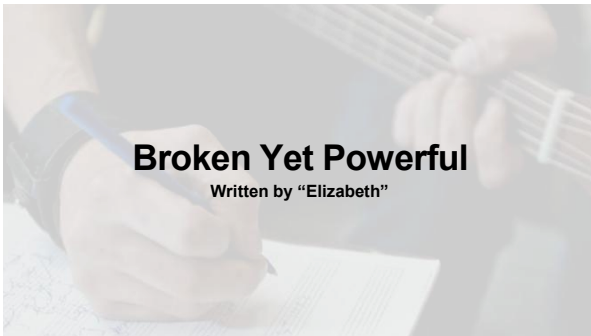
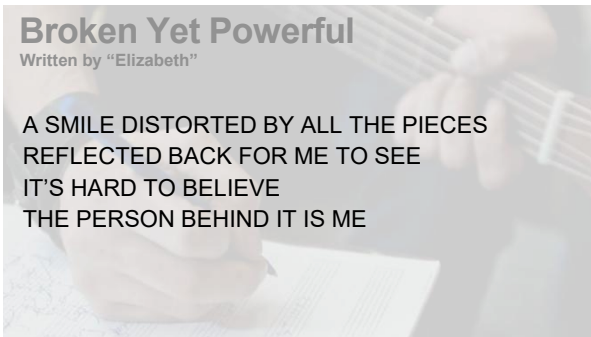




1



2



3

Broken Yet Powerful

Written by "Elizabeth"

BROKEN YET POWERFUL
FRIGHTENED YET BRAVE
THE BROKEN GLASS MAKES IT HARD
TO SEE WHAT THERE IS TO SAVE

4

Broken Yet Powerful

Written by "Elizabeth"

SILENT YET SCREAMING
SMILING YET CRYING
FRACTURED FACES LOOK BACK AT ME
WHILE I'M LIVING YET DYING

5

Broken Yet Powerful

Written by "Elizabeth"

BROKEN YET POWERFUL
FRIGHTENED YET BRAVE
THE BROKEN GLASS MAKES IT HARD
TO SEE WHAT THERE IS TO SAVE

6

Broken Yet Powerful

Written by "Elizabeth"

SHATTERED PIECES FALLEN HERE AND THERE
AN EXPLOSION OUT OF CONTROL
SADNESS AND PAIN AND ANGER TOO
LEAVES CHASMS WITHIN MY SOUL

7

Broken Yet Powerful

Written by "Elizabeth"

BROKEN YET POWERFUL
FRIGHTENED YET BRAVE
THE BROKEN GLASS MAKES IT HARD
TO SEE WHAT THERE IS TO SAVE

8

Broken Yet Powerful

Written by "Elizabeth"

HUMILIATED CRUSHED AND DESTROYED
SHATTERED PIECES LAYING ROUND ABOUT
CAN YOU TELL ME DO YOU KNOW?
IS THE PAIN OUTSIDE IN OR INSIDE OUT?

9

Broken Yet Powerful

Written by "Elizabeth"

BROKEN YET POWERFUL
FRIGHTENED YET BRAVE
THE BROKEN GLASS MAKES IT HARD
TO SEE WHAT THERE IS TO SAVE

10

Broken Yet Powerful

Written by "Elizabeth"

SHATTERED PIECES LAYING ROUND ABOUT
IS THE PAIN OUTSIDE IN OR INSIDE OUT?
IS THE PAIN OUTSIDE IN OR INSIDE OUT?

11



Music has no survival benefit but is part of all cultures, past and present.

12

Music has been called:
"universal language"
"the greatest good that mortals know"



13



Has been known to
"solace the sick and weary" and is credited
with "helping people
express their emotions".

14

Music is a non-invasive,
relatable, and powerful tool,
supported by science to:

alter neurobiology

influence the "reward
system"

and explore emotional
states without substances.



15

Could Music Therapy Benefit Your Practice?

