## 7 Studies on the Benefits of Group Drumming

Compiled by Christine Stevens, <u>UpBeat Drum Circles</u>

Listed chronologically by date of publication

#### 1. Drumming Strengthens the Immune System

Composite Effects of Group Drumming Music Therapy on Modulation of Neuroendocrine-Immune Parameters in Normal Subjects. *Journal of Alternative Therapy*. Jan, 2001. p. 38-47. Bittman BB et all

- 111 subject who were all non-drummers.
- Natural Killer NK cell activity was boosted in subjects who drummed compared to controls. Natural Killer cell activity stimulated by Cytokines (Interleukin II and Gamma Interferon - Helper (Th1) cells) was boosted in subjects who drummed compared to controls.
- HealthRHYTHMS improved cellular biology and reversed the stress response.

#### 2. Group Drumming Reduces Employee Burnout in Healthcare Workers

Recreational Music-Making: A Cost-Effective Group Interdisciplinary Strategy for Reducing Burnout and Improving Mood States in Long-Term Care Workers *Advances in Mind-Body Medicine*. Fall/Winter, 2003. p.4-15. Bittman et all

- 112 subjects employees in Long Term Care.
- 6-week series of *HealthRHYTHMS* group drumming with interdisciplinary teams.
- Decreased burnout on Maslac Burnout Scale.
- Improved employee mood states by 46% on POMS Profile of Mood States sustained effect of 62% six weeks' post intervention.
- Economic Impact saved \$89,000 for typical 100-bed medical facility through employee retention and reduced turnover. Total annual savings to the industry based on an 18.3% decrease in projected at \$1.46 billion.

#### 3. Group Drumming Reduces Instrumental Anger in Adolescents

Creative Musical Expression as a Catalyst for Quality of life Improvement in Inner-city Adolescents Placed in a Court-referred Residential Treatment Program, Bittman, et al, ADVANCES Spring, Vol 24, 1, 2009.

- 52 Subjects, ages 12 to 18.
   Pre/Post-test matched controls. Measured Child and Adolescent Functional Assessment Scale (CAFAS), Adolescent Psychopathology Scale (APS), Adolescent Anger Rating Scale (AARS), Reynolds Adolescent Depression Scale, 2nd edition (RADS 2).
- Improved scores in school/work role performance, total depression, anhedonia/ negative affect, negative self-evaluation, and instrumental anger.

- **4. Group Drumming Improves Social-Emotional Skills for Low-Income Children** The Impact of Group Drumming on Social-emotional Behavior in Low- income Children. *Evidence-based Complementary and Alternative Medicine*, 2011 (Ho, Tsao, Bloch, & Zeltzer).
  - UCLA researchers tested Beat the Odds® a 12 week group drumming protocol to reduce inattention, withdrawn/depression, posttraumatic stress, anxiety, attention deficit/hyperactivity, oppositional defiance, and sluggish cognitive tempo.
- **5. Group Drumming Improves Social and Mental Wellbeing for At-Risk Youth** Wood, L., Ivery, P., Donovan, R., & Lambin, E. To the beat of a different drum improving the social and mental wellbeing of 'at risk' youth with drumming. *Journal of Public Mental Health*, *12*,2 p70-79, 2013.
  - 180 students across 19 schools with control groups.
  - Drumming & Cognitive therapy combined in the Rhythm 2 Recovery model increased self-esteem in identified 'at risk' school students.
  - Drumming & Cognitive therapy combination reduced behavioral incidents and increasing school attendance.
- 6. Group Drumming Reduces Anxiety, Depression and Inflammation

Effects of Group Drumming Interventions on Anxiety, Depression, Social Resilience and Inflammatory Immune Response among Mental Health Service Users, Fancourt D, et all, PLoS ONE 11(3): e0151136. doi:10.1371/journal.pone.0151136, 2016.

- 10 weeks of group drumming for mental health service users, facilitated by musicians, decreased depression, anxiety and built social resilience compared with a non-music control group.
- Collaboration of Royal College of Music, Medicine and Psychology London College.

# 7. Group Drumming Combined with Cognitive Therapy improves Resilience, Decreases Stress in Prison Population

Faulkner, S., & Bartleet, B. L. Drumming interventions in Australian prisons: Insights from the Rhythm2Recovery Model. In M. Balfour, B. L. Bartleet, L. Davey, J. Rynne & H. Schippers (Eds.). *Performing arts in prisons*. Bristol: Intellect, 2019.

- 146 prisoners across 8 prisons, male & female with matched control subjects.
- Drumming & Cognitive Therapy combination in the Rhythm 2 Recovery model reduced psychological distress & increased resilience in prisoners.
- Maintained improvement at 3-month post program, demonstrating lasting impact.

### **More Research on Group Drumming with Different Populations**

Rhythm Research Resource Webpage:

https://www.rhythmresearchresources.net