

Music for Life; A Life of Music Pilot Study

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Mission: *Music for Life; A life of Music* is a program designed to give students with disadvantaged socioeconomic backgrounds some skills and tools necessary to modulate the effects of stressful life circumstances through yoga and through music making. The program seeks to apply a praxial philosophy of music making by engaging students to develop in their musical skills, but also to develop an awareness of how their musical skills are related to their psycho-physical behavior response and how to modulate their response through breath and musical control.

Contemporary literature and research grounding:

A great deal of research has been done investigating how mindfulness training and yoga can be used in urban environments to help give students tools with which to modulate stress response. In the 2013 article “Implementing mindfulness and yoga in urban schools: a community-academic partnership” (Mendelson et al., 2013), the authors participated in an autoethnographic study investigating the challenges and benefits of a 6 week mindfulness and yoga program in 2 randomly selected Baltimore, MD city public schools. Through journal entries by the students, they found an overwhelming cry for tools with which to reduce their stress. Resistance to the techniques was uncovered by requirements at times to sit still. Wisner, 2013 also describes how students participating in compensatory alternative high school programs for behavioral problems derived great benefits in attention and mood improvement from an 8 week instructional program in meditation practices (Wisner, 2013).

We address this challenge through arts based integration of these techniques. Sussman et al. 2011 described in their paper “The wisdom of the inner life: Meeting oneself through meditation and music” how practicing and playing music can lead to deep inner wisdom and understanding of how oneself works. It is based on transpersonal psychology- the Western term for unitive experiences of completeness with oneself, others, ideas and the world. The paper outlines how meditation practices develop an understanding of embodied actions and how playing music assumes the role of embodied understanding. This means that by coming to understand how the body moves, breaths and responds to thoughts and actions through meditation, we can come to understand how the body moves, breath and responds to thoughts and actions through our making of sound in music.

The research in putting meditation and yoga together is compelling. The breathing practices of yoga are particularly compelling and a focus of this program. In Richard Ley’s 1999 article “The modification of breathing behavior- Pavlovian and operant control in emotion and cognition” the author describes how maladaptive cognitive states- stress, worry, doubt, fear panic etc- are associated with certain breath patterns. Conversely, so are positive cognitive states. The article outlines how simple Pavlovian conditioning can be employed to repeatedly disassociate maladaptive cognitive states with their accompanying breathing patterns and remove the attendant anxiety and discomfort through breathing therapies. When negative cognitive states are present, they are then associated with breathing patterns normally associated with positive states. When this occurs, the maladaptive patterns cease to be distressing (Ley, 1999). David Shannahoff-Khalsa in his 2008 research “Kundalini Yoga Meditation

Techniques for the Treatment of Obsessive Compulsive and OC Spectrum Disorders” explores how specific yoga breathing meditations are effective in mitigating the effects of obsessive compulsive disorder. Ley’s research explains how the particular breathing patterns researched by Shannahoff-Khalsa work- as the practitioner experiences distressing thoughts, the accompanying breath patterns of those distressing thoughts are interrupted by the yoga breathing technique. Instead, the breath is controlled and activates the parasympathetic (relaxing) side of the nervous system and removed the attendant anxiety (Shannahoff-Khalsa, 2008).

Application:

This program will use all of this information to benefit the students and give them skills for music making and skills for life. As students learn the specific technical elements of music making- phrasing, articulation, tuning etc- we are doing so with a conscious awareness of how powerful arts based activities are in requiring students to purposely control breathing. The program is coming at music making from a whole new perspective- that not only are we participating in the arts, but we are participating in the arts with our body. It is an obvious fact, that without a body, this does not take place, but these new directions and thoughts on applied yoga and meditation are bringing new levels of awareness as to how we teach out students body awareness.

The students will be both participating in music making activities and in yoga activities. They will spend time being social and working hard. There is instrumental technique, music theory, yoga practice, individual lessons and large ensembles. Each piece plays into the other parts and at the end, makes a whole.

This is the concept of praxial musicing (music as a verb). This program is about a praxial- ie. real life, real situations, and real purpose- for music making. People make music all over the world for specific reasons- to celebrate, mourn, worship, enjoy or entertain (Elliott et al. 2015). Here, we are making music for skills for life. We are teaching students how to use their body and their capacity to move, breath and play for a purpose. When students leave, they will have the skills to play music with others, or alone, as well as a set of tools for modulating behavior response through yoga breathing and at the same time, through their instrument

Pilot Study of 90 Minute Workshop

A 90 minute workshop based on the above described program was conducted with a group of 52 high school students participating in a summer band festival. The students completed the Perceived Stress Scale (Cohen et al., 1983) and a modified Perceived Stress Scale to measure the success of the workshop in mitigating feelings of anxiety. Below is the sequence of the activities conducted, followed by the data. 52 students participated, 18 voluntarily turned in their responses, amongst which 4 were illegible. N=14.

