**INTERVENTIONS**

Articles testing the applied science and implementation of mindfulness-based interventions


Effects on cognitive functioning and implications on healthcare. Singapore Medical Journal. [link]


Whitesman, S., Mash, R. (2016). Examining the effects of a mindfulness-based distance learning professional training module on personal and professional functioning: A qualitative study. BMC Medical Education. [link]


Brandmeyer, T., Delorme, A. (2016). Reduced mind wandering in experienced meditators and associated EEG correlates. Experimental Brain Research. [link]


Campbell, R., Vansteenkiste, M., Delesie, L.,...Mariman, A. (2016). The role of basic psychological need satisfaction, sleep, and mindfulness in the health-related quality of life of people living with HIV. Journal of Health Psychology. [link]


Drake, M. M., Morris, M., Davis, T. J. (2016). Neuroticism’s susceptibility to distress:
Moderated with mindfulness. *Personality and Individual Differences.* [link]


**METHODS**

Articles developing empirical procedures to advance the measurement and methodology of mindfulness


Renshaw, T. L. (2016). *Preliminary development and validation of the mindful student questionnaire. Assessment for Effective Intervention.* [link]


---

**REVIEWS**

Articles reviewing content areas of mindfulness or conducting meta-analyses of published research


---

**TRIALS**

Research studies newly funded by the National Institutes of Health (NOV 2016)

Northwestern University (D. Victorson, PI). Reducing the effects of active surveillance stress, uncertainty and rumination through engagement in mindfulness education. NIH/NCI project #5R01CA193331-02. [link]

Ralph Johnson VA Medical Center (K. Brady, PI). Mindfulness-based recovery in veterans with substance use disorders. Veterans Affairs project #5101RX001292-03. [link]

University of Southern California (M. Pentz, PI). Cancer control research program. NIH/NCI project #SP30CA14089-42. [link]

University of Texas MD Anderson (K. Milbury, PI). Couple-based meditation program for patients with metastatic lung cancer and their partners. NIH/NCI project #5R21CA191711-02. [link]
**Highlights**

A summary of select studies from the issue, providing a snapshot of some of the latest research

---

Pregnancy profoundly affects women's bodies. Women’s heart rate, blood pressure, and autonomic nervous system functioning undergo significant changes as pregnancy proceeds, and many women experience degrees of emotional distress. Some of these changes have the potential to deleteriously affect the mother's long-term health as well as her infant’s social and emotional development.

**Braeken et al. [Psychophysiology]** conducted a longitudinal study of how differing levels of trait mindfulness are associated with differing levels of cardiovascular and autonomic functioning in pregnant mothers and with their newborn infant's social and emotional development in the months following birth.

The researcher’s recruited 156 pregnant Dutch women who volunteered for inclusion in the study (average age = 33 years). Repeated measures of maternal cardiovascular function (blood pressure, heart rate, heart rate variability, and the length of the time interval between ventricular contraction and blood injection into the aorta known as the "pre-ejection period") were taken during the first and third trimesters of pregnancy, along with a self-report measure of emotional distress. Trait mindfulness was measured during the second trimester using the Freiburg Mindfulness Inventory. Maternal emotional distress was again measured 2-4 months after delivery, and infant social-emotional development was assessed by maternal report the fourth month after delivery using the Ages and Stages Questionnaire-Social Emotional (ASQ-SE).

Maternal mindfulness was significantly associated with higher levels of general heart rate variability and high frequency heart rate variability. The more mindful the women were, the less their high frequency heart rate variability declined and the less their pre-ejection period shortened from the first to the third trimester. These results are interpreted as showing that more versus less mindful women have lower decreases in parasympathetic nervous system activity over the course of their pregnancy, given that these cardiac measures reflect changes in autonomic nervous system function. Higher levels of mindfulness were significantly associated with lower levels of emotional distress both during and after pregnancy. The ASQ-SE adaptive functioning sub-scale was significantly associated with maternal mindfulness, so that more mindful mothers had infants who showed higher levels of adaptive functioning. Adaptive functioning refers to the relative absence of difficulties in feeding, sleeping and elimination.

