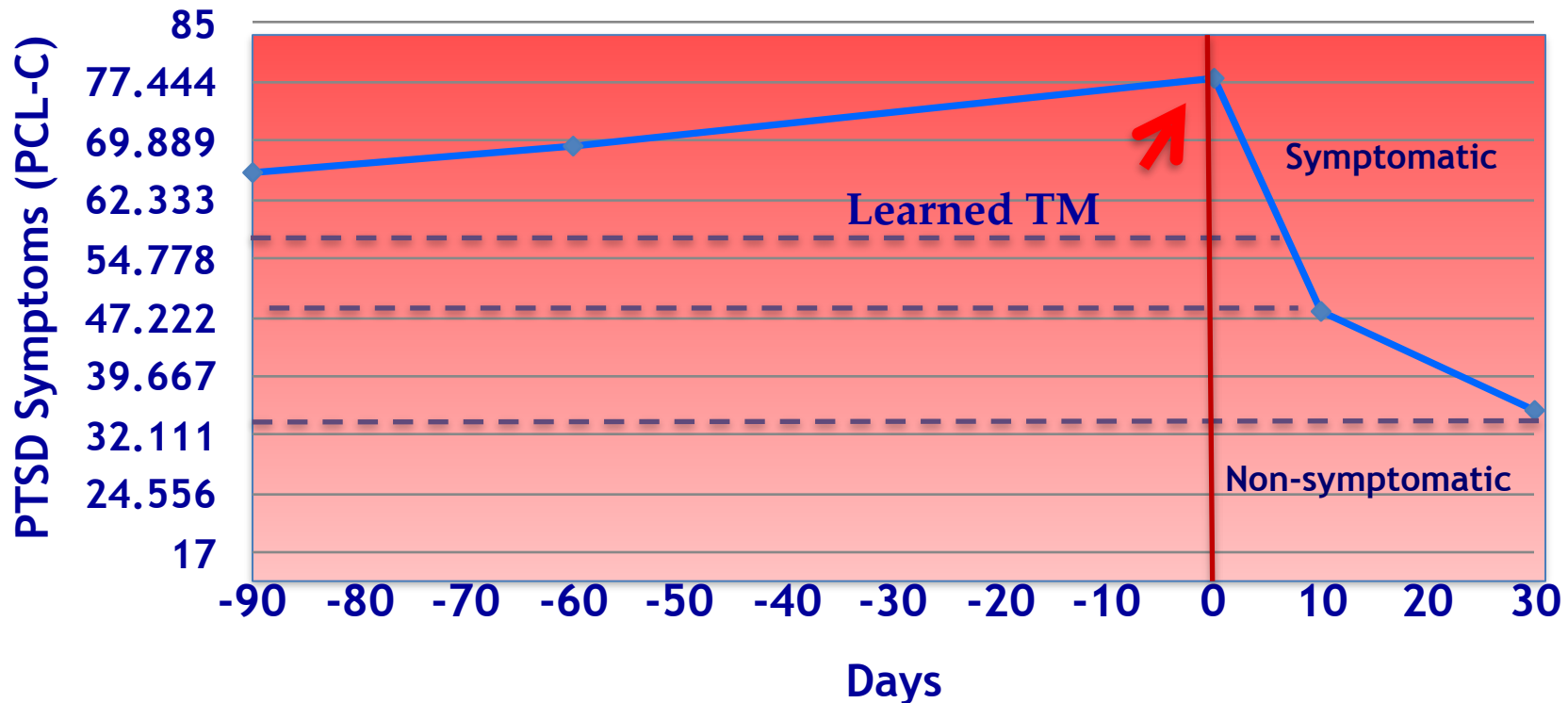
# Decreased PTSD Symptoms in Congolese War Refugees

through the *Transcendental Meditation* Technique



The TM technique reduced PTSD symptoms in war refugees.

# Rapid Reduction in PTSD Symptoms in Congolese War Refugees through the *Transcendental Meditation* Technique



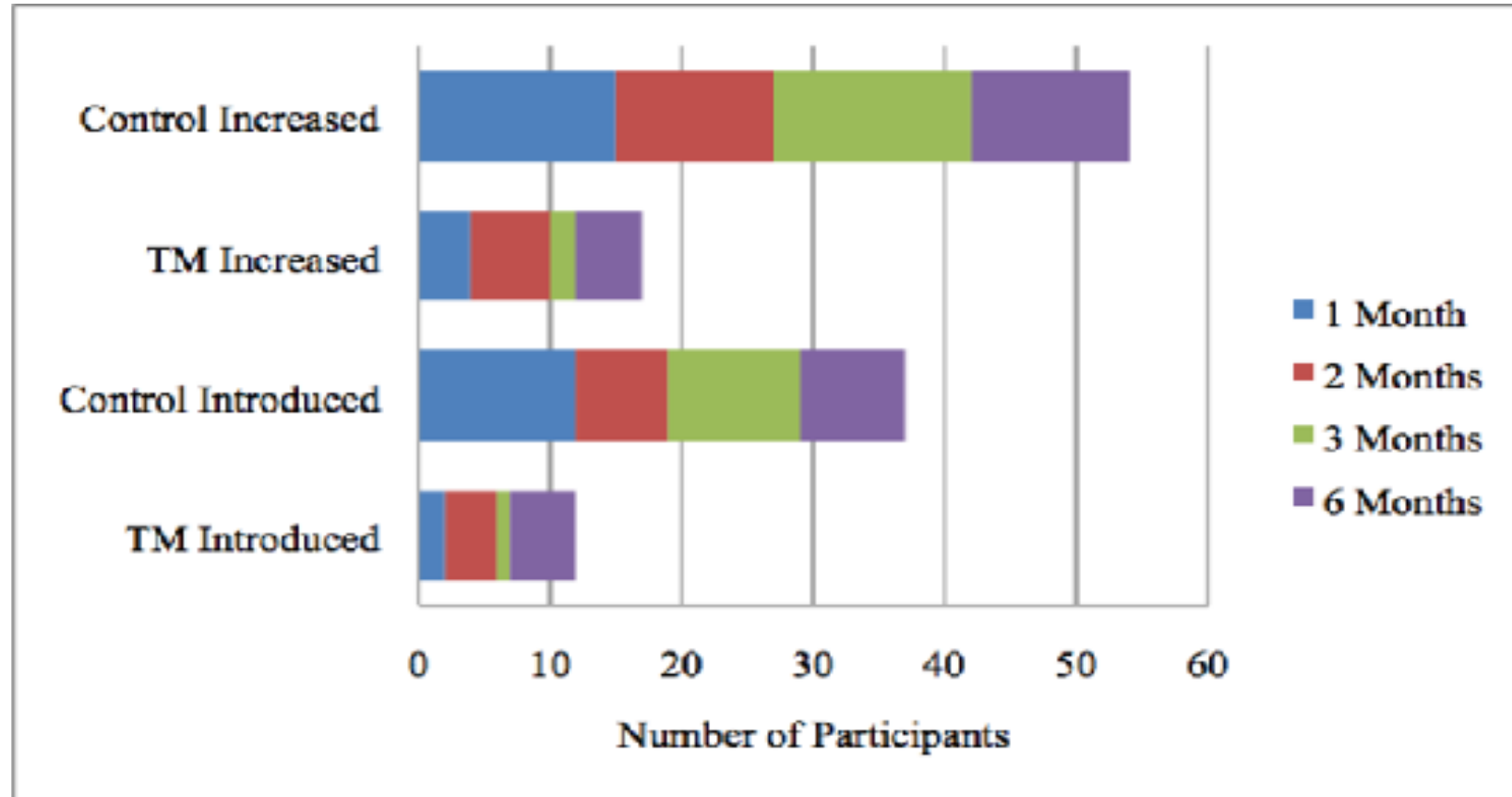
**TM reduces PTSD symptoms within 10 days, and after 30 days they decline to non-symptomatic levels.**

Reference. Rees, B., F. Travis, D. Shapiro, and R. Chant. "Significant Reductions in Posttraumatic Stress Symptoms in Congolese Refugees after 10 Days Transcendental Meditation Practice." *Journal of Traumatic Stress* 27, no. 1 (2014): 112-15.



# Reduced Use of Psychotropic Medication in Military Personnel with PTSD and Anxiety Disorders

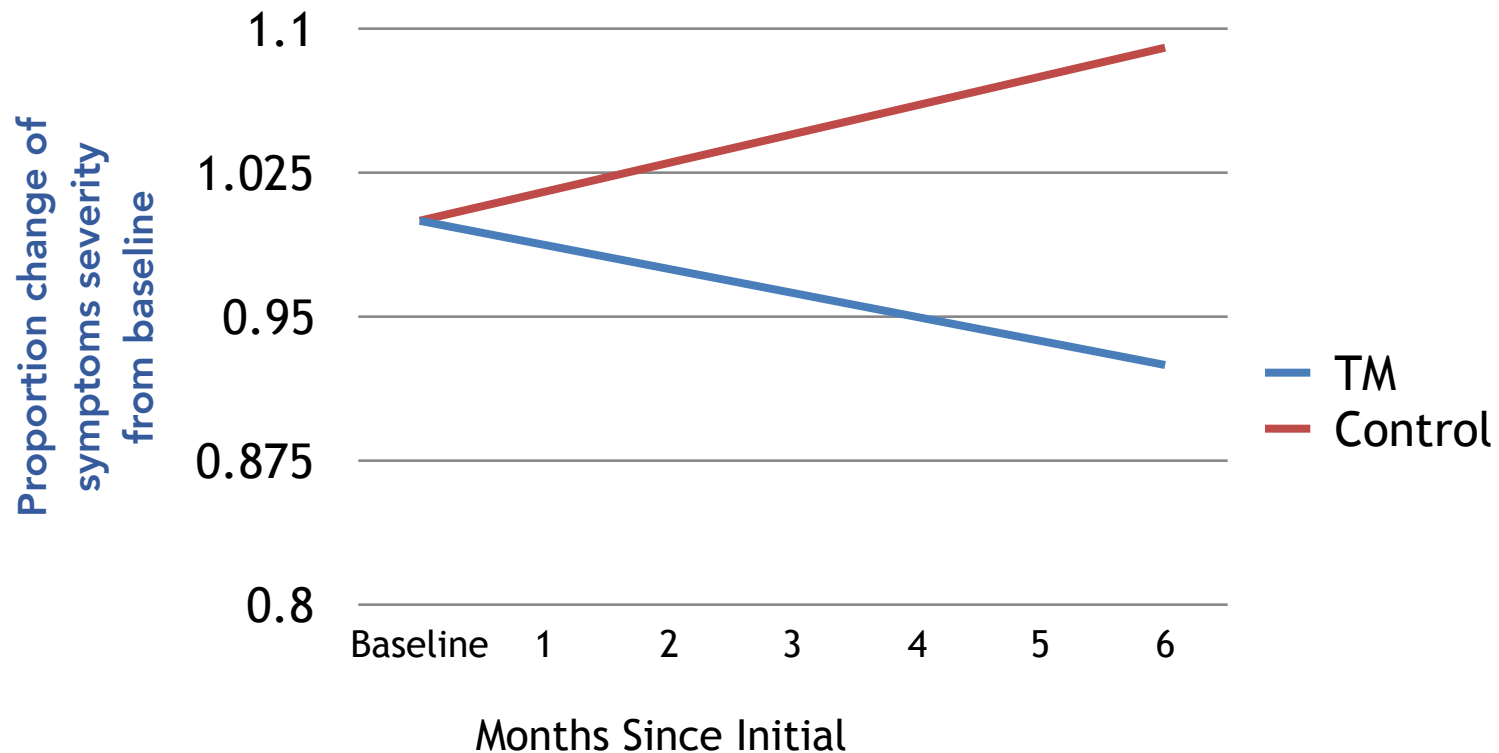
*Through the Transcendental Meditation technique*



Reference. Barnes VA, Monto A, Williams JJ, Rigg JL. Impact of Transcendental Meditation on psychotropic medication use among active duty military service members with anxiety and PTSD. *Military Medicine*. 2016;181(1):56-62

# Decreased Severity of PTSD and Anxiety along with Decreased Use of Psychotropic Medication

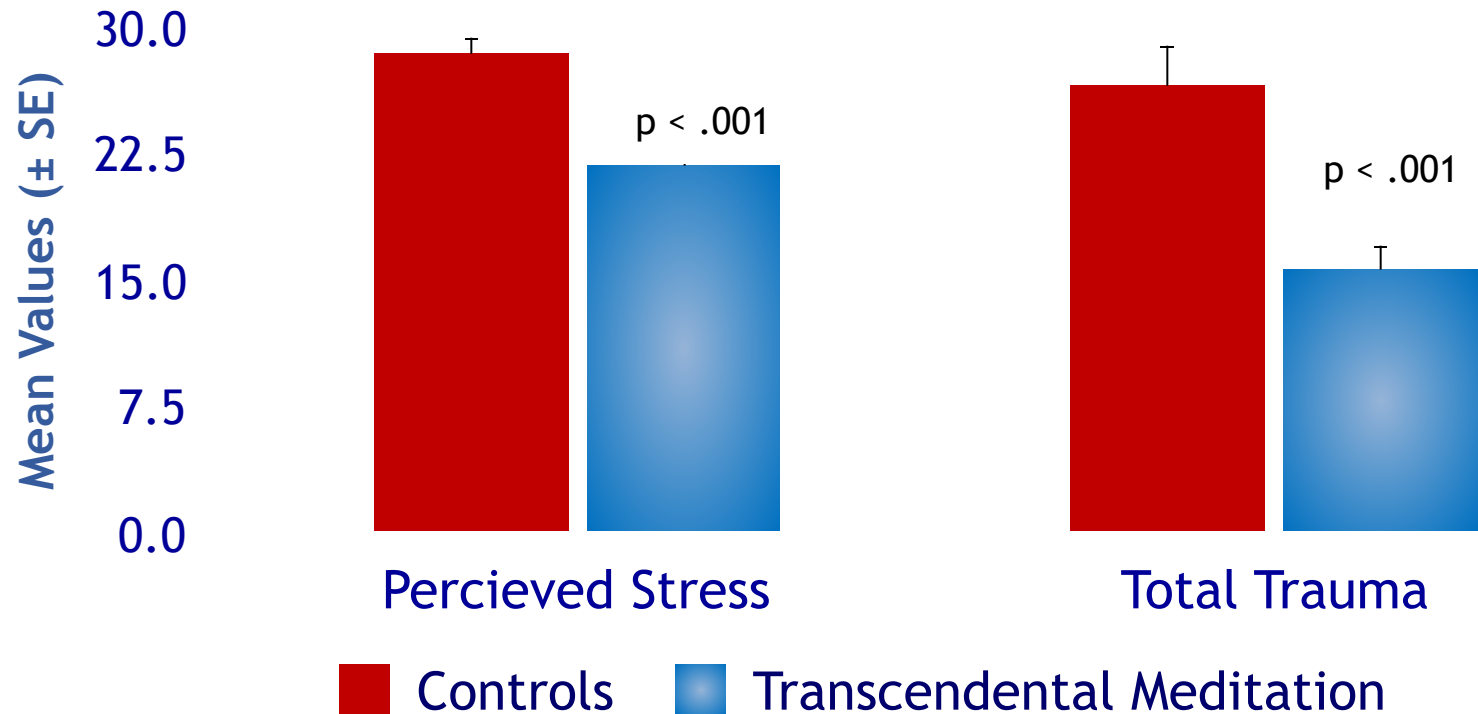
*Through the Transcendental Meditation technique*



Reference. Barnes VA, Monto A, Williams JJ, Rigg JL. Impact of Transcendental Meditation on psychotropic medication use among active duty military service members with anxiety and PTSD. *Military Medicine*. 2016;181(1):56-62

# Decreased Trauma Symptoms in Male Prison Inmates

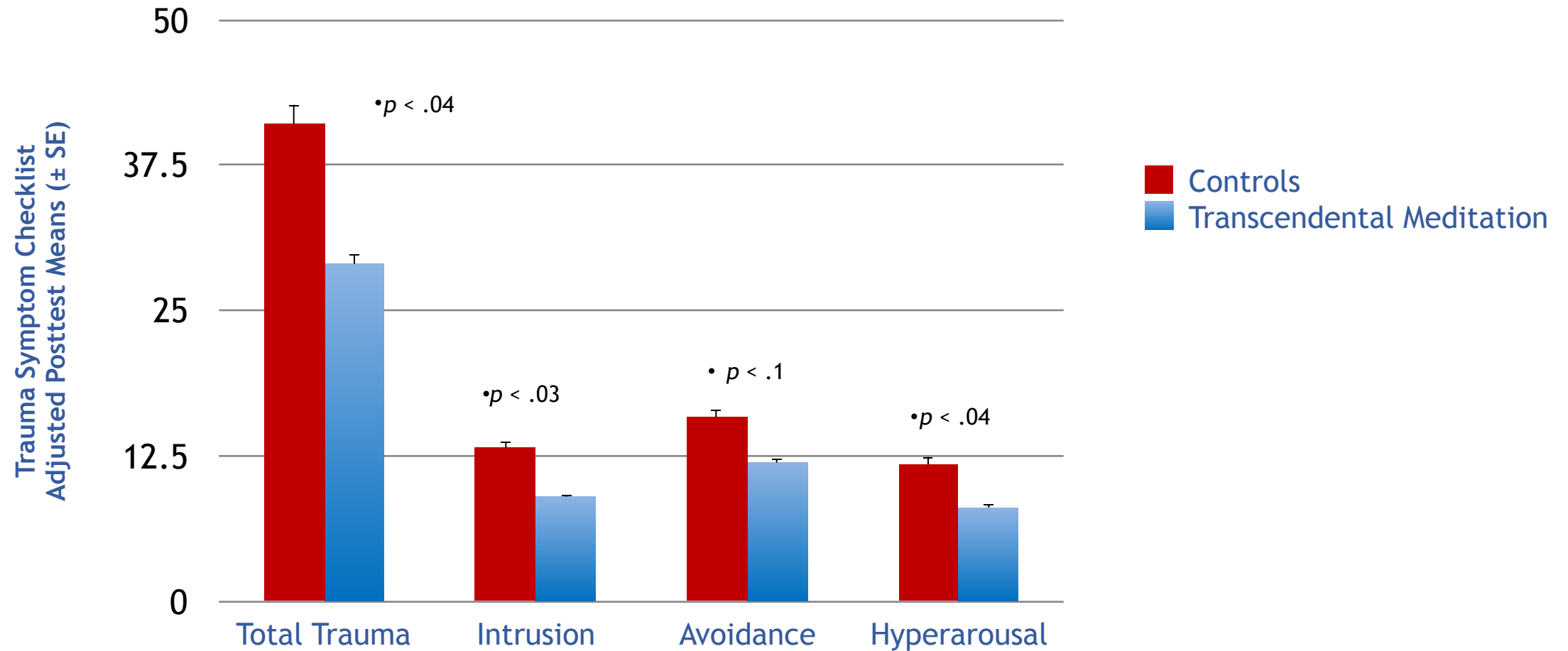
## *Randomized Controlled Trial*



Reference. Nidich S, O'Connor T, Rutledge T, Duncan J, Compton B, Seng A, et al. Reduced trauma symptoms and perceived stress in male prison inmates through the Transcendental Meditation program: A randomized controlled trial. *The Permanente Journal*. 2016;20(4):16-007.