Our Objectives for this Keynote

- Discuss the evidence-based practice of music therapy
- Discuss the current scientific evidence supporting the use of music in treating substance abuse and other addictive behaviors
- Discuss how music therapy might benefit your current practice
- Discuss how music may fit into your scope of practice and how to locate a trained music therapist when appropriate

16

About Us

Over 15 Years of Experience

Morgan L. Robertson, MT-BC
 BSoF from Indiana University Jacobs School of Music in Voice and Theater (2000)
 Bachelor's Equivalency in Music Therapy from Drury University in 2011
 Miss Morgan Music, LLC (Private Practice since 2011)
 Adolescent Substance Abuse Group: 8 years
 Juvenile Justice Program: 10 years
 Adult Mental Health (Unhoused, Recovery, Veterans, Trauma): 8 years



17

About Us

Over 10 Years of Experience

Taylor J. Corcoran, MT-BC, (NMT™)
 Bachelor's in MT, Minor Psych (2016)
 Additional training in Neurologic Music Therapy® (NMT™)
 Adult Mental Health (1.5y)
 Private Practice, Including Mental Health (5.5y)



18

Music Therapy

What is it?
What is its history?



19

What is Music Therapy (MT)?

- “Music Therapy is the **clinical** and evidence-based use of **music interventions** to accomplish **individualized goals** within a **therapeutic relationship** by a **credentialed professional** who has completed an approved music therapy program.” (American Music Therapy Association)
- Working on FUNCTIONAL goals not musical goals
- Music is the “tool” (motivating BUT more importantly, the “agent” of change)

20

History of Music Therapy

- MT became organized in the 20th century, but used in this country to treat physical and mental ailments since the late 18th Century
- 1789 Article (anonymous) - Music discussed as a therapeutic agent which influences emotional and thus, physical healing.
- 19th Century (several authors) - Discuss music in the treatment of a variety of ailments
- 1832 - Music used in educational settings
- 1918, 1945 - MT took shape in the care of soldiers returning from WW1 and WW2
- 1919 - Initial MT classes taught at Columbia University in NYC, training musicians to work in hospitals

21

History of Music Therapy, Contin.

- First colleges - Michigan State, University of Kansas, Chicago Musical College, College of the Pacific, and Alverno College – started to train and streamline practice
- E. Thayer Gaston from KU teamed with Menninger Clinic in Topeka, KS to develop first training site
- The two professional organizations endorsed and collaborated on development of a Board Certification exam 1985

22

National Organizations

- 1926 - National Association for Music in Hospitals
- 1941 - National Foundation for Music Therapy
- 1944 - Committee for the Use of Music in Hospitals, to oversee use of music in psychiatric hospitals
- 1950 - National Association for Music Therapy (NAMT), Established RMT designation
- 1971 - American Association for Music Therapy (AAMT)
- 1998 - NAMT and AAMT merged to form AMTA (current US MT organization)



23

The Power of Music The Science



24

Music Can Alter Neurochemistry

Brain chemicals play an important role in brain cell communication and physiological and emotional responses. Music has been shown to:

- Cause changes in "dopamine", our brain's "feel good" hormone
- [relaxing music] Reduce blood cortisol levels (a hormone related to stress response)
- [relaxing/familiar music] Reduce epinephrine (adrenalin) and norepinephrine (associated with heightened arousal)
- [by engaging in active music making] Increase oxytocin (hormone associated with trust and bonding)

25

Music Can Stimulate Reward Pathways

Simply passive music listening alone has been shown to activate several brain regions associated with "reward", motivation, learning, and emotional responses including:

- The nucleus accumbens (central area in the brain's reward pathway, linking stimuli to experience and associating behaviors with reward; receives dopamine from VTA)
- The ventral tegmental area (drives goal-directed behaviors and pleasure; produces and sends dopamine)
- The hypothalamus (regulator of the autonomic nervous system, manages "drives", and involved in mood and stress responses)
- The insula (involved in sensory integration, connecting physical sensation to experience, decision making, and addiction and craving)

26



- These findings suggest that music itself can be a rewarding stimulus that could reinforce positive, behavioral change or even replace "unhealthy" pleasure seeking (such as gambling, substance abuse, etc.).
- Conversely, the use of music paired with maladaptive behaviors may reinforce those behaviors; in these instances, education about the contraindications of music may be helpful.