This study observes that mindful women have less of a decrease in parasympathetic activity over the course of their pregnancy, which could be an important finding in preventing problems like gestational hypertension and preeclampsia. It also finds that mindful women experience less emotional distress, which could be an important finding in preventing postpartum depression. Lastly, it finds that mindful mother's infants have higher levels of adaptive functioning, which may reflect their calmer pregnancies, or perhaps a more mindful parenting style.

The study is limited by it being an associational rather than an interventional study, thus it cannot prove that mindfulness was the effective cause of these benefits, or that mindfulness training might produce the same sorts of benefits. Only future studies can test how robust these findings are and whether training pregnant women to be more mindful will show similar benefits on cardiovascular and emotional health outcomes.
Prostate cancer is the second most frequently diagnosed cancer in men, and one-fifth of those diagnosed go on to develop either metastatic or incurable progressive forms of the disease. Men with advanced prostate cancer have higher rates of depression, anxiety, PTSD, and suicide risk than the general population, and may be able to benefit from group treatments to reduce the psychological suffering associated with both the illness and the unintended effects of treatment.

Mindfulness-Based Cognitive Therapy (MBCT) has been shown to be an effective treatment for preventing relapse in recurrent depression, and Chambers et al. [Journal of Clinical Oncology] conducted a randomized, controlled study to see whether it could also be of benefit to advanced prostate cancer patients.

The researchers randomly assigned 189 Australian men (average age = 71 years) with advanced prostate cancer to either an 8-week MBCT group intervention delivered by teleconferencing, or a minimally enhanced treatment-as-usual condition. Teleconferencing allowed patients who lived in rural/remote areas or who were too ill to travel to participate. MBCT telephone sessions were held once a week, lasted for 1.25 hours, included short 15-minute meditation periods, and encouraged daily home practice. The enhanced treatment-as-usual condition provided patients with a consumer guide to advanced prostate cancer, a relaxation CD, coping-with-cancer booklets, and similar information. Outcome measures included self-report measures of general psychological distress, cancer-specific distress, anxiety concerning prostate-specific antigen (PSA) tests, quality of life, posttraumatic growth, and mindfulness (using the Five Facet Mindfulness Questionnaire or FFMQ). Measures were obtained at baseline and at 3, 6, and 9 month follow-ups.

There were no significant differences between the MBCT group and the control group on any of the self-reported outcome variables, including any of the FFMQ sub-scales. Of the 94 men assigned to the MBCT group, only 52% participated in 4 or more of the 8 group sessions. When statistical analyses were performed using the 49% of the MBCT participants who completed four or more sessions, there were again no significant improvement in outcomes, except for MBCT participants earning higher FFMQ Observing scores. Despite the lack of change in outcomes assessed, of the 61% of the MBCT sample who completed satisfaction questionnaires, 73% rated the intervention as “very helpful.”

MBCT was not effective in reducing distress in this sample of men with advanced prostate cancer. There are many possible reasons for this finding. First, a psychotherapeutic MBCT may not be for everybody. This was an older male population, and it’s possible that either mindfulness skills in the context of cognitive therapy weren’t consonant with their preferred masculine coping styles, or that their attentional styles weren’t sufficiently modifiable. Second, this was a largely non-distressed population (60% scored below the cut-off for significant distress) so there might not have been that much room for improvement.

The high non-attendance rate may be a clue that patients either didn’t think the treatment was necessary, or that this treatment wasn’t what they wanted. Third, the high non-attendance rate lowered this study’s statistical power, affecting its ability to detect an actual effect. Fourth, teleconferencing may not have been an effective medium for MBCT treatment delivery, especially considering most MBIs were developed for in-person group-based administration. Further studies are needed to clarify which populations and conditions MBCT may be best suited for, and which forms of delivery may be most effective for male patients with advanced cancer.
**Notice:**

This page is reserved for one full-page placement.

Feature your placement on this page in Mindfulness Research Monthly. Placement price per issue is $375 USD.

MRM monthly issues now available for reservation in 2017 include:
Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Reserve your monthly issue now by making a request to info@goAMRA.org