# Decreased PTSD in Female Prison Inmates

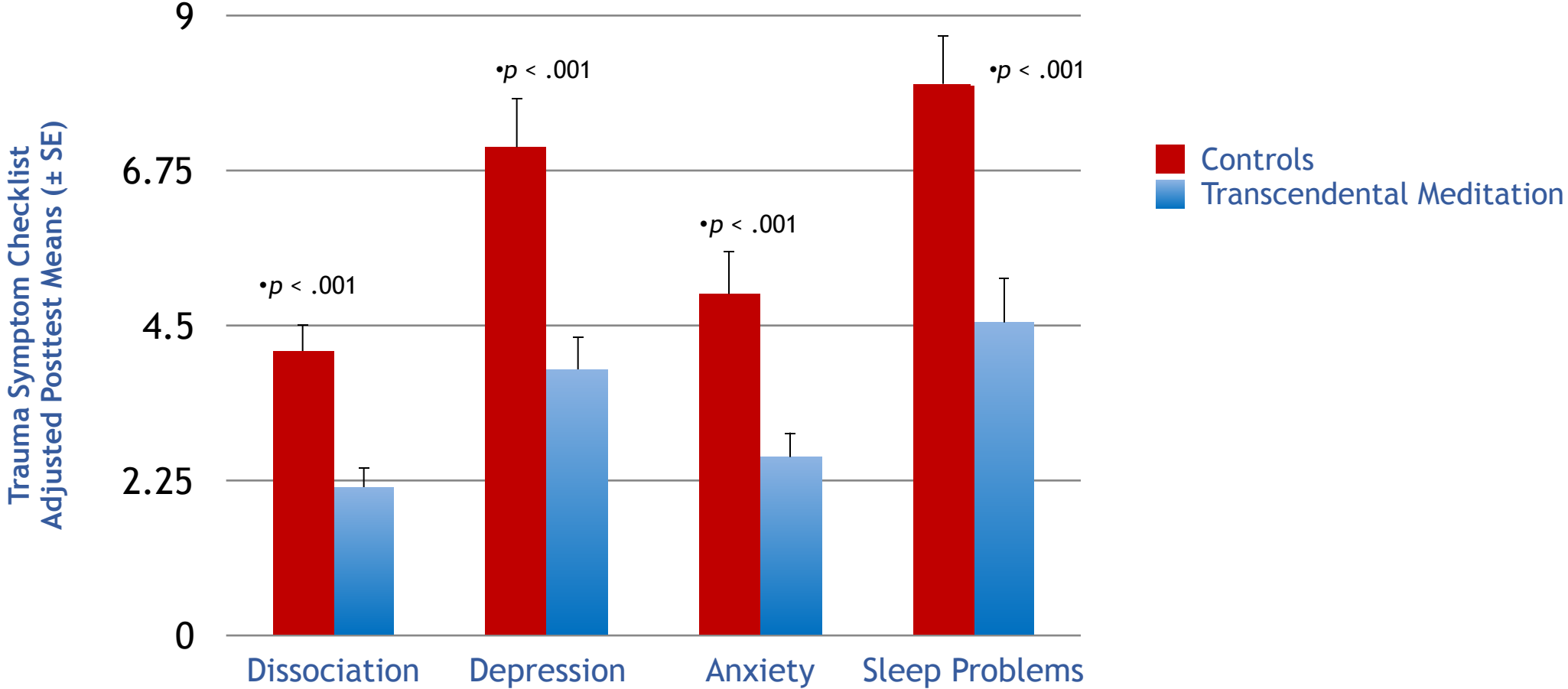
## *Randomized Controlled Trial*



**Reference.** Nidich, S., Seng, A., Compton, B., O'Connor, T., Salerno, J. W., & Nidich, R. (2017). Transcendental Meditation and Reduced Trauma Symptoms in Female Inmates: A Randomized Controlled Study. *Perm J*, 21. doi: 10.7812/TPP/16-008

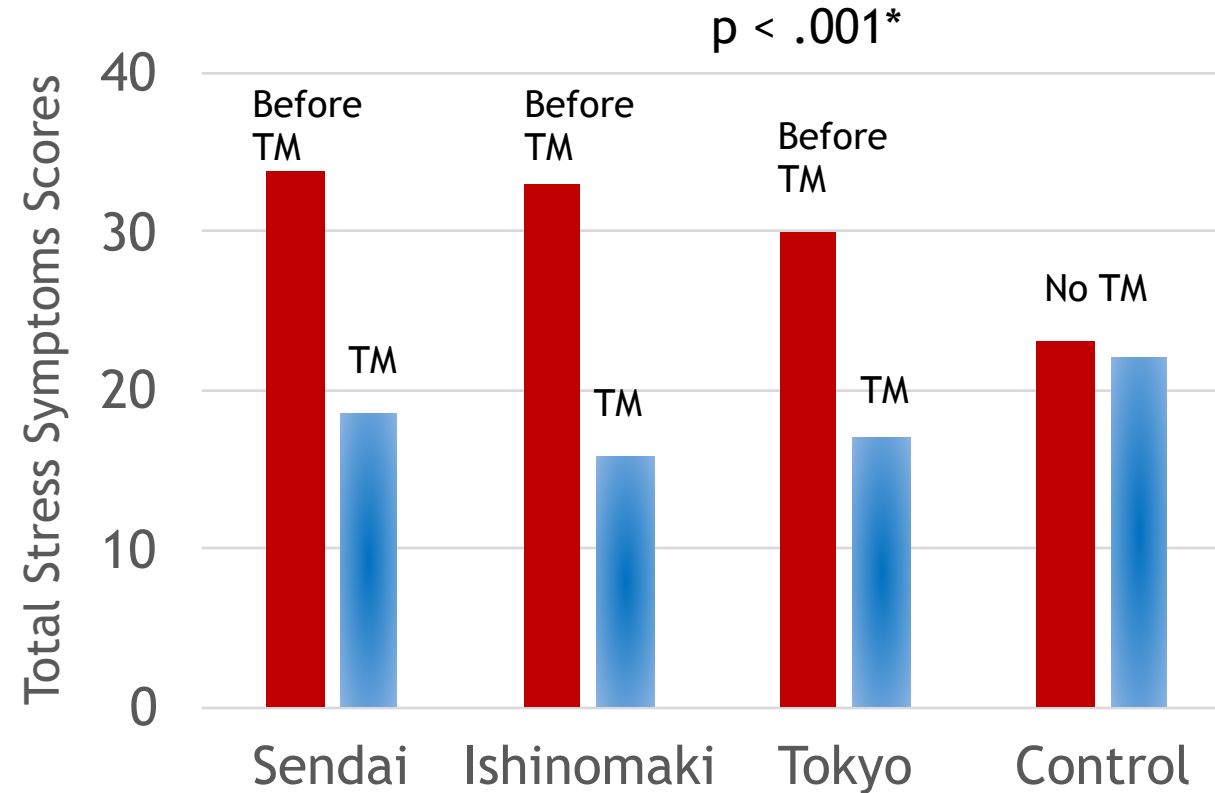
# Decreased PTSD in Male Prison Inmates

## *Randomized Controlled Trial*



Reference. Nidich S, O'Connor T, Rutledge T, Duncan J, Compton B, Seng A, et al. Reduced trauma symptoms and perceived stress in male prison inmates through the Transcendental Meditation program: A randomized controlled trial. *The Permanente Journal*. 2016;20(4):16-007.

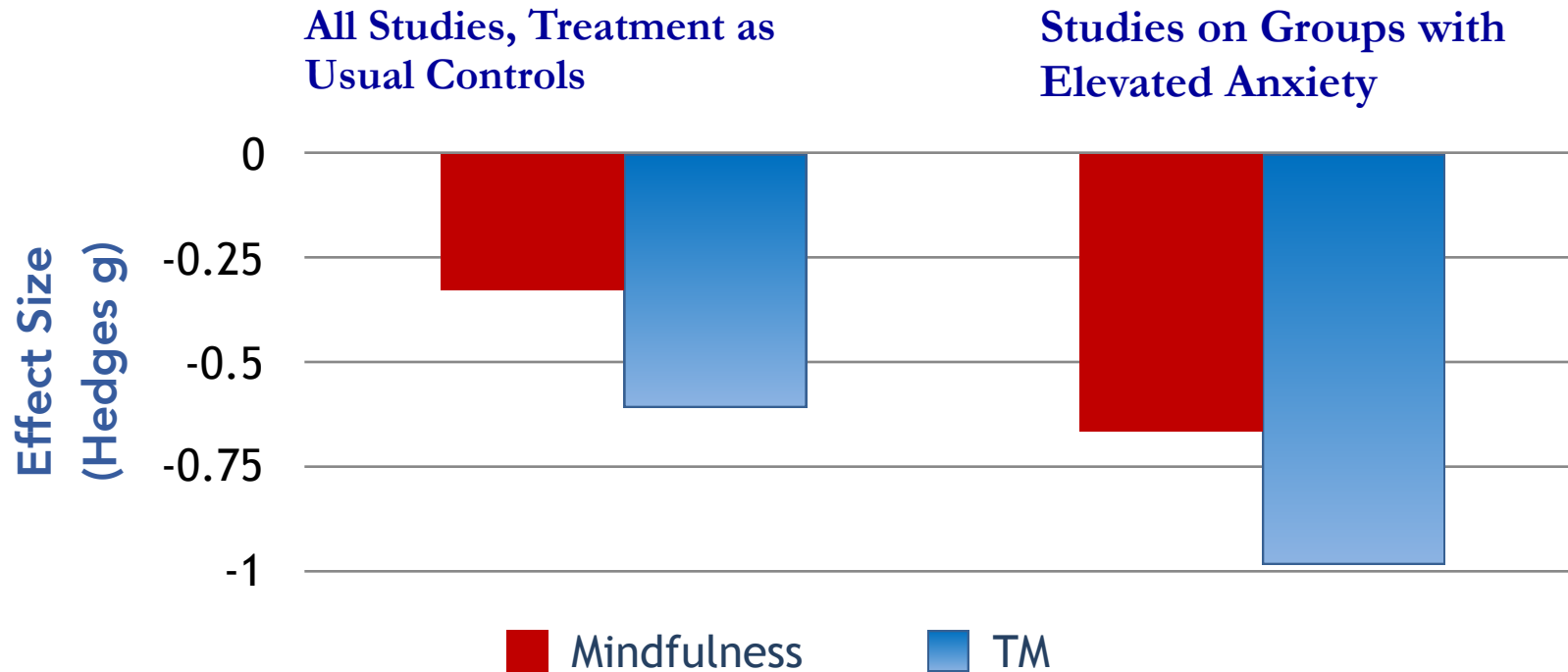
# TM Decreased Stress Levels After the Earthquake–Tsunami Disaster in Japan.



The chart shows stress levels decreased from before and to after learning TM in two cities affected by the 2011 Japanese earthquake-tsunami disaster (Sendai and Ishinomaki). TM also decreased stress in people living in Tokyo, which was not affected by the earthquake-tsunami. No change in controls subjects who did not learn TM.

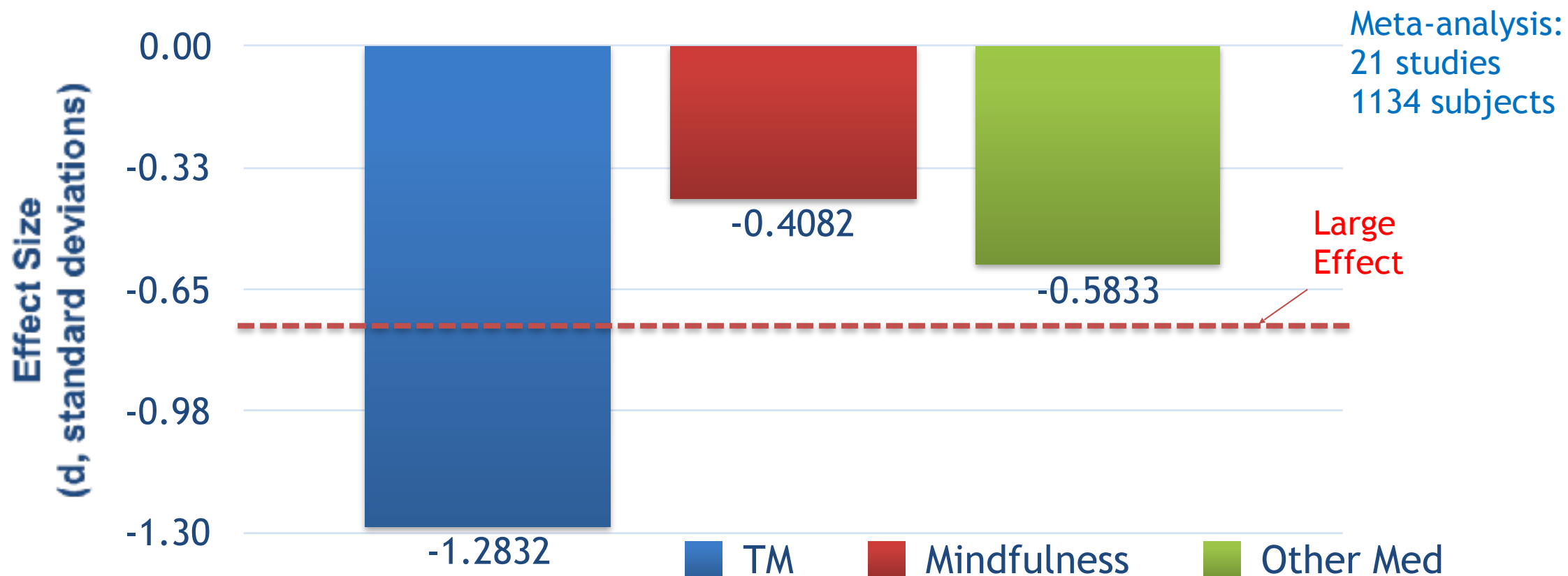
**Reference.** Yoshimura, Mitsunobu, Etsuko, Kurokawa, Noda, Takayuki, Hineno, Koji, Tanaka, Yasuo, Kawai, Yuji, & Dillbeck, Michael C. (2015). Disaster relief for the Japanese earthquake-tsunami of 2011: Stress reduction through the Transcendental Meditation technique. *Psychological Reports: Mental & Physical Health*, 117(1), 1-11.