27

Music Can Alter Mood

Many studies support music's ability to alter mood. Music activates both cortical and subcortical areas of the brain associated with emotional response, including:

- The orbitofrontal cortex (links sensory input to emotion and reward)
- The superior temporal cortex (links sensory input to cognition)
- The anterior cingulate cortex (involved in emotional regulation)
- The nucleus accumbens (links emotion to action and motivation)
- The limbic system (processes emotion, memories, reward, instincts)

28

Music Can Produce Calm States

- Music can alter arousal states by "up-" or "down-regulating" one's arousal.
- Music activates the limbic system, neurochemicals, and specific brain structures associated with regulation and fear processing.
- For instance, "unpleasant music" has been shown to activate the amygdala while "pleasant music" deactivates the amygdala, an area of the brain that recognizes and responds to threats.

29

Benefits of MT in Mental Health



30

Benefits of the Use of Music in Mental Health

Music Is:

- A non-invasive tool that affects one’s neurobiology
- A way to explore and alter emotional states without the use of substances
- Activates “reward pathways” in the brain, making music *itself* a rewarding stimulus that could promote adherence to treatment.
- Can increase oxytocin and can be a means of building trust within the interdisciplinary system.
- “Relatable” and “accessible”, making MT appear “safe”, approachable, relevant, or risk-free.

31

Success of MT in Mental Health
For Addictive Behaviors



32

Benefits of the Use of Music in Mental Health

Two major reviews (Cochrane and PLoS ONE) assessed the outcomes of Music Therapy (MT) treatment in SUD.

- Research positively supported MT to reduce cravings and increase motivation for treatment for adults in detoxification and rehabilitation settings, especially MT treatment longer than a single session.
- Research reported beneficial effects on mood after MT.
- After longer MT experiences, enhanced internal LOC was identified.
- No statistically significance data showed an effect on depression, anxiety, motivation for sobriety, or retention of treatment.
- The Cochrane review summarized the overall view of both review papers: *“The results of this review suggest that the evidence base for the use of MT for SUDs is emerging.”*

33

Most Reported Challenges of Research:

- MT is often provided in tandem with other therapy modalities, making it difficult to isolate the true effectiveness of MT alone.
- Definitions and measurements of treatment outcomes vary between studies. For example, how researchers define and measure motivation varies from study to study.
- Several studies of MT for SUD have been completed by the same researcher at the same facility. Reviewers recognize that more and varied research is needed.

34

**What IS MT vs
What IS NOT MT**



35

Back to the Definition

- Use of "**clinical and evidence-based use of music interventions**
- to accomplish **individualized goals**
- within a **therapeutic relationship by a credentialed professional** who has completed an approved music therapy program." (American Music Therapy Association)

36

Therapeutic Goals Addressed in MT

- Among many populations: motor, speech/language, cognition
- Among Clients with Addictive Behaviors
 - Cognition (impulse control, problem solving)
 - Cognitive Restructuring
 - Self-Awareness/Reflection
 - Coping Skills
 - Social Skills
 - Relaxation/Mood Vectoring

37

Examples

NON MT example

using music to set the tone of a group session as people enter/exit

using song lyrics in a collage or art project

MT example

MAKING music to emotionally regulate (drumming)

MAKING music to express emotions (songwriting)

38

How Can You Use Music in Your Practice?

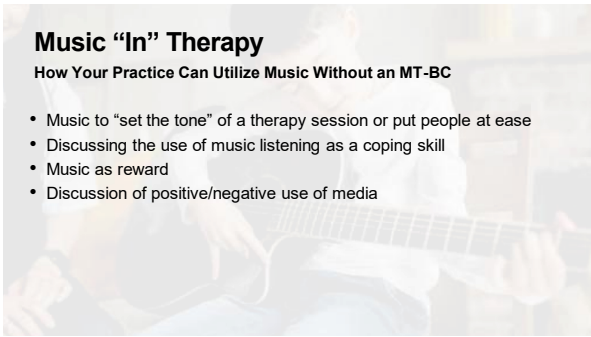


39

Music “In” Therapy

How Your Practice Can Utilize Music Without an MT-BC

- Music to “set the tone” of a therapy session or put people at ease
- Discussing the use of music listening as a coping skill
- Music as reward
- Discussion of positive/negative use of media