90 Minute workshop program:

- Introduction to breathing physiology
- completion of pre survey
- yoga class done in chair
- meditation with singing

- break
- ensemble work in breathing and phrasing
- completion of post survey

Data Collection Tools:

Below is a copy of the data collection tools that were used for the pre and post surveys.

Pre- Survey

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?..... 0 1 2 3 4
2. In the last month, how often have you felt that you were unable to control the important things in your life? 0 1 2 3 4
3. In the last month, how often have you felt nervous and “stressed”? 0 1 2 3 4
4. In the last month, how often have you felt confident about your ability to handle your personal problems? 0 1 2 3 4
5. In the last month, how often have you felt that things were going your way?..... 0
1 2 3 4
6. In the last month, how often have you found that you could not cope with all the things that you had to do? 0 1 2 3 4
7. In the last month, how often have you been able to control irritations in your life?.....
0 1 2 3 4
8. In the last month, how often have you felt that you were on top of things?
0 1 2 3 4
9. In the last month, how often have you been angered because of things that were outside of your control?..... 0 1 2 3 4
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? 0 1 2 3 4

Post Survey

Modified Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts *right now*. In each case, you will be asked to indicate by circling how you feel.

0 = not at all 1 = a little bit 2 = moderately 3 = significantly 4 = totally

1. If something unexpected were to happen right now, do you feel you would be able to handle it calmly?
?..... 0 1 2 3 4

2 Do you feel that you have control over the important things in your life?..... 0 1
2 3 4

3. Do you feel nervous or stressed right now?
0 1 2 3 4

4. Do you feel confident about your ability to handle your personal problems right now?
..... 0 1 2 3 4

5. Do you feel that things are going your way?
..... 0 1 2 3 4

6 Do you feel that you could cope with all of the things you have to do right now?
0 1 2 3 4

7. Do you feel that you can control irritations in your life right now?
..... 0 1 2 3 4

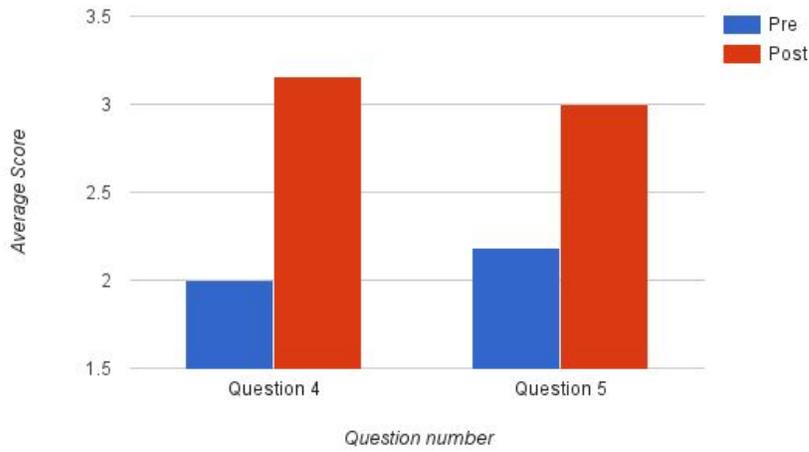
8. Do you feel that you are on top of things right now?
.....0 1 2 3 4

9. Are you feeling angered about things outside of your control?
..... 0 1 2 3 4

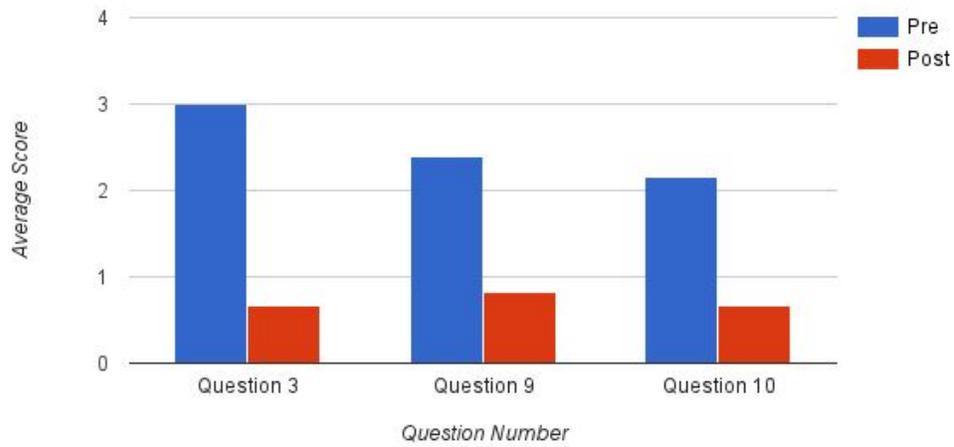
10. Do you feel that difficulties are piling up so high that you cannot handle them?
0 1 2 3 4