# Meta-Analysis: Greater Anxiety Reduction with TM<sup>®</sup> than Mindfulness



**References:** 1. Orme-Johnson, D. W., and V. A. Barnes. "Effects of the Transcendental Meditation Technique on Trait Anxiety: A Meta-Analysis of Randomized Controlled Trials." *Journal of Alternative and Complementary Medicine* 20, no. 5 (2013): 330-41.  
2. Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78(2), 169-183. doi:10.1037/a0018555

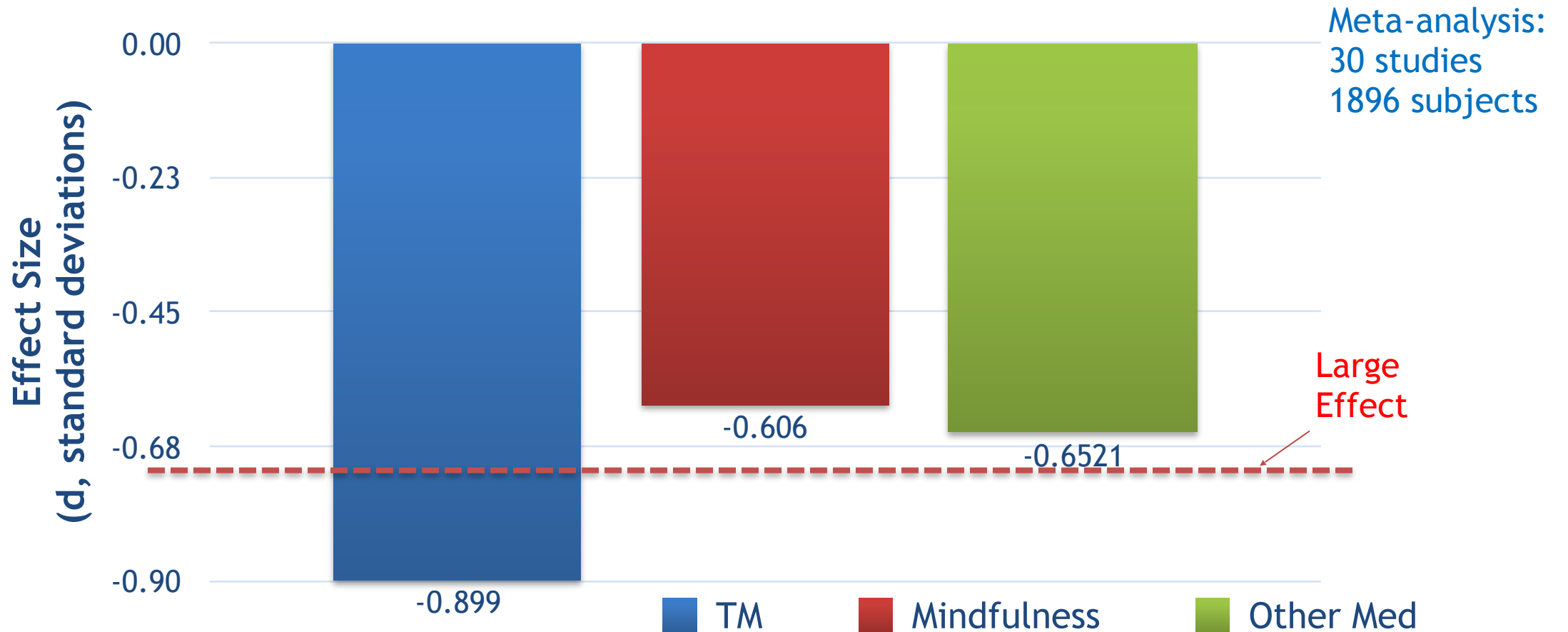
# Meta-Analysis: Greater Decrease in Negative Emotions Through TM Than Mindfulness or Other Meditations



Reference. Sedlmeier, P., J. Eberth, M. Schwarz, D. Zimmermann, and F. Haarig. "The Psychological Effects of Meditation: A Meta-Analysis." *Psychological Bulletin* 138, no. 6 (2012): 1139-71.

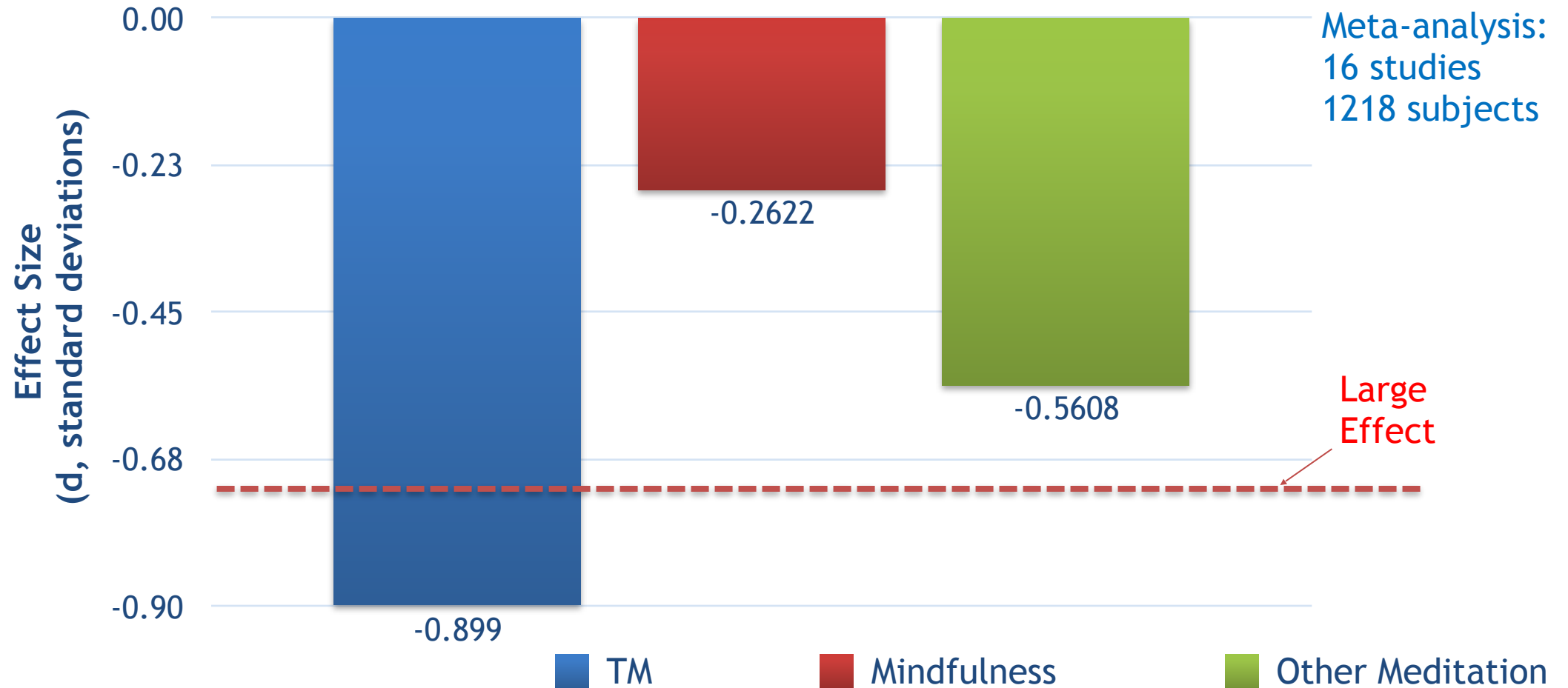


# Meta-Analysis: Greater Decrease in Trait Anxiety Through TM Than Mindfulness or Other Meditations



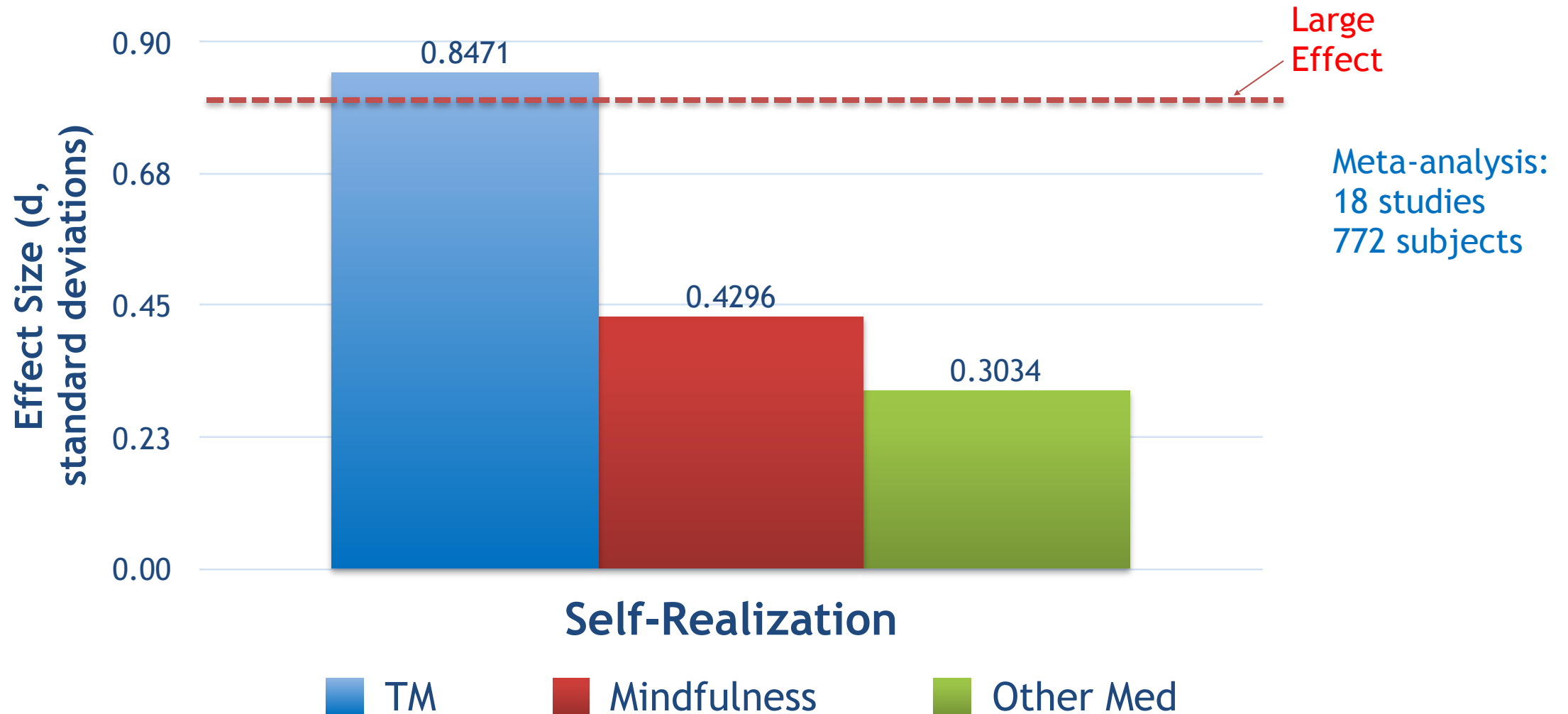
Reference. Sedlmeier, P., J. Eberth, M. Schwarz, D. Zimmermann, and F. Haarig. "The Psychological Effects of Meditation: A Meta-Analysis." *Psychological Bulletin* 138, no. 6 (2012): 1139-71.

# Meta-Analysis: Greater Decrease in Neuroticism Through TM Than Mindfulness or Other Meditations



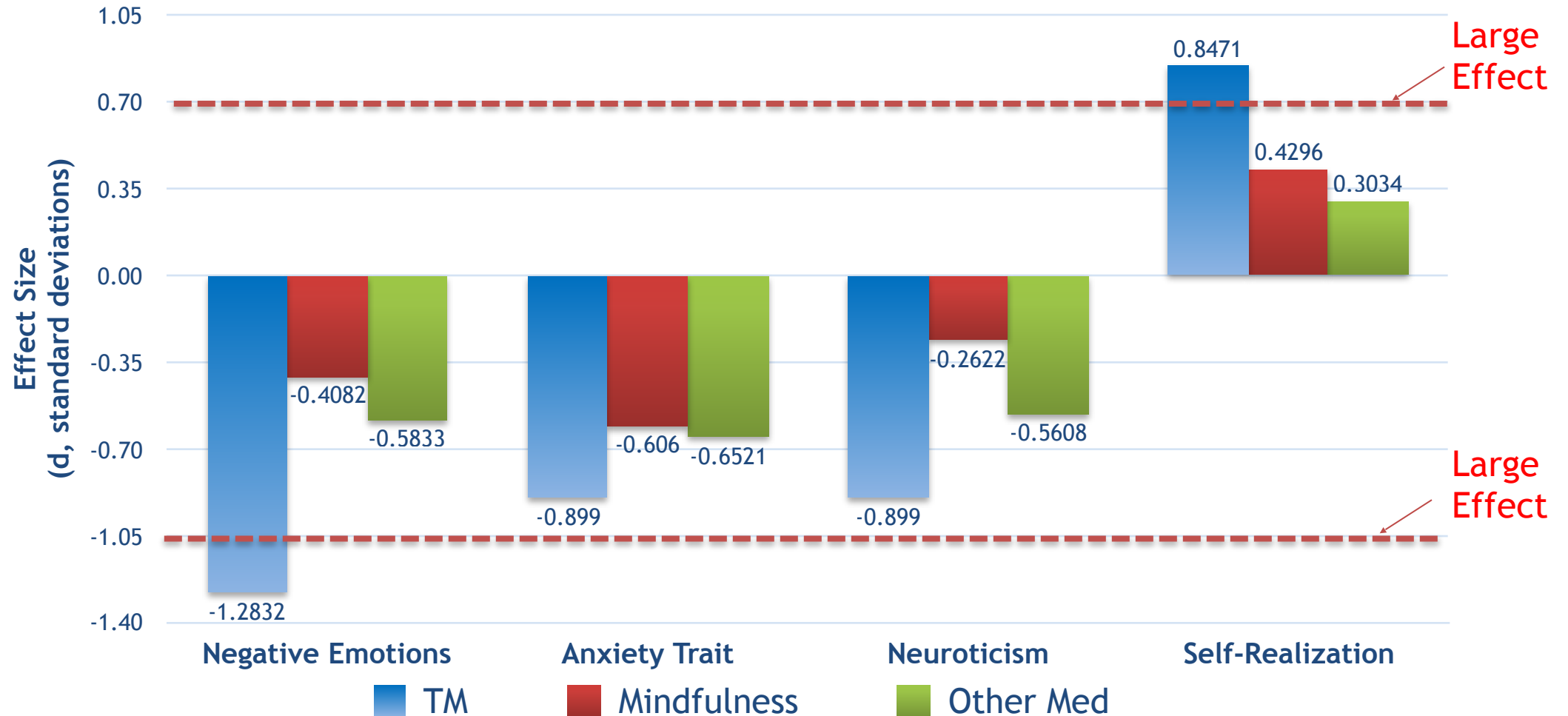
Reference. Sedlmeier, P., J. Eberth, M. Schwarz, D. Zimmermann, and F. Haarig. "The Psychological Effects of Meditation: A Meta-Analysis." *Psychological Bulletin* 138, no. 6 (2012): 1139-71.

# Meta-Analysis: Greater Increase in Self-Realization Through TM Than Mindfulness or Other Meditations



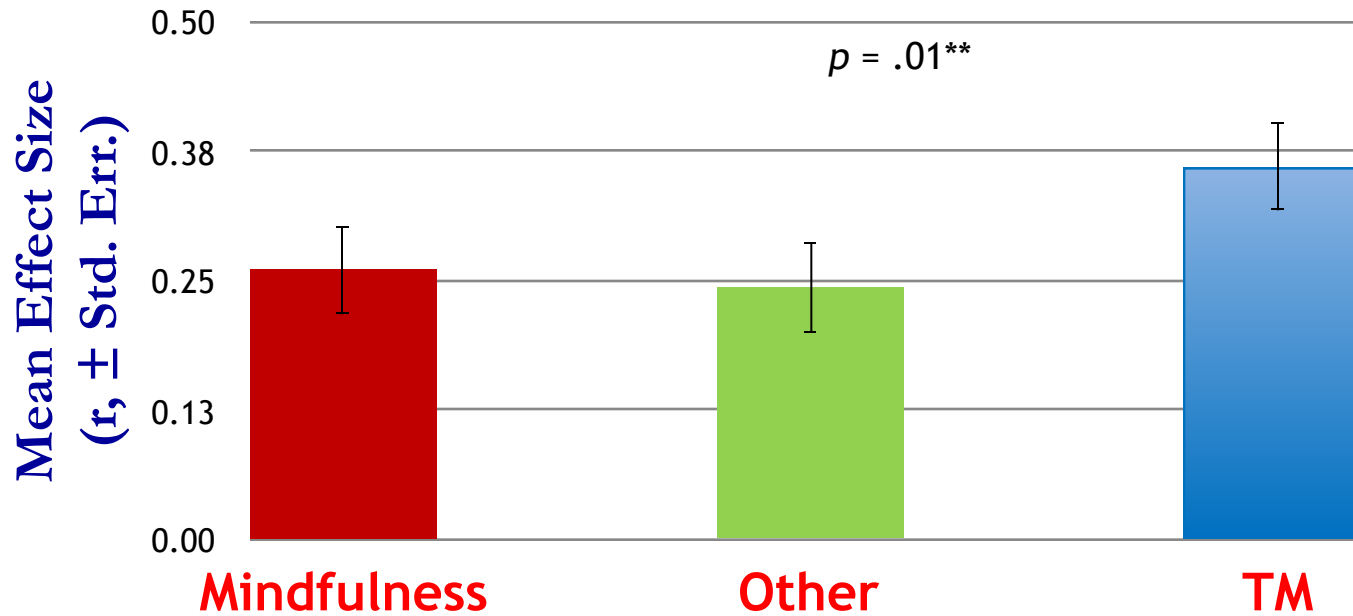
Reference. Sedlmeier, P., J. Eberth, M. Schwarz, D. Zimmermann, and F. Haarig. "The Psychological Effects of Meditation: A Meta-Analysis." *Psychological Bulletin* 138, no. 6 (2012): 1139-71.

# Meta-Analysis: Comparisons of TM, Mindfulness, and Other Meditations on Psychological Variables



Reference. Sedlmeier, P., J. Eberth, M. Schwarz, D. Zimmermann, and F. Haarig. "The Psychological Effects of Meditation: A Meta-Analysis." *Psychological Bulletin* 138, no. 6 (2012): 1139-71.

# Meta-Analysis: Comparison of Mindfulness, Other Meditations, and TM on Index of Six Variables (Trait Anxiety, Negative Emotions, Neuroticism, Self-Realization, Perception, Self-Concept)



\*\* Comparison of TM with the other two types of meditation.

References: Orme-Johnson, D. W., and M. C. Dillbeck. Methodological Concerns for Meta-Analyses of Meditation. *Psychological Bulletin* 140, no. 2 (2014): 610-16

**Recent Research (2014-2019) on the  
*Transcendental Meditation*® Technique  
Four Stories**

**Story #3: TM Is the Most Effective Stress Reduction Technique —>  
Universal Stress Reduction**

**Conclusion #3. TM has repeatedly been demonstrated by meta-analyses to be the most effective means of stress reduction. It has been shown to be highly effective in many populations for reducing PTSD, anxiety, depression, and use of psychotropic drugs and alcohol.**

**Recent Research (2014-2019) on the  
*Transcendental Meditation*® Technique  
Four Stories**

**Story #4: Authentic Vedic Knowledge → Improved National Consciousness**

**New Knowledge**

- New Translation and commentary of Vedic Text “Yogic Flying According to Yoga Vasishtha”, documenting the authenticity of Maharishi’s programs for higher states of consciousness and the use of group Yogic Flying to create an ideal society.

# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique Four Stories

## Story #4: Authentic Vedic Knowledge → Improved National Consciousness

### New Applications

The Invincible America Assembly of group 1,725 Yogic Flyers improved the US quality of life as indicated by:

- Decreased U.S. homicide rate;
- Decreased U.S. urban violent crime rate;
- Decreased U.S. murder rate;
- Decreased U.S. motor vehicle fatality rate;
- Decreased U.S. fatality rate due to other types of accidents;
- Decreased U.S. infant mortality rate; and
- Decreased U.S. rate of drug-related deaths.



# Recent Research (2014-2019) on the *Transcendental Meditation*® Technique Four Stories

## Story #4: Authentic Maharishi Vedic Knowledge → Improved National Consciousness

### New Applications

- Increased the competitive advantage of Norway and New Zealand compared to other nations when they gained 1% of their population practicing the Transcendental Meditation technique.
- Group practice of TM and TM-Sidhi program at Maharishi Vedic University (MVU) in Cambodia reduced socio-political violence in the country.
- In a new area of research, a study found that a building built according the principles of Maharishi Vedic architecture (Vastu), increased both verbal and spatial creativity in people working in the building.

YOGIC FLYING  
ACCORDING TO YOGA VASISHTHA



TRANSLATION AND COMMENTARY  
BY PETER F. FREUND

Freund, P. *Yogic Flying According to Yoga Vasishtha*. Paperback Prime and Kindle Edition.  
[www.amazon.com](http://www.amazon.com).

A translation of seven chapters from Yoga Vasishtha, with commentary written in light of the teaching of the Transcendental Meditation technique, TM-Sidhi program, and Yogic Flying around the world by Maharishi Mahesh Yogi.

Verse 49:

श्रीराम उवाच

आकल्पादनवच्छिन्ना चित्संवित्सर्वमस्ति हि

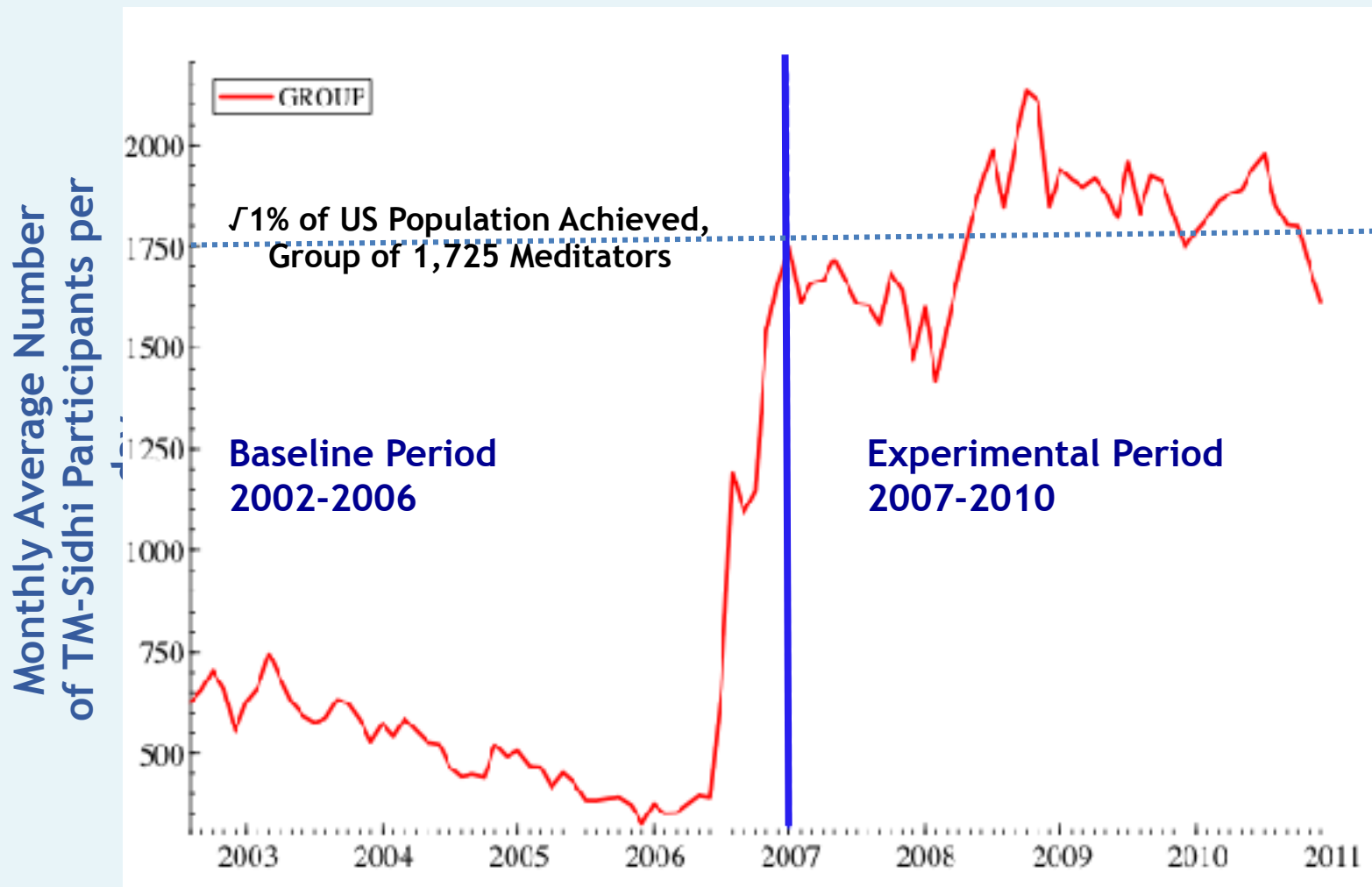
तस्मात्कुण्डलिनीकोशात्केनार्थेनोदयः स्फुटः ४९

*The glorious Rām said:*

*Since ancient times the knowledge of all the higher states of consciousness has been there in every generation:*

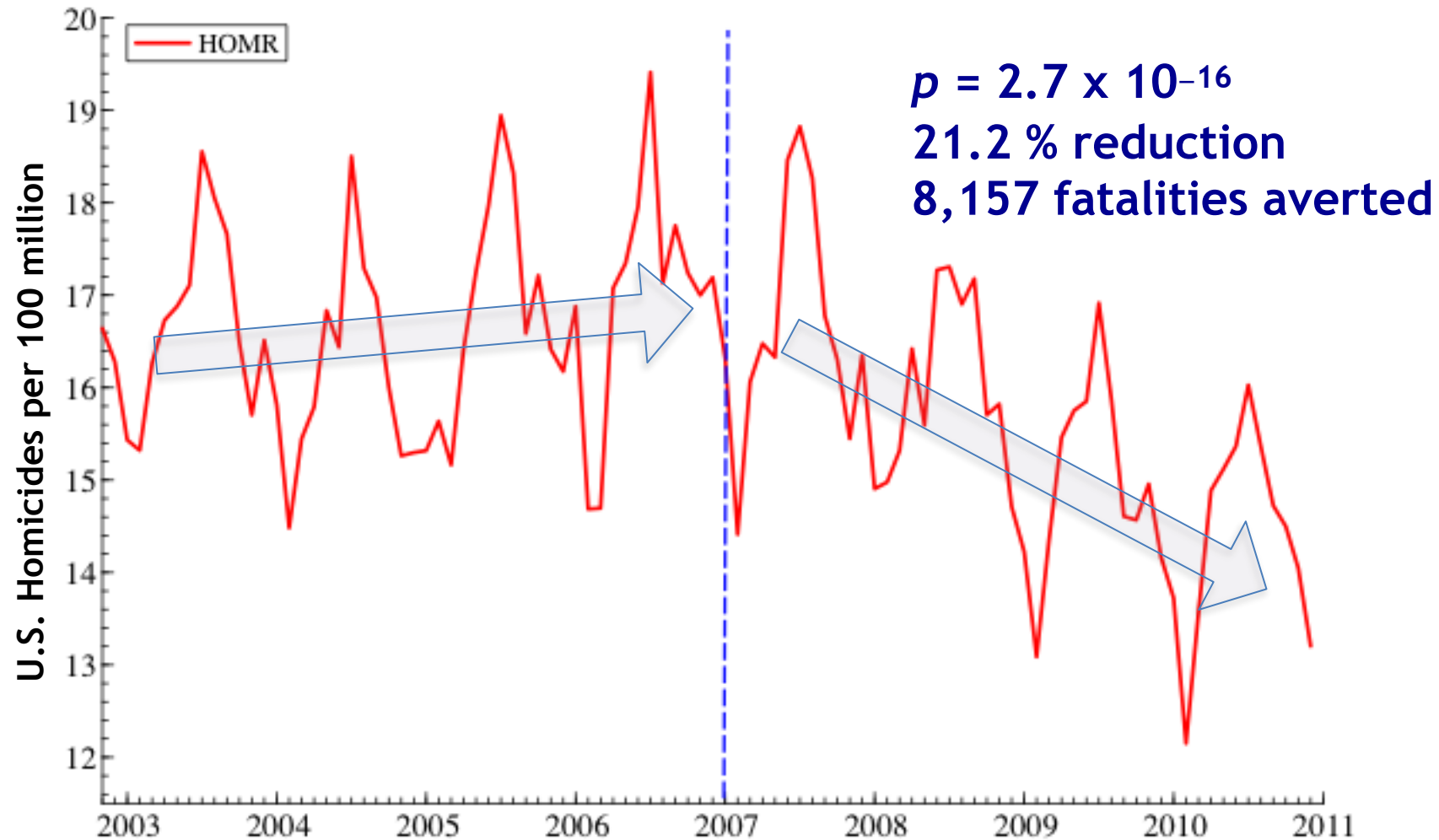
*The knowledge of enlightenment in terms of the [realization of the] Constitution of the Universe in human physiology [through Yogic Flying] certainly came from that [same] eternal tradition of knowledge. With what purpose was the knowledge of Yogic Flying brought forth in the world? (Freund, P. )*

# Size of TM-Sidhi Group During Baseline and Experimental Period



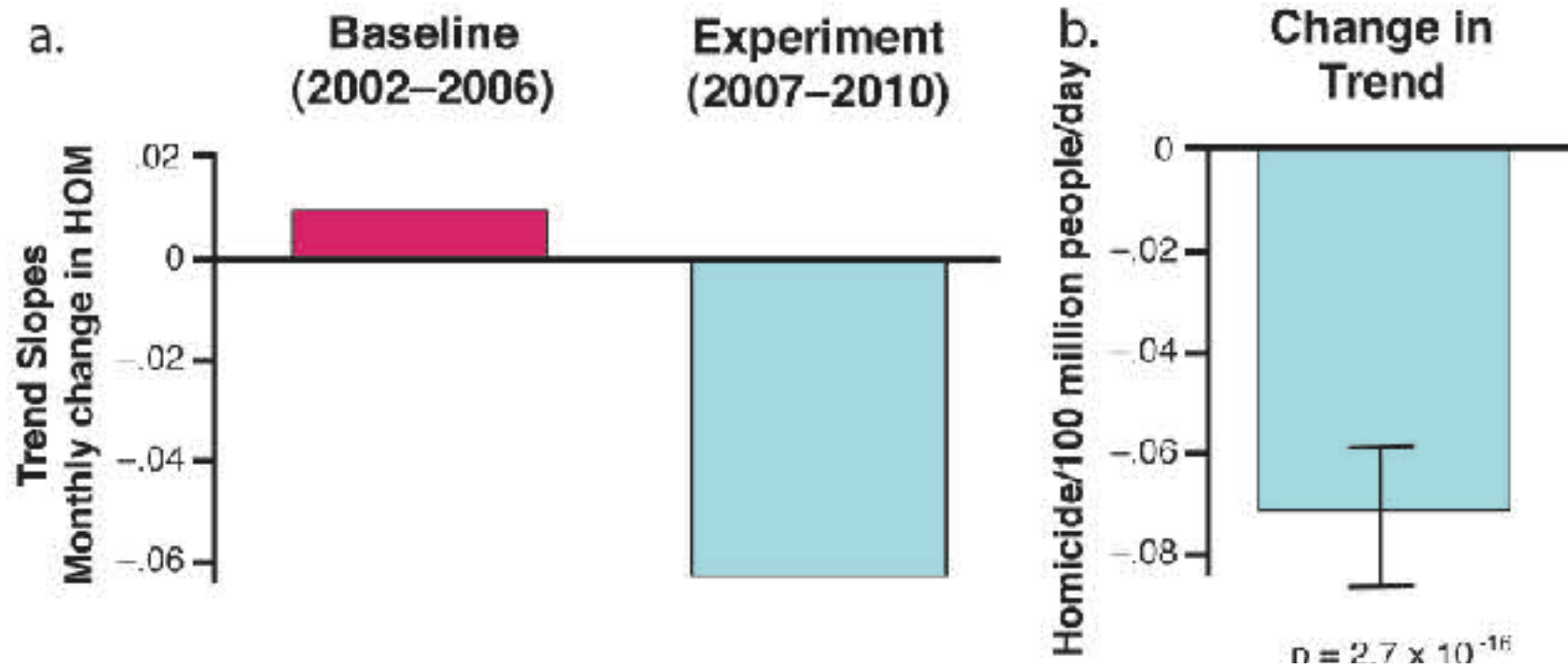
Reference. Dillbeck MC, Cavanaugh KL. Societal violence and collective consciousness: Reduction of U.S. homicide and urban violent crime rates. *SAGE Open*. 2016;April-June:1-16.

# Reduced U.S. Homicide Rate



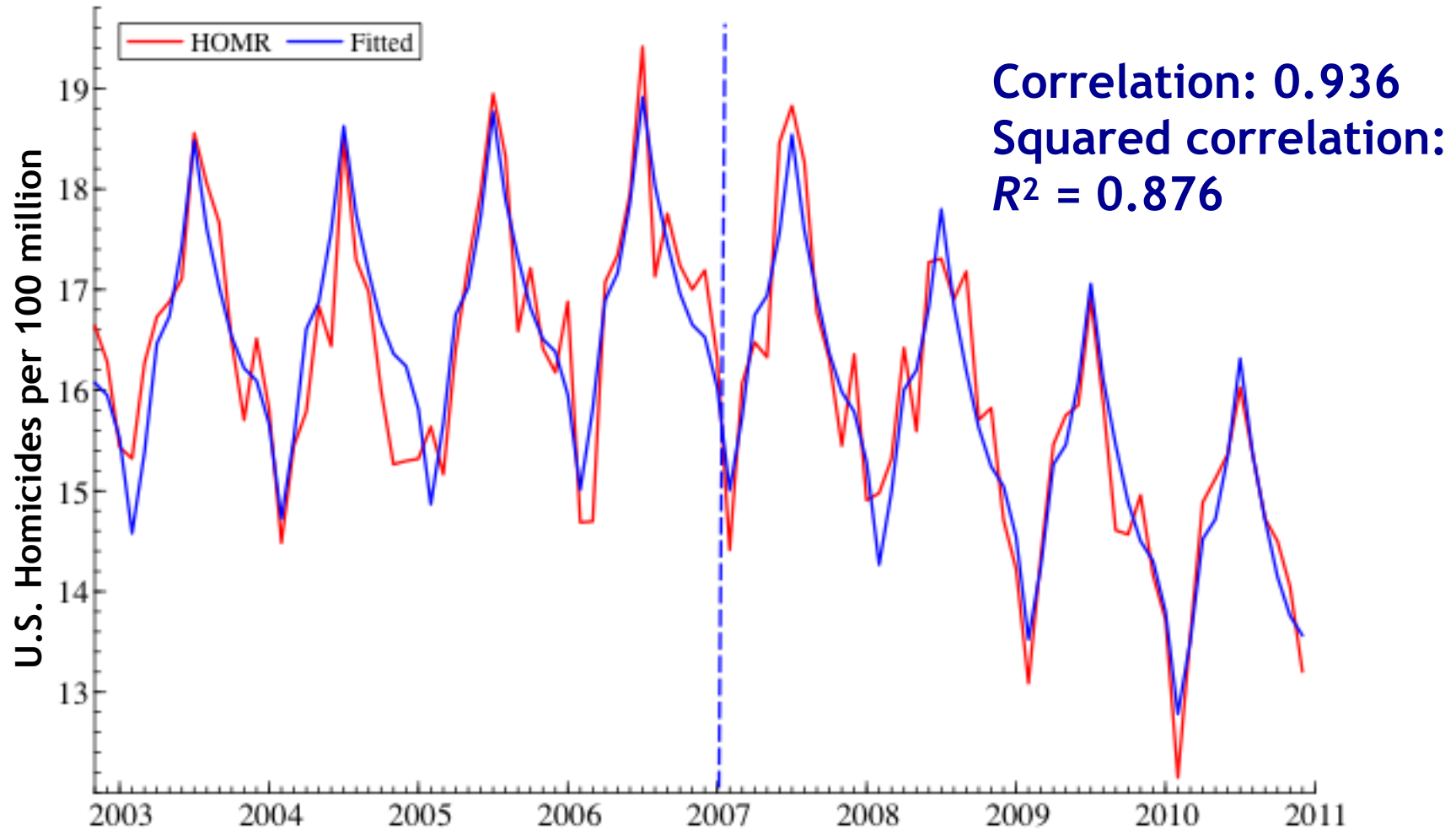
Reference. Dillbeck MC, Cavanaugh KL. 2016. Societal violence and collective consciousness: Reduction of U.S. homicide and urban violent crime rates. *SAGE Open*, 7(1), 1-16.

# Homicide Baseline and Experimental Period Trends



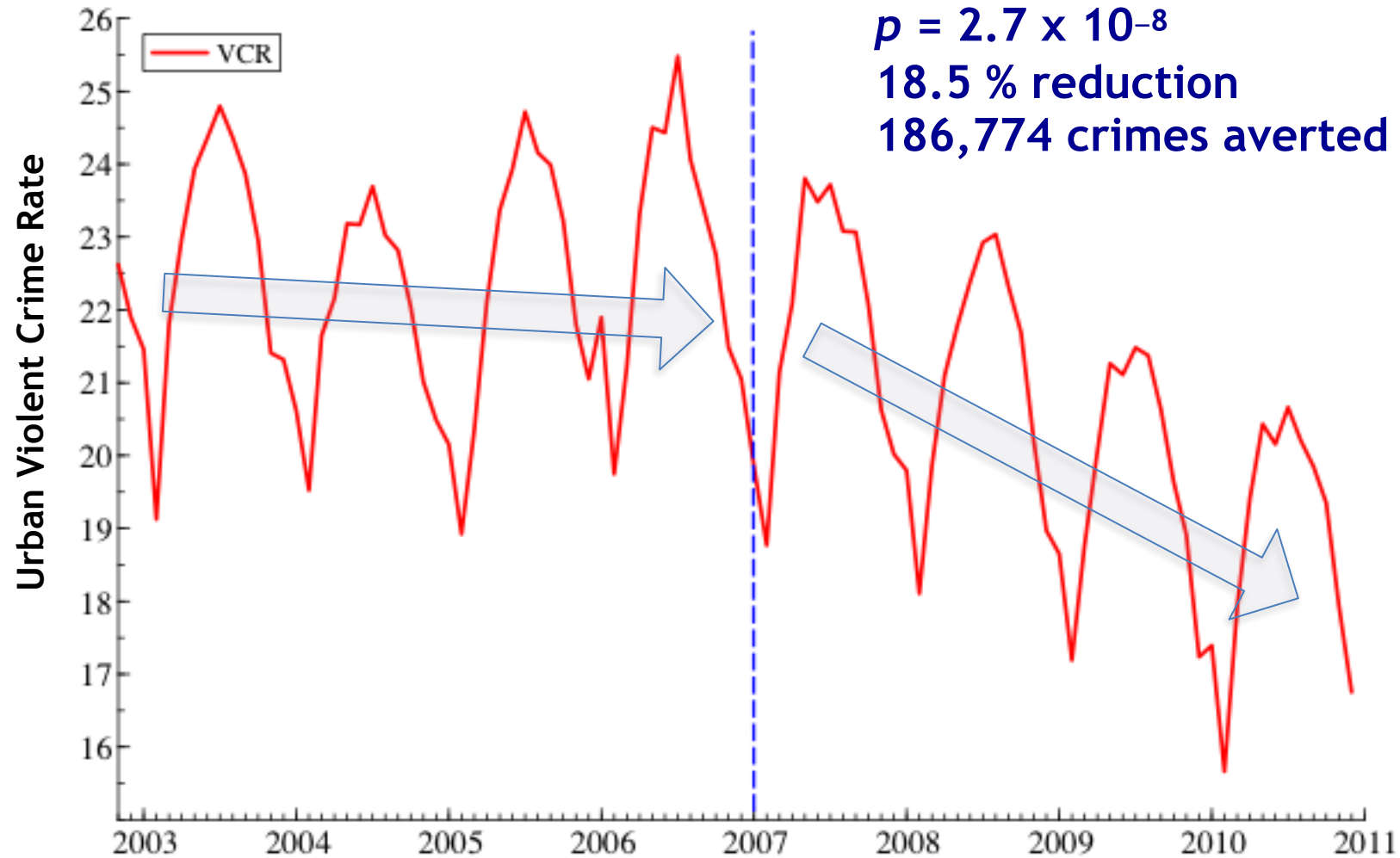
Reference. Dillbeck MC, Cavanaugh KL. 2016. Societal violence and collective consciousness: Reduction of U.S. homicide and urban violent crime rates. *SAGE Open*, 7(1), 1-16.

# U.S. Homicide Rate: Predictions of Statistical Model vs. Actual Data



Reference. Dillbeck MC, Cavanaugh KL. 2016. Societal violence and collective consciousness: Reduction of U.S. homicide and urban violent crime rates. *SAGE Open*, 7(1), 1-16.

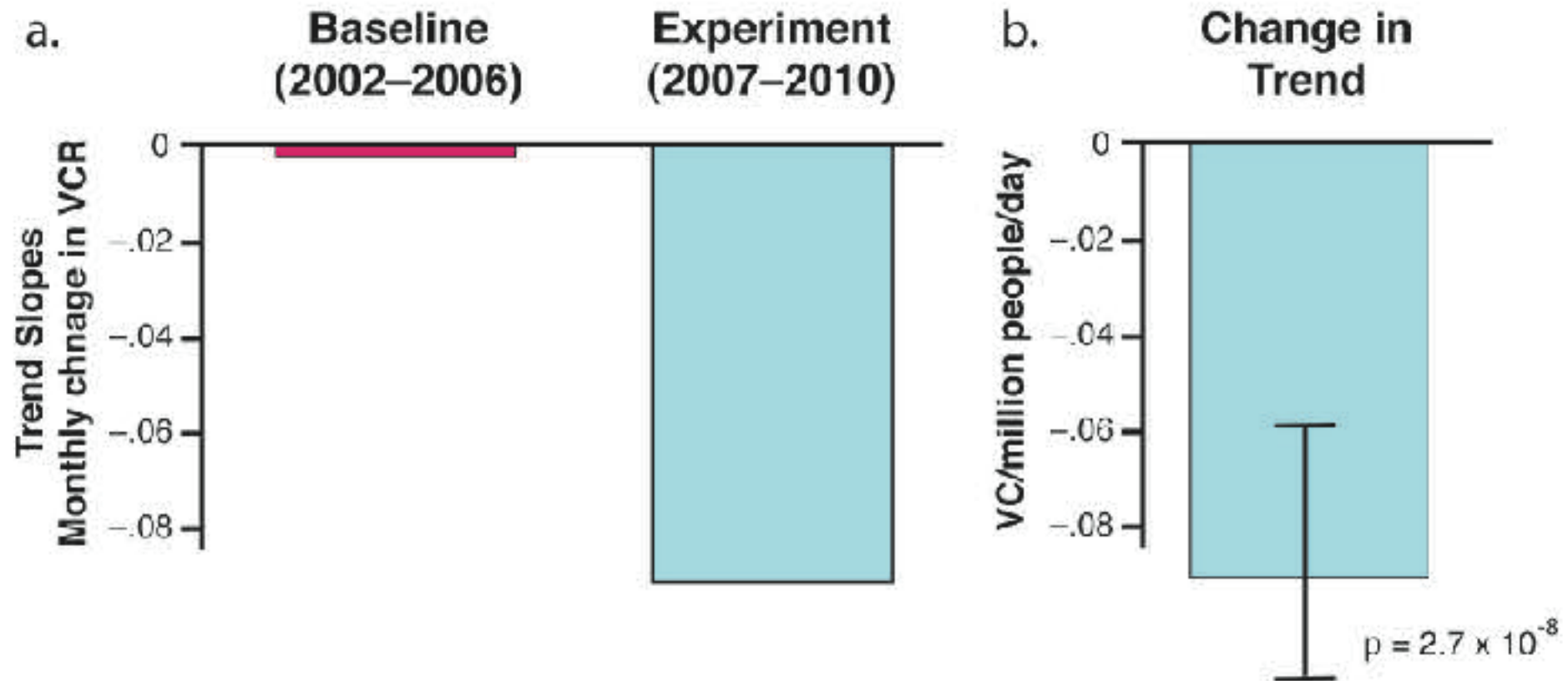
# Decreased Violent Crime Rate in 206 Urban Areas



Reference. Dillbeck MC, Cavanaugh KL. 2016. Societal violence and collective consciousness: Reduction of U.S. homicide and urban violent crime rates. *SAGE Open*, 7(1), 1-16.

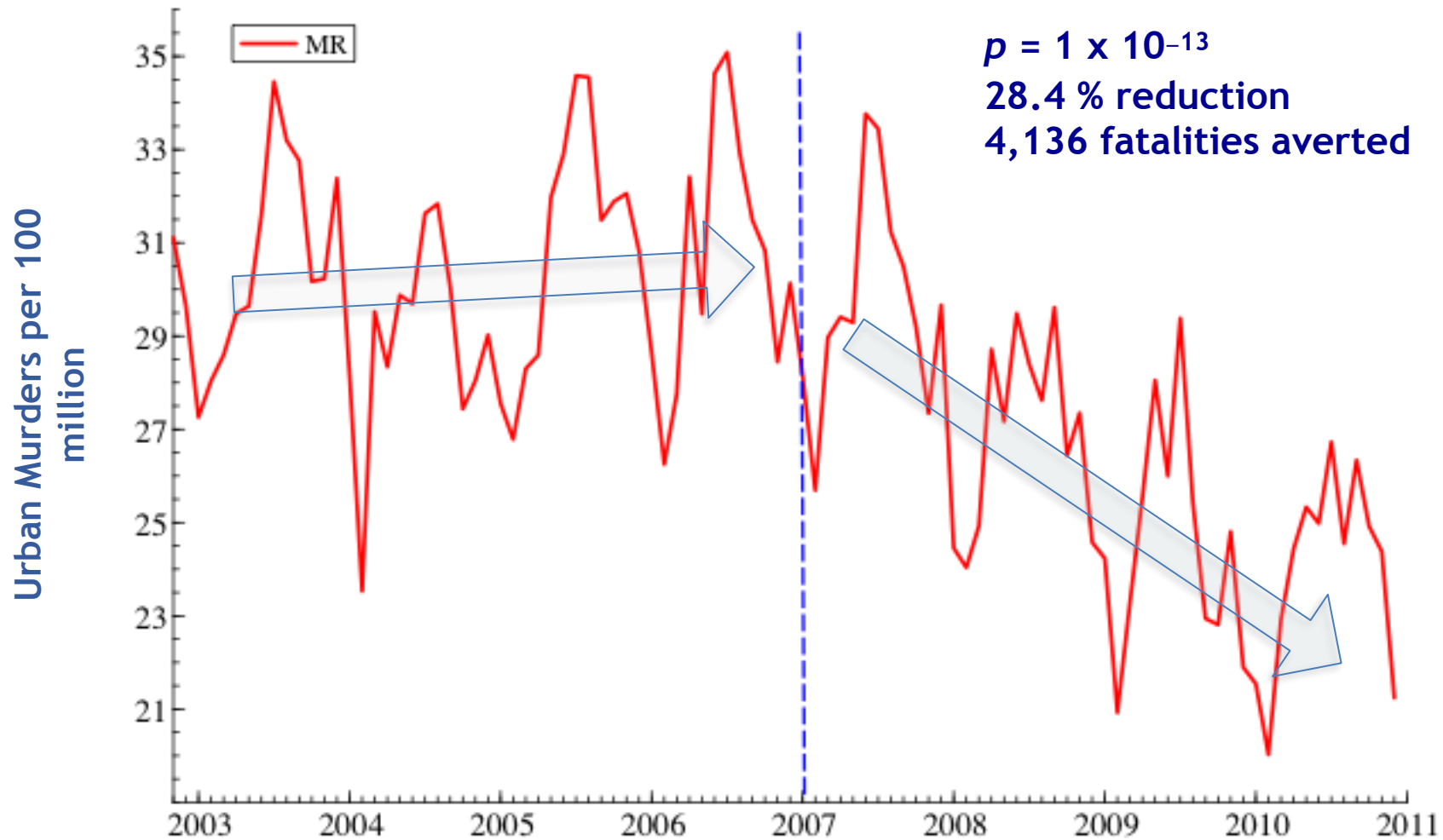


# Urban Violent Crime Baseline and Experimental Period Trends



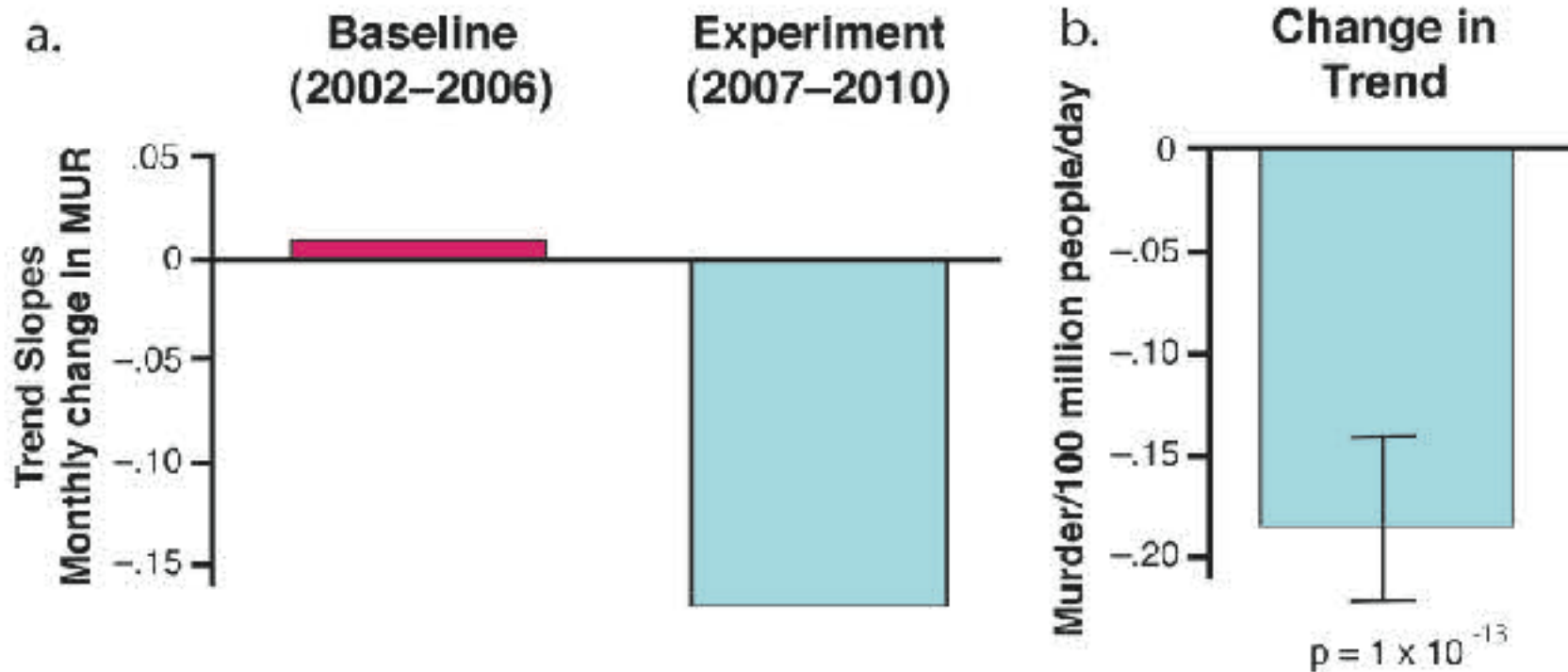
Reference. Dillbeck MC, Cavanaugh KL. 2016. Societal violence and collective consciousness: Reduction of U.S. homicide and urban violent crime rates. *SAGE Open*, 7(1), 1-16.

# Decreased Murder Rate in 206 U.S. Urban Areas



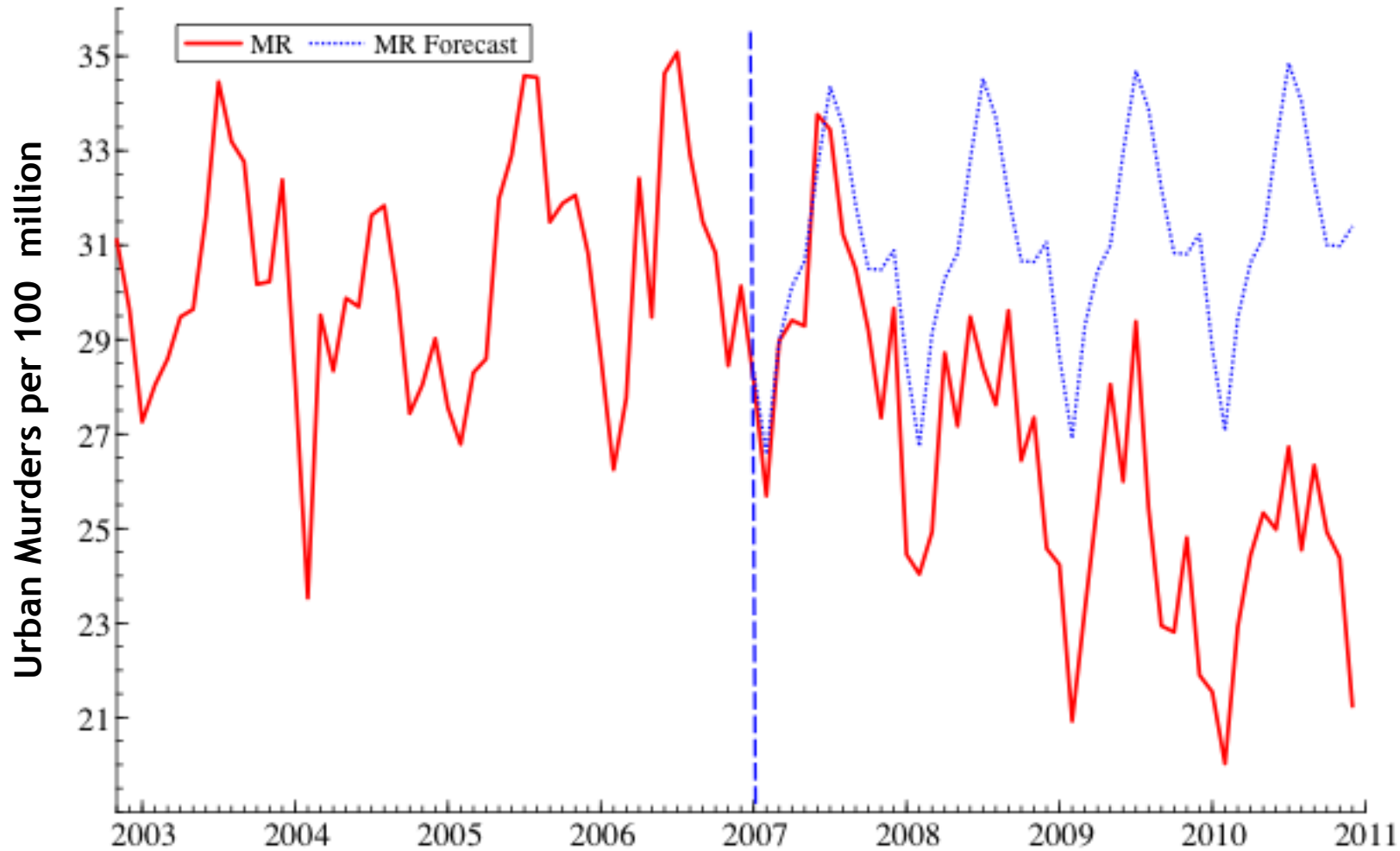
Reference. Cavanaugh KL, Dillbeck MC. 2017. Field Effects of Consciousness and Reduction in U.S. Urban Murder Rates: Evaluation of a Prospective Quasi-Experiment. *Journal of Health and Environmental Research*, 3(3-1), 32-43.