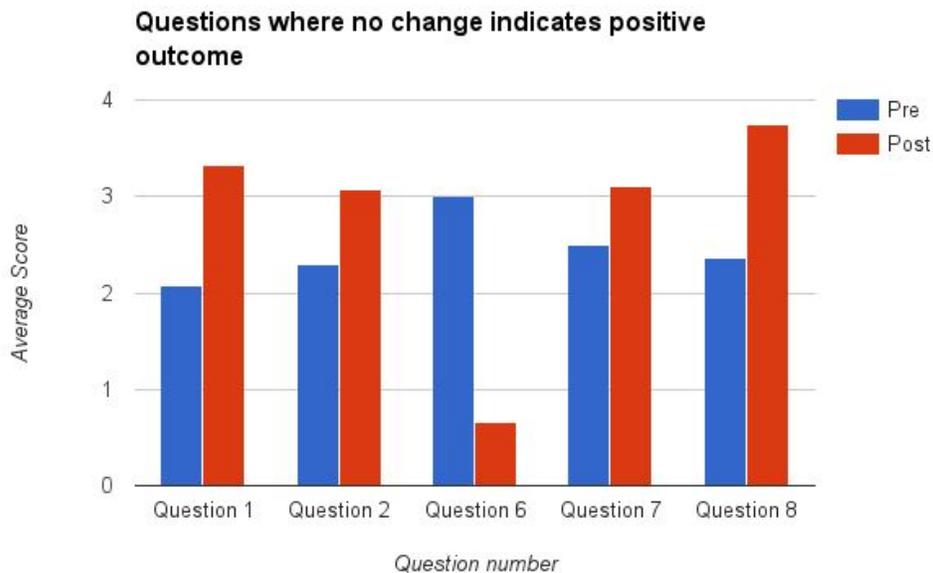
Data:

Questions where increase indicates positive outcome



Questions where decrease indicates positive outcome





Individual student responses:

Student	Comment
Student 3	This was really helpful, and also pretty fun. It seemed to really make a difference. The teacher really knew what he was talking about.
Student 4	I really liked how it made me feel more in control of myself, emotion wise and confident wise. I felt like I could control what I was feeling and could center myself. I really enjoyed it :)
Student 5	Awesome. Definitely something I think was beneficial to learn, not just for this festival, but the band at our school. Definitely will try and get our instructor to try this during the marching season... we need all the help we can get.
Student 6	I liked the breathing exercises and how relaxed I felt. But, I didn't like how we had lots of time between the last exercise, I felt like I lost my relaxation.
Student 8	Believe in yourself.
Student 9	Thanks! It was really awesome and I had a good time and learned a lot.
Student 10	We should have done real yoga with mats and stuff too! This was awesome.
Student 12	Thank you... that helped a lot!
Student 13	I feel very calm and relaxed.

Student 15	I was surprised at how much better I felt. I felt as if my tone was much better.
Student 16	This workshop was very helpful and relaxing. I enjoyed it very much.

Explanation:

The responses to questions 4 and 5 demonstrate extremely positive outcomes for the workshop. Question 4 first asks how often the participant feels able to handle their personal problems in the past month and then in the post survey, how confident they feel right at this moment to handle their personal problems. The overall increase in the score indicates that the only variable between their feelings 90 minutes prior and this score was the workshop. Question 5 first asks, how often the participant feels things were going their way. In the post survey, it asks if they feel things are going their way. Again, there is a dramatic increase in the positive feelings of their perception about how things are going for them.

Question 3 is extremely important for demonstrating the efficacy of this workshop in mitigating feelings of stress. The participants are first asked how often in the last month they have felt nervous or stressed. The average score was 3, indicating fairly often. The post survey asks if they feel stressed right now. The average score was .6666, <1 indicating not at all. This dramatic decrease is extremely encouraging.

Participants also demonstrate an increasing sense of control over their lives in question 10. The pre-survey asks how often in the last month participants feel that their responsibilities are piling up so high that they cannot handle them. The average score was 2.16 indicating a little more than “sometimes.” In the post-survey, the average score was .6666, <1 indicating that they do not feel they cannot handle their responsibilities and feel very in control in this moment.

Individual student response feedback also provides compelling qualitative data as to the efficacy of the workshop. An overwhelming number of students commented upon how in control and relaxed they felt after completion of the workshop. The students all commented on how much they enjoyed and found it beneficial, but student 15 even commented on how the program helped her musically. The student responses indicate an overwhelming need and desire for such activities and the tools they can learn to manage their emotions and stress as well as improve their music making.

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