## Urban Murder Baseline and Experimental Period Trends



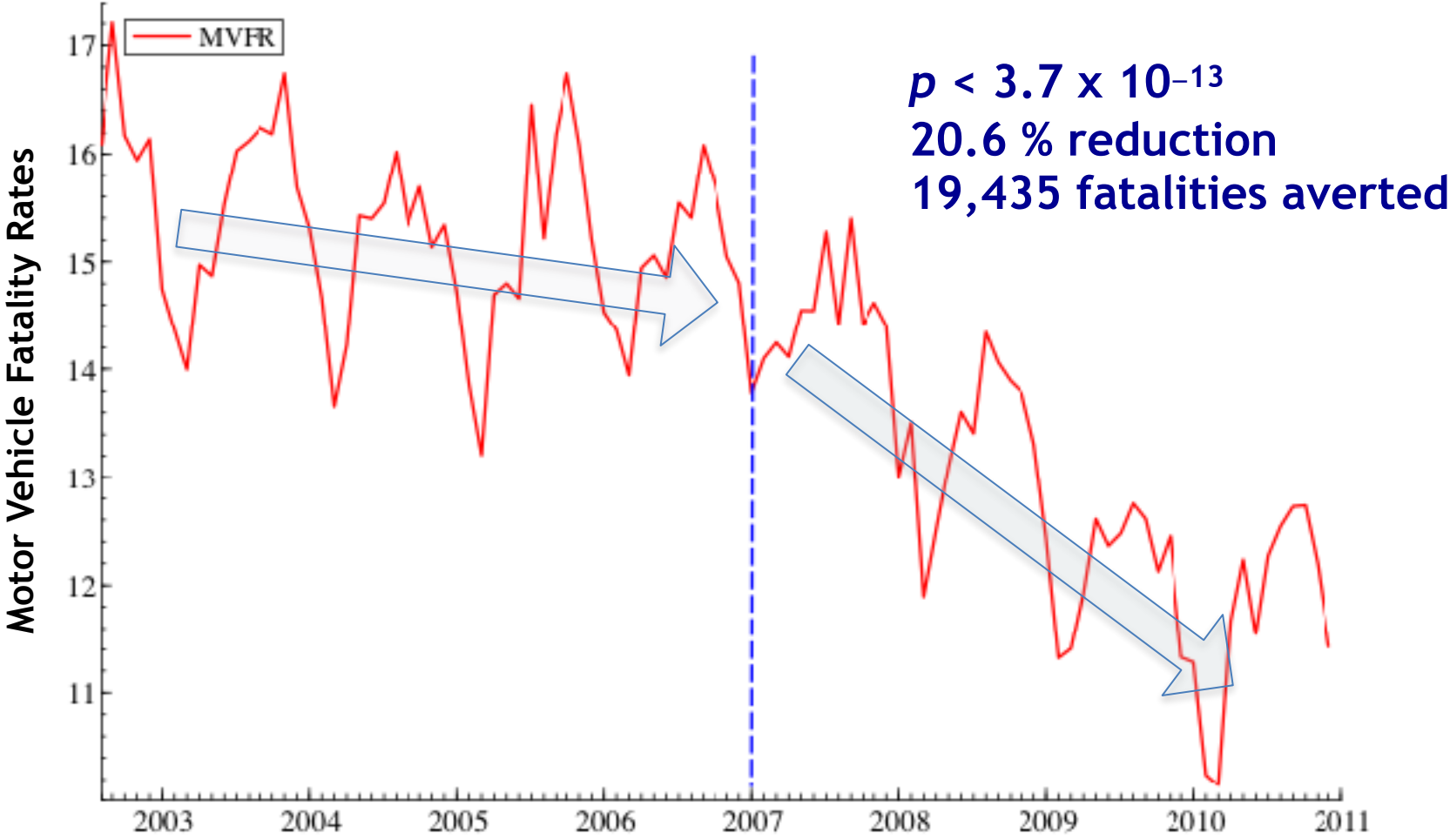
Reference. Cavanaugh KL, Dillbeck MC. 2017. Field Effects of Consciousness and Reduction in U.S. Urban Murder Rates: Evaluation of a Prospective Quasi-Experiment. *Journal of Health and Environmental Research*, 3(3-1), 32-43.

# Urban Murder Rate and Forecast 2007-2010



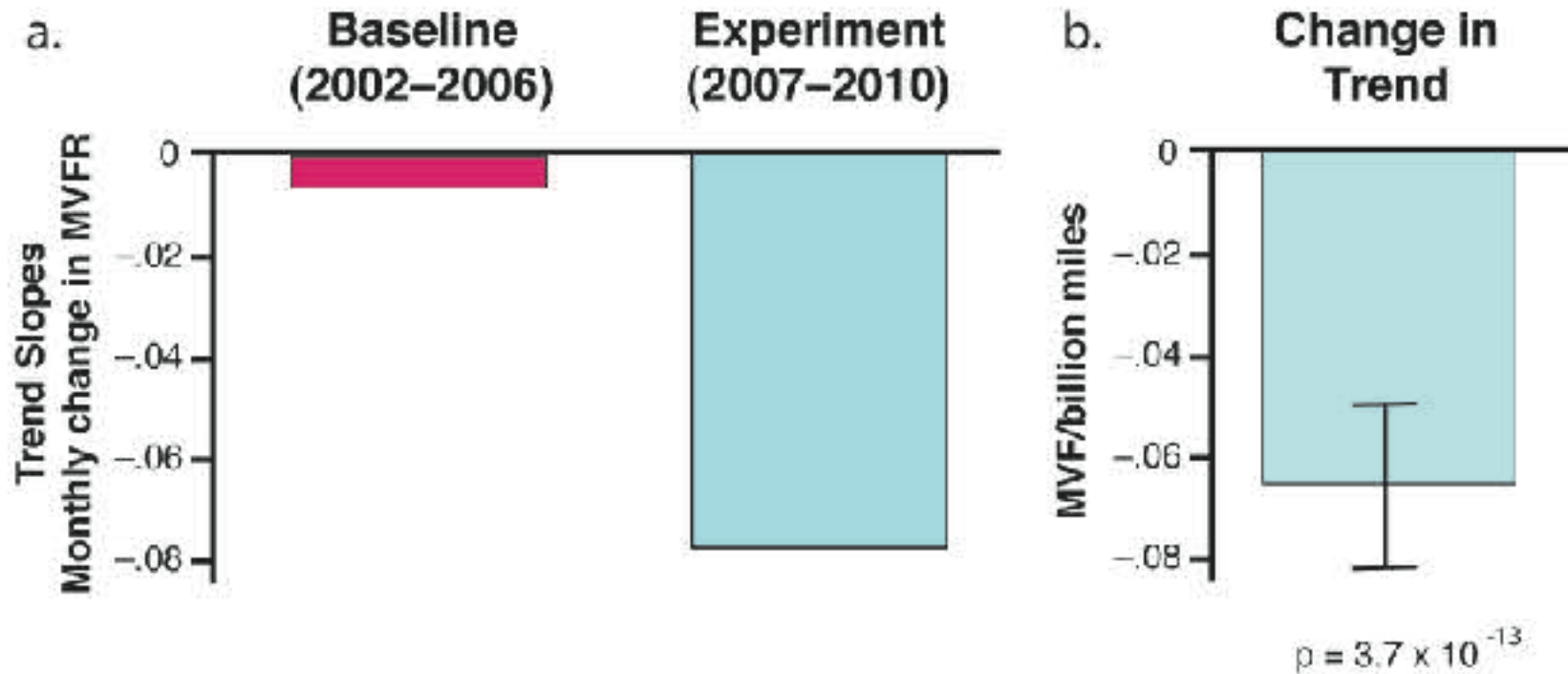
Reference. Cavanaugh KL, Dillbeck MC. 2017. Field Effects of Consciousness and Reduction in U.S. Urban Murder Rates: Evaluation of a Prospective Quasi-Experiment. *Journal of Health and Environmental Research*, 3(3-1), 32-43.

# Decreased U.S. Motor Vehicle Fatality Rate



Reference. Cavanaugh KL, Dillbeck MC. 2017. The contribution of proposed field effects of consciousness to the prevention of U.S. accidental fatalities: Theory and empirical tests. *Journal of Consciousness Studies*, 24(1-2), 53-86.

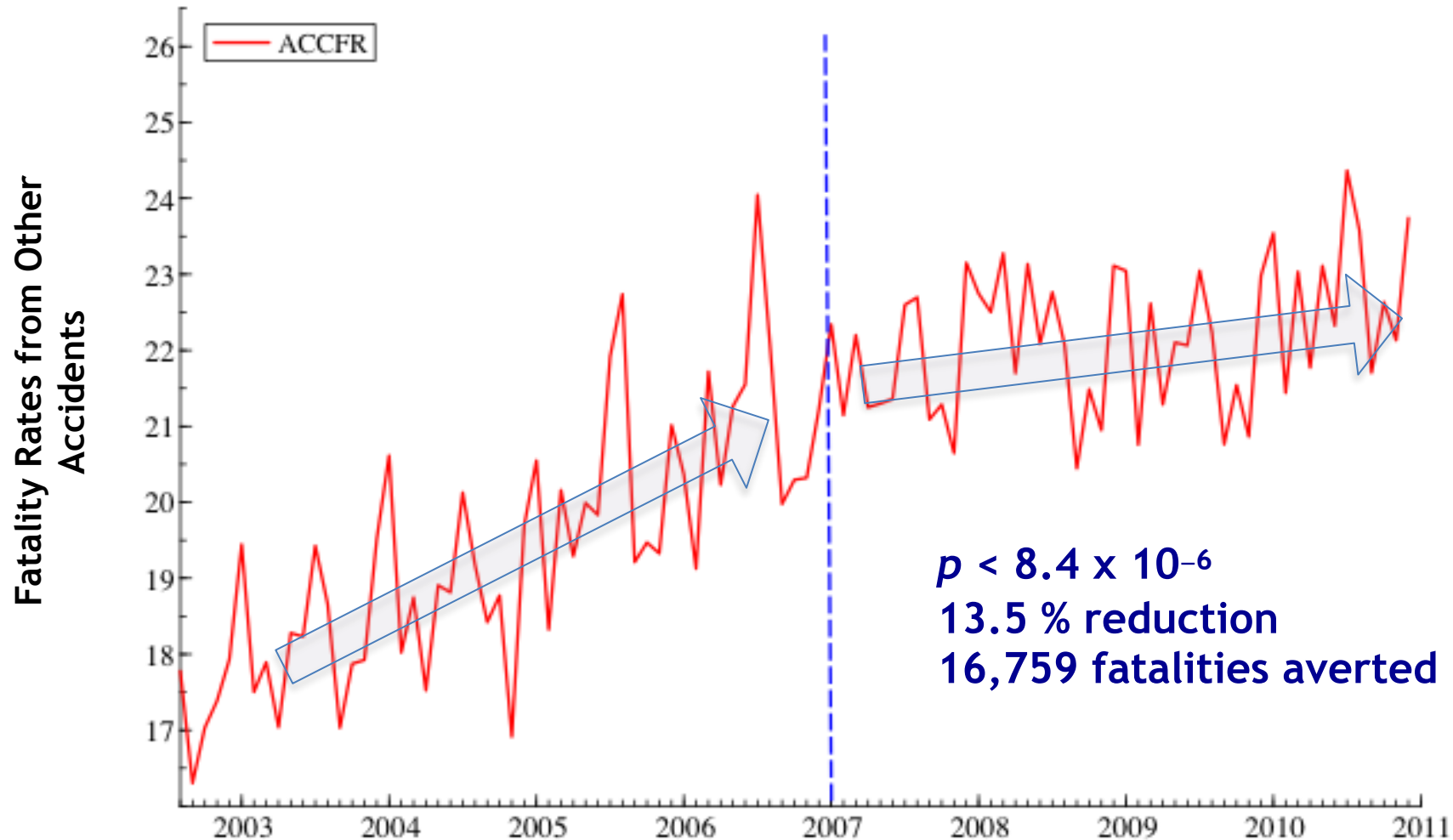
## Motor Vehicle Fatality Rate Baseline and Experimental Period Trends



Adapted from *Journal of Consciousness Studies*, 2017, 24(1-2). © 2017 by Imprint Academic, Ltd.

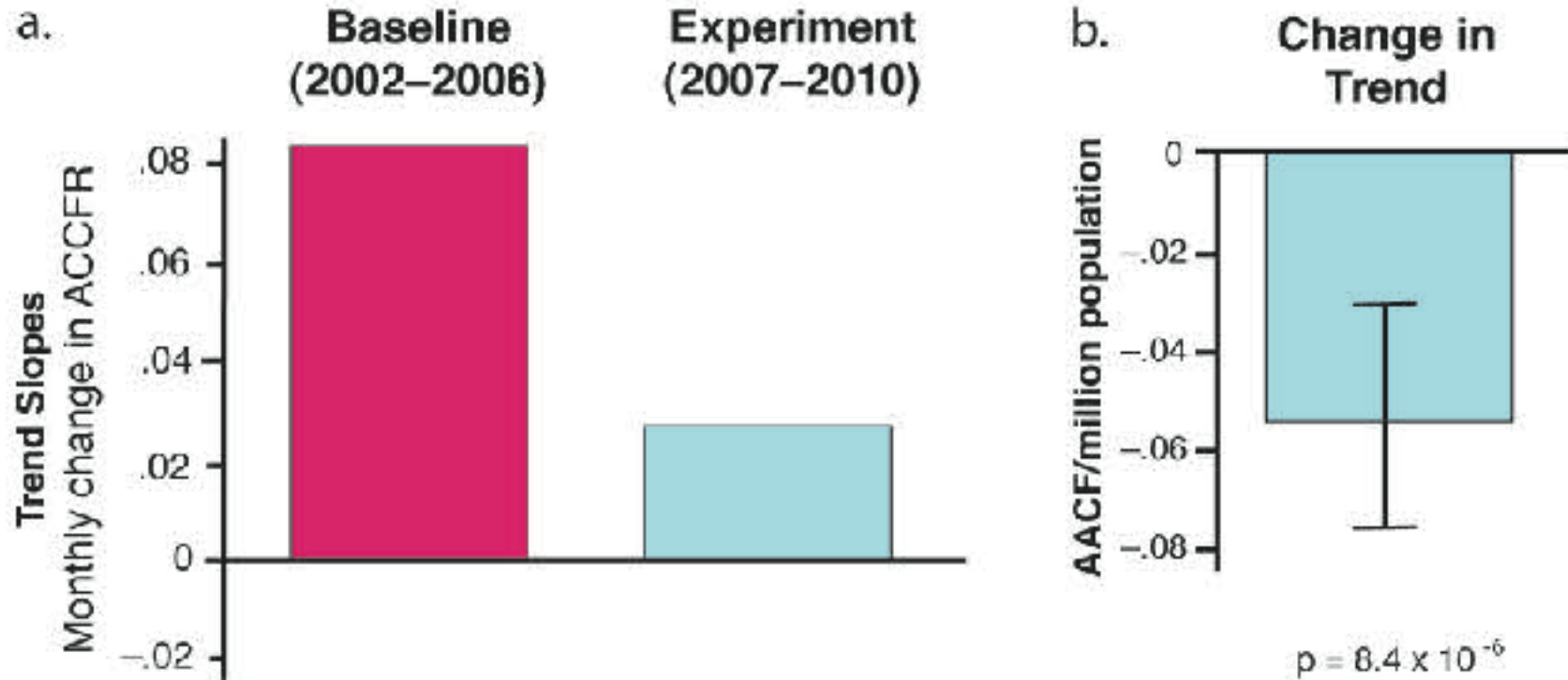
Reference. Cavanaugh KL, Dillbeck MC. 2017. The contribution of proposed field effects of consciousness to the prevention of U.S. accidental fatalities: Theory and empirical tests. *Journal of Consciousness Studies*, 24(1-2), 53-86.

# Decreased U.S. Fatality Rate – Other Accidents



Reference. Cavanaugh KL, Dillbeck MC. 2017. The contribution of proposed field effects of consciousness to the prevention of U.S. accidental fatalities: Theory and empirical tests. *Journal of Consciousness Studies*, 24(1-2), 53-86.

## Fatalities Due to Accidents Other Than Motor Vehicles Baseline and Experimental Period Trends

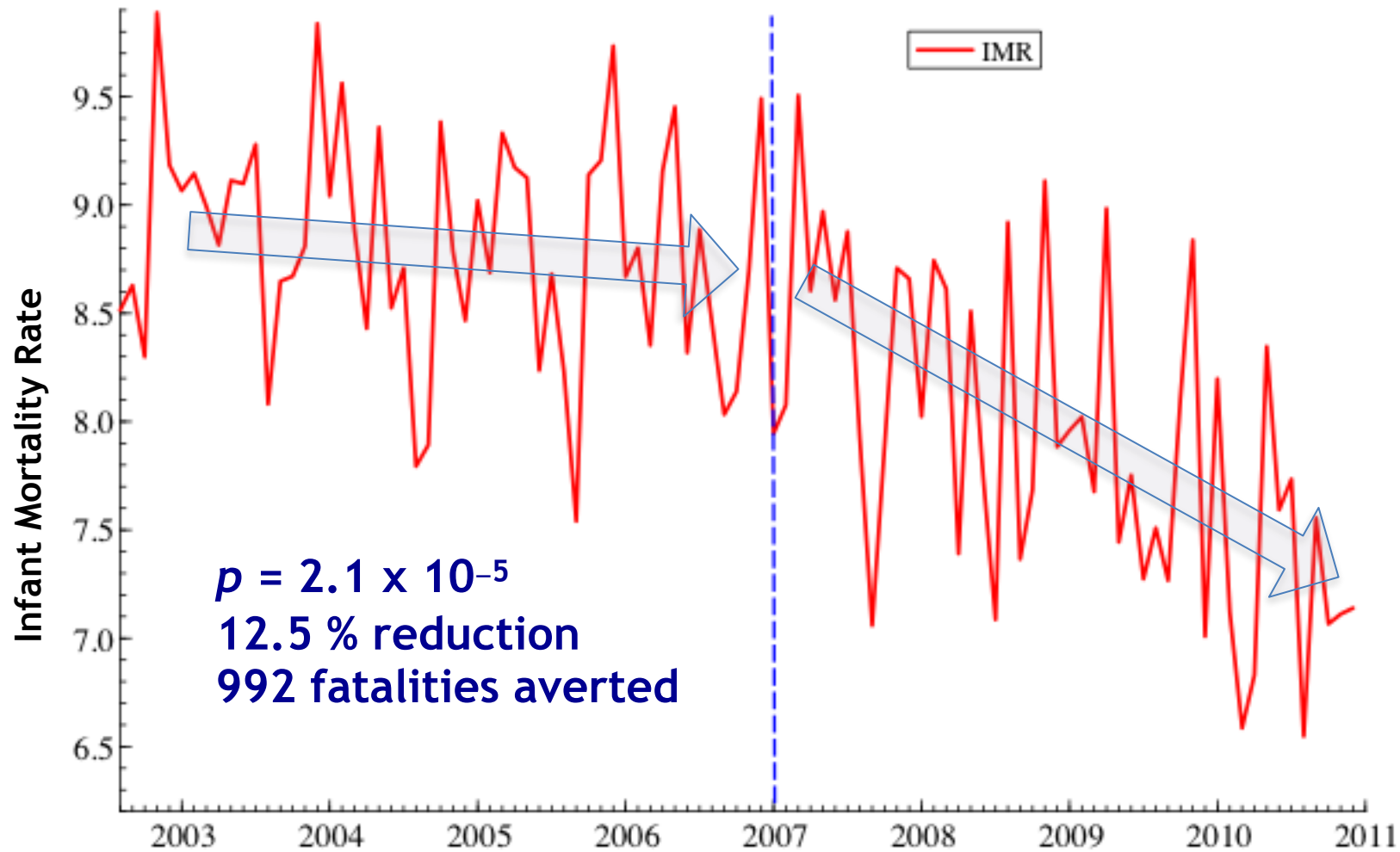


Adapted from *Journal of Consciousness Studies*, 2017, 24(1-2). © 2017 by Imprint Academic, Ltd.

Reference. Cavanaugh KL, Dillbeck MC. 2017. The contribution of proposed field effects of consciousness to the prevention of U.S. accidental fatalities: Theory and empirical tests. *Journal of Consciousness Studies*, 24(1-2), 53-86.

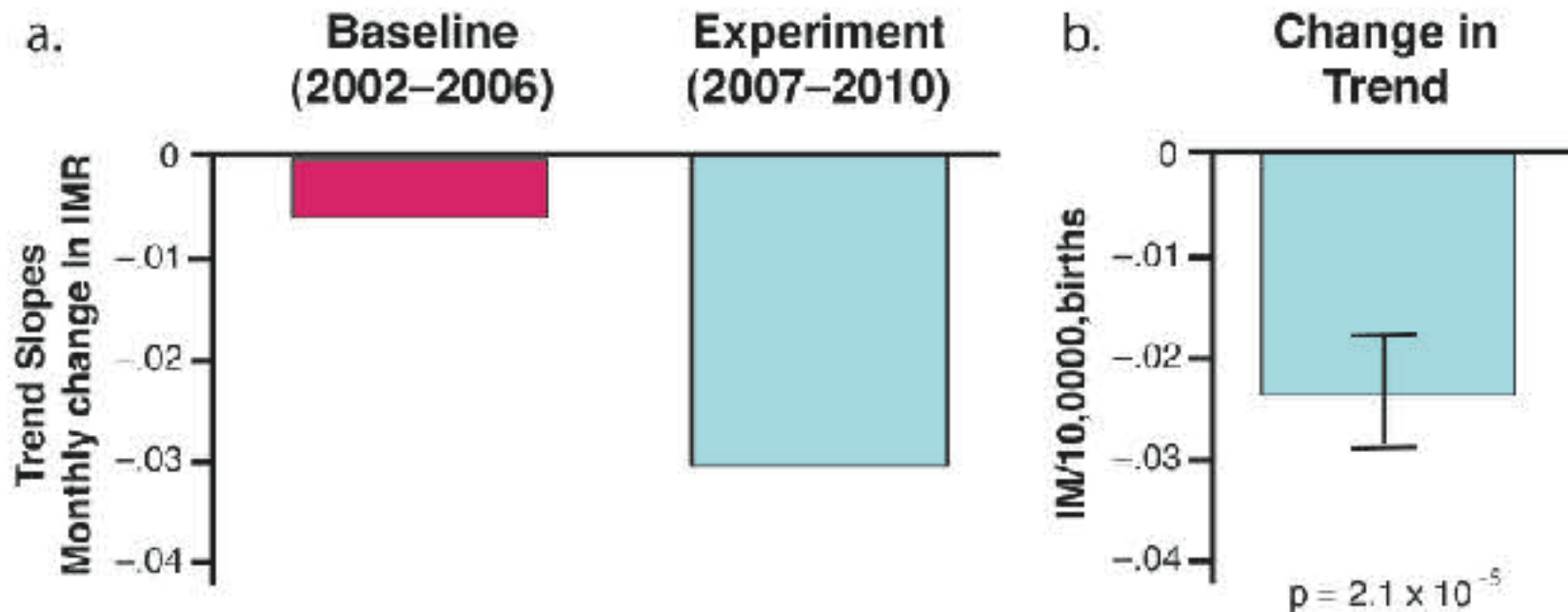


# Decreased U.S. Infant Mortality Rate



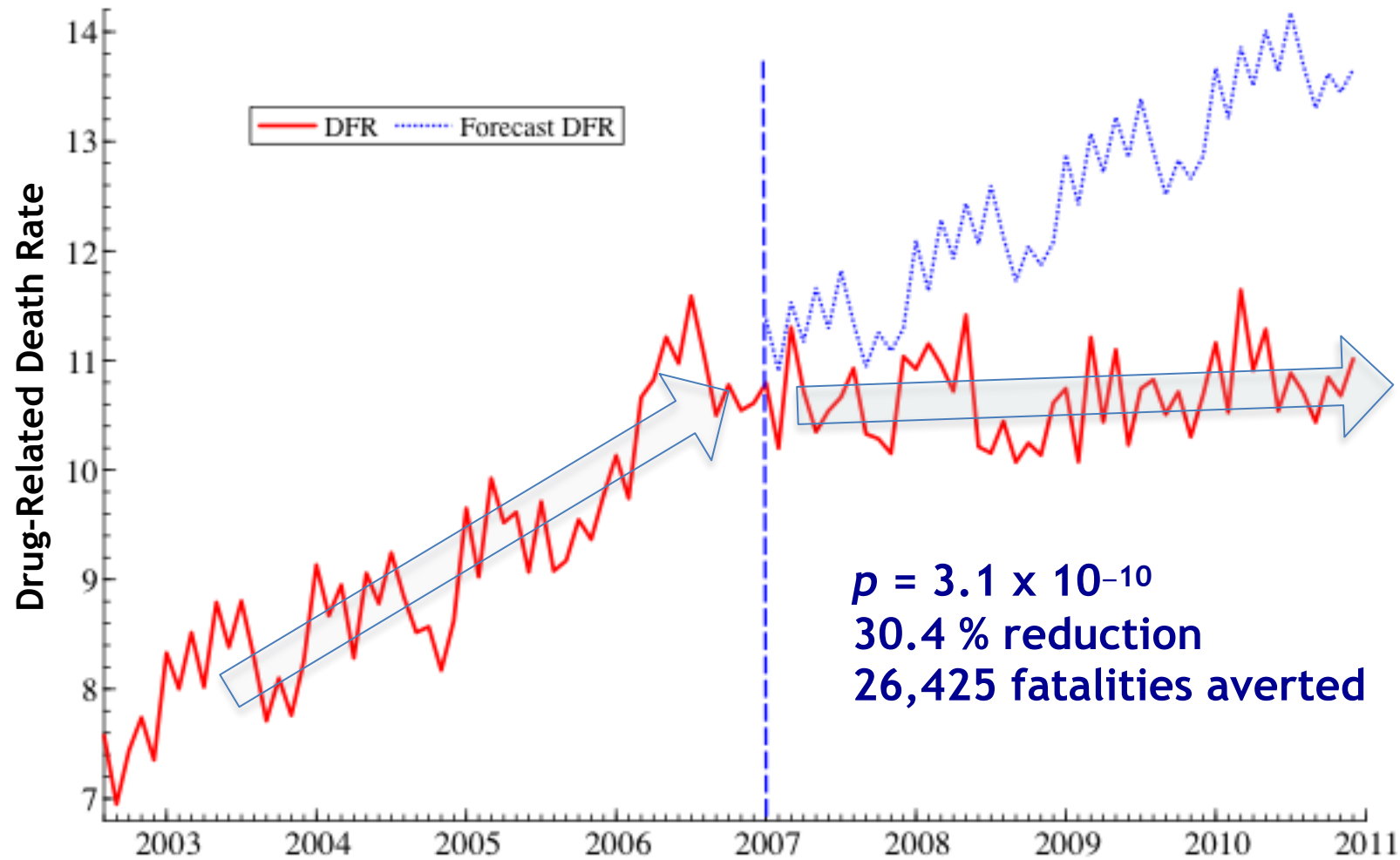
Reference. Dillbeck MC, Cavanaugh KL. 2017. Group Practice of the *Transcendental Meditation*® and *TM-Sidhi*® Program and Reductions in Infant Mortality and Drug-Related Death: A Quasi-Experimental Analysis. *SAGE Open*. 7(1), 1-15.

## Infant Mortality Rate Baseline and Experimental Period Trends



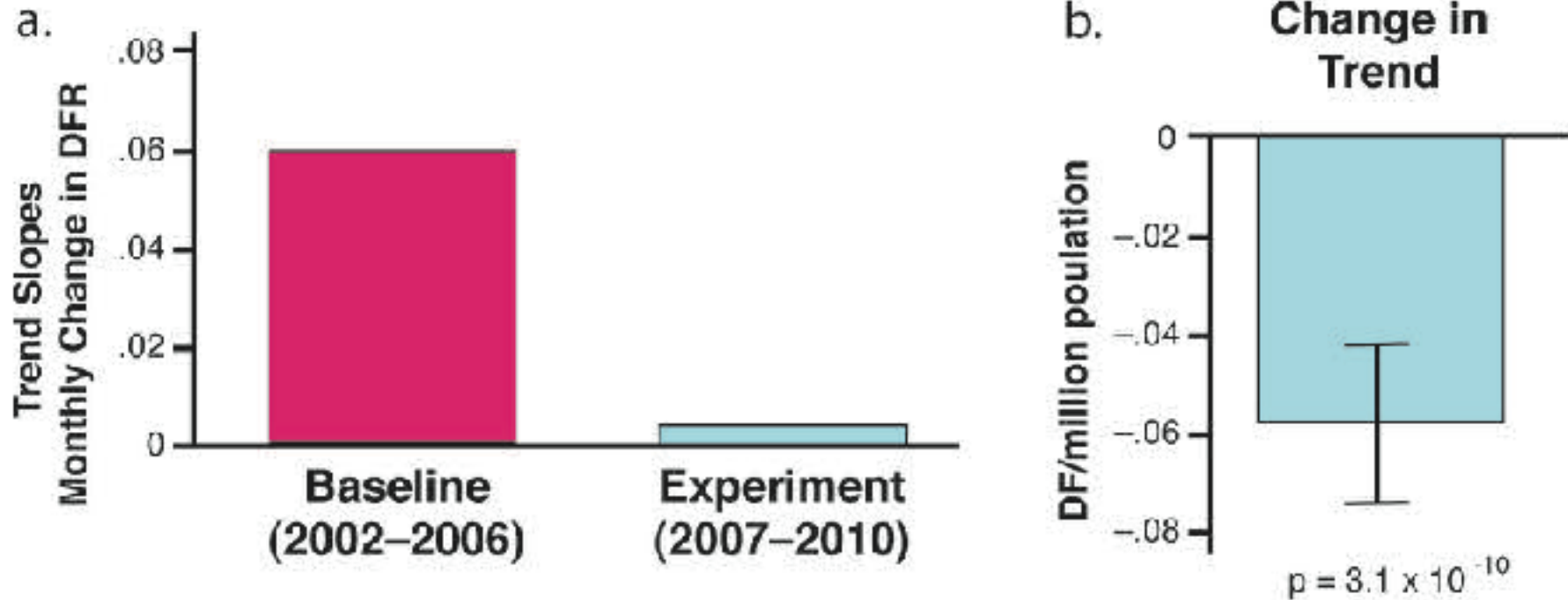
Reference. Dillbeck MC, Cavanaugh KL. 2017. Group Practice of the *Transcendental Meditation*® and *TM-Sidhi*® Program and Reductions in Infant Mortality and Drug-Related Death: A Quasi-Experimental Analysis. *SAGE Open*. 7(1), 1-15.

# Decreased U.S. Drug-Related Fatality Rate



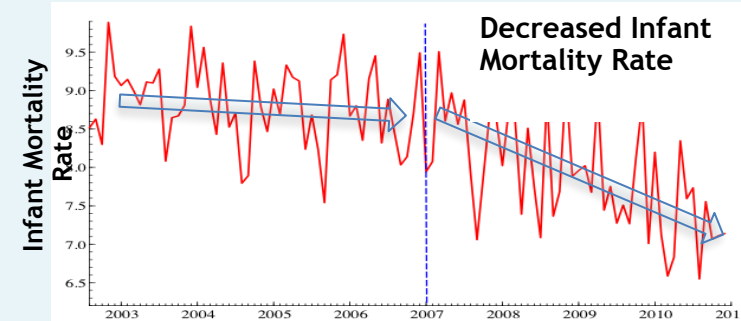
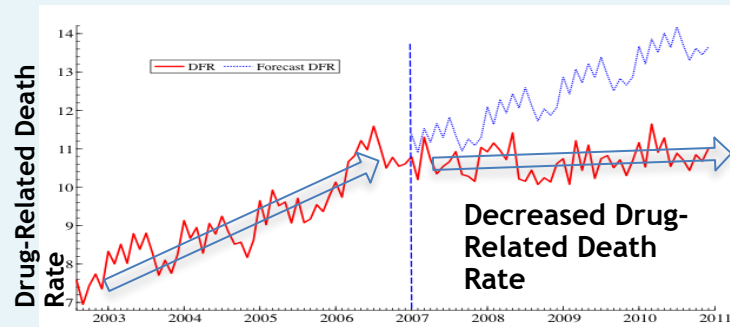
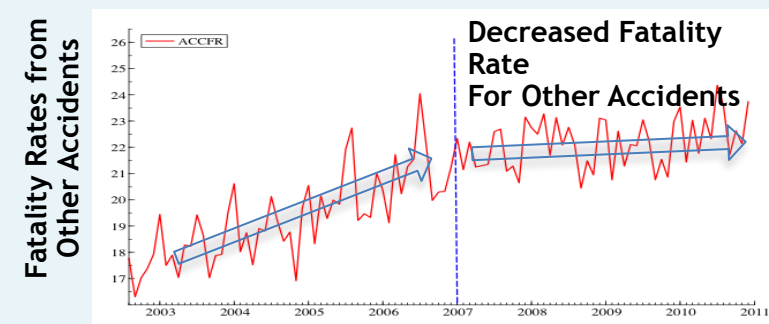
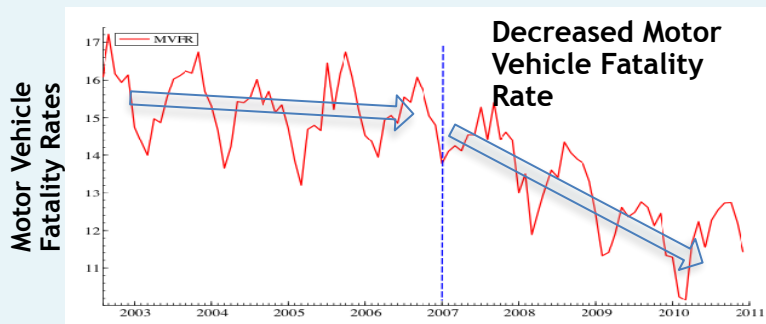
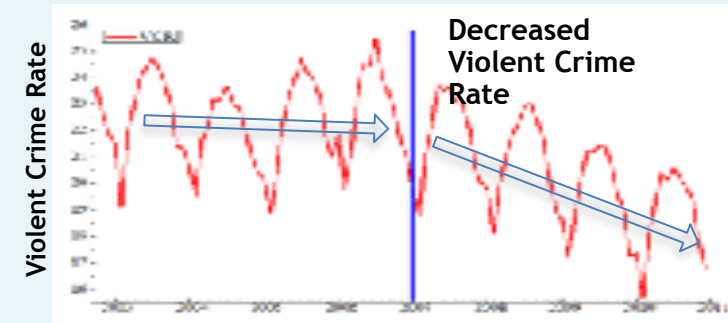
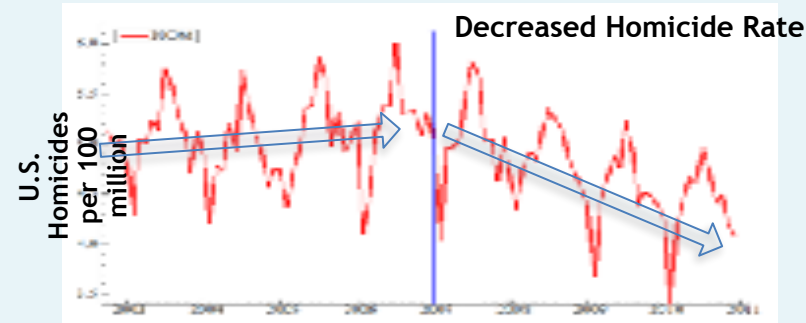
Reference. Dillbeck MC, Cavanaugh KL. 2017. Group Practice of the *Transcendental Meditation*® and *TM-Sidhi*® Program and Reductions in Infant Mortality and Drug-Related Death: A Quasi-Experimental Analysis. *SAGE Open*. 7(1), 1-15.

## Drug-Related Fatality Rate Baseline and Experimental Period Trends



Reference. Dillbeck MC, Cavanaugh KL. 2017. Group Practice of the *Transcendental Meditation*® and *TM-Sidhi*® Program and Reductions in Infant Mortality and Drug-Related Death: A Quasi-Experimental Analysis. *SAGE Open*. 7(1), 1-15.

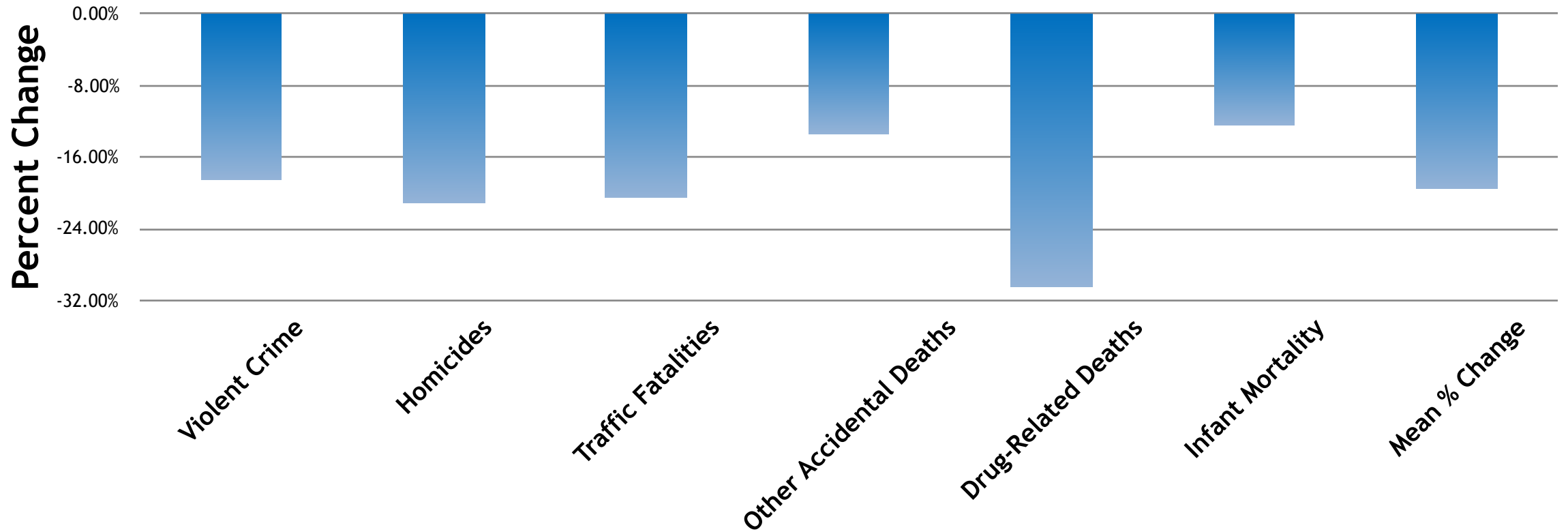
# Summary: Effects of the Invincible America Assembly on U.S. Crime and Fatality Rates



# Summary:

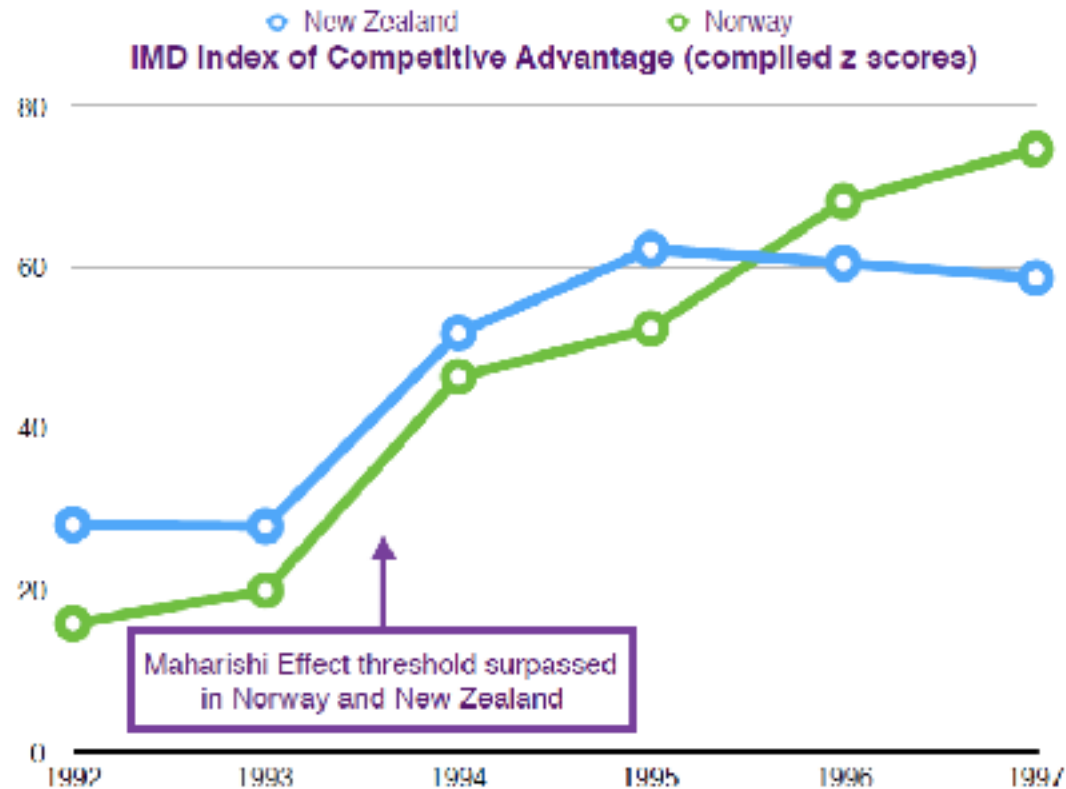
## Effects of the Invincible America Assembly on the United States

### Percent Change in Crime and Fatality Rates 2007-2010



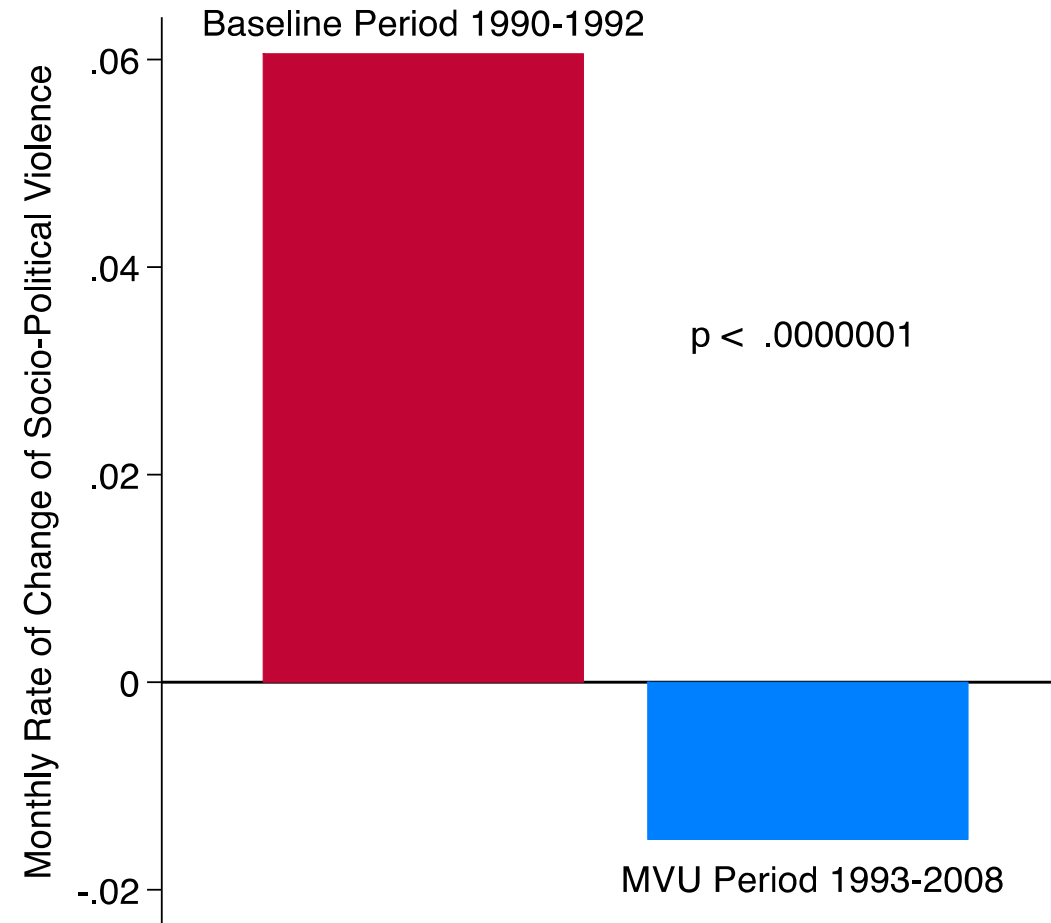
**References.** Dillbeck MC, Cavanaugh KL. 2016. Societal violence and collective consciousness: Reduction of U.S. homicide and urban violent crime rates. *SAGE Open*, 6(2), 1-16. Cavanaugh KL, Dillbeck MC. 2017. The contribution of proposed field effects of consciousness to the prevention of U.S. accidental fatalities: Theory and empirical tests. *Journal of Consciousness Studies*, 24(1-2), 53-86. Dillbeck MC, Cavanaugh KL. 2017. Group Practice of the *Transcendental Meditation*® and *TM-Sidhi*® Program and Reductions in Infant Mortality and Drug-Related Death: A Quasi-Experimental Analysis. *SAGE Open*, 7(1), 1-15. Cavanaugh KL, Dillbeck MC. 2017. Field Effects of Consciousness and Reduction in U.S. Urban Murder Rates: Evaluation of a Prospective Quasi-Experiment. *Journal of Health and Environmental Research*, 3(3-1), 32-43.

# Increased Competitive Advantage in Countries After they Reached 1% of the Population Practicing TM



Reference. Hatchard, G., & Cavanaugh, K. L. (2017). The Effect of Coherent Collective Consciousness on National Quality of Life and Economic Performance Indicators—An Analysis of the IMD Index of National Competitive Advantage. *Journal of Health and Environmental Research. Special Issue: Maharishi Vedic Science: Creating a Sustainable Future*, 3(3-1), 16-31. doi:10.11648/j.jher.s.2017030301.12

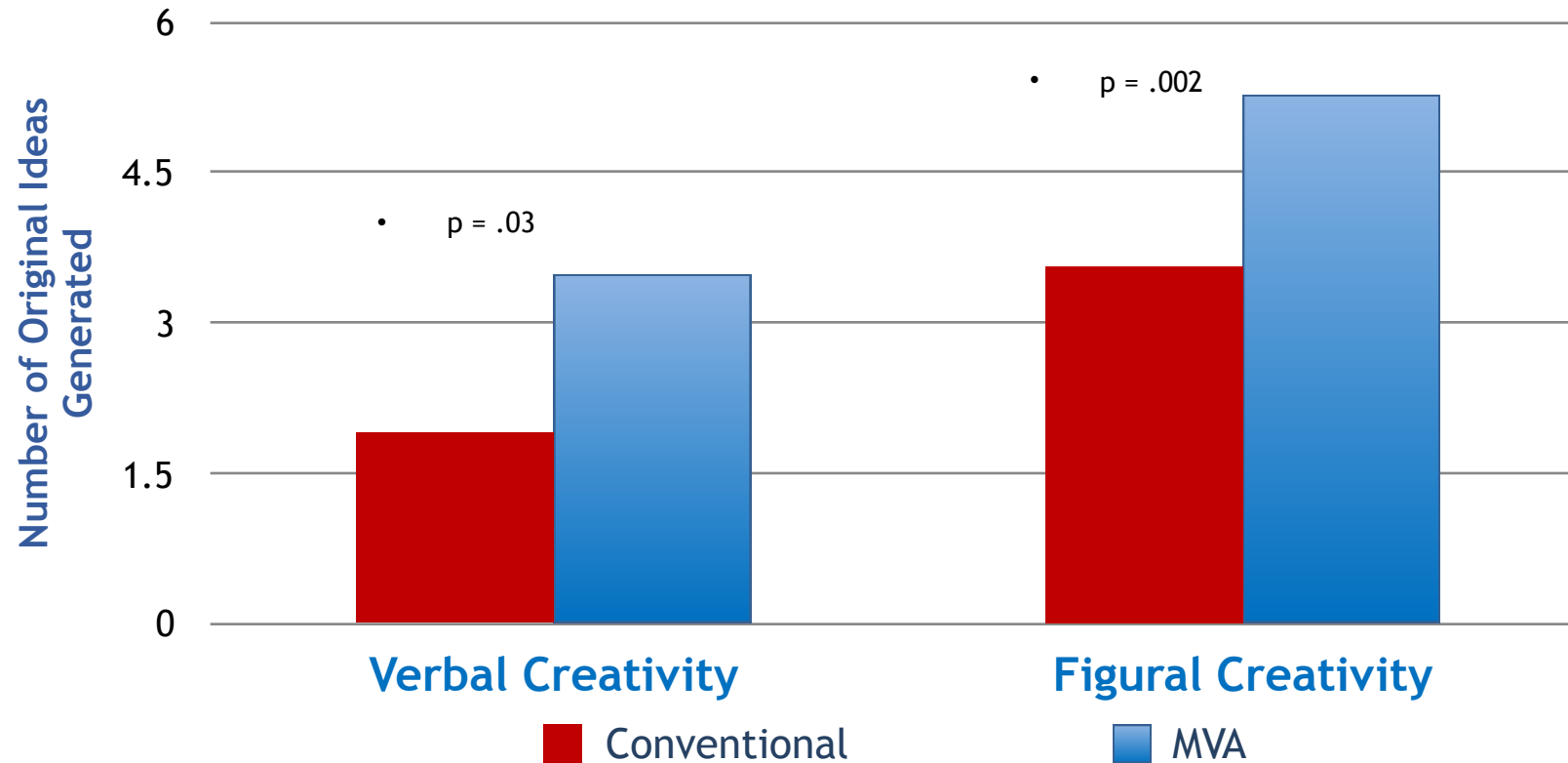
# Group Practice of the Transcendental Meditation and TM-Sidhi Reduced Socio-Political Violence in Cambodia



Reference: L. Fergusson & K. L. Cavanaugh (2019). Socio-political violence in Cambodia between 1990 and 2008: An explanatory mixed methods study of social coherence. *Studies in Asian Social Science*, 6(2), 1-45.



# Increased Originality of Verbal and Figural Creative Thinking in People Working in a Maharishi Vedic Architecture (MVA) Settings



People working in a building built according the principles of Maharishi Vedic architecture (MVA) increased in both verbal and spatial creativity compared to people working in conventional architecture.

**References:** Maheshwari, A., & Werd, M. R. P. (2019). Architecture and creativity: Examining the impact of Maharishi Vastu on workplace creativity. *Creativity Research Journal*, 31(4). doi:10.1080/10400419.2019.1667943

**Recent Research (2014-2019) on the  
*Transcendental Meditation*® Technique  
Four Stories**

**Story #4: Authentic Vedic Knowledge → Improved National Consciousness**

**Conclusion.** Maharishi's programs to create coherence in collective consciousness are based on the ancient Vedic tradition and have been repeatedly verified to improve quality of life in cities, nations, and the world, in prospective empirical demonstrations.

# Scientific Research on the Transcendental Meditation technique: Collected Papers, Vols 1 – 7.



- **Over 675 Studies**
- **Conducted at over 250 Universities and Research Institutions**
- **In 30 Countries**

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