40

The Advantage of Working with a Music Therapist

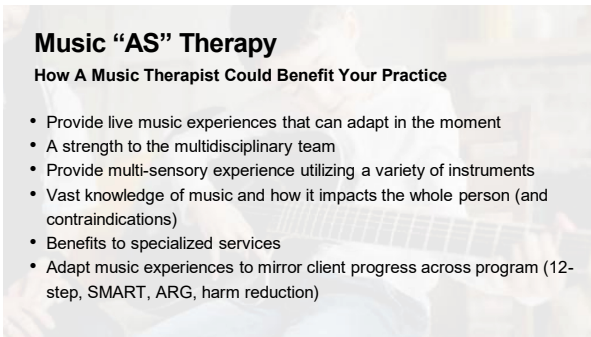


41

Music “AS” Therapy

How A Music Therapist Could Benefit Your Practice

- Provide live music experiences that can adapt in the moment
- A strength to the multidisciplinary team
- Provide multi-sensory experience utilizing a variety of instruments
- Vast knowledge of music and how it impacts the whole person (and contraindications)
- Benefits to specialized services
- Adapt music experiences to mirror client progress across program (12-step, SMART, ARG, harm reduction)



42

Curious to Learn More?

Please attend our experiential breakout session:

June 18, 2:45-3:45pm



43

How To Find a MT-BC



44

Looking for a MT-BC?

- Search for local music therapy companies. Many companies may offer contracted music therapy work.
- Go to cbmt.org and search for a therapist in your area or anywhere around the world.

CERTIFICATION DIRECTORY

Search the Directory
MT-BCs have the option to opt-out of being included in this directory. Contact info@cbmt.org if unable to locate a therapist.

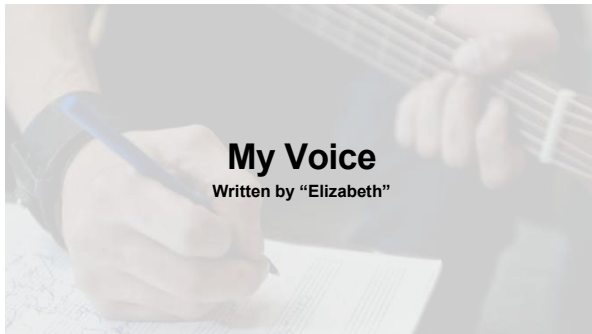
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Zip/Postal Code	Distance	
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45

Questions?

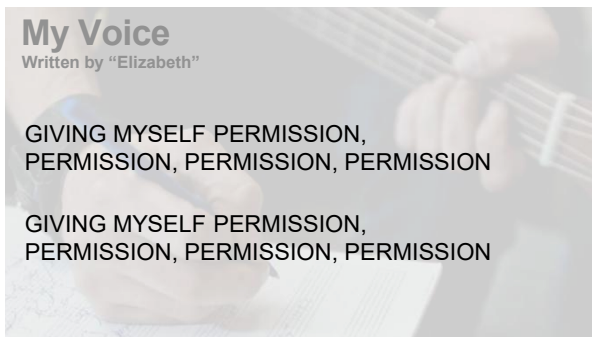


46



My Voice
Written by "Elizabeth"

47



My Voice
Written by "Elizabeth"

GIVING MYSELF PERMISSION,
PERMISSION, PERMISSION, PERMISSION

GIVING MYSELF PERMISSION,
PERMISSION, PERMISSION, PERMISSION

48

My Voice

Written by "Elizabeth"

TO HEAR MY VOICE, AS GOOD AS YOU, TO
HEAR MYSELF, TOO

49

My Voice

Written by "Elizabeth"

GIVING MYSELF PERMISSION TO SHARE
THINGS BOTH GOOD AND BAD.
I WANT TO LEARN TO SPEAK OF THE GOOD
THINGS THAT I SEE.

50

My Voice

Written by "Elizabeth"

POSITIVE, UPLIFTING THINGS, LIKE A
BUTTERFLY OR A TREE.
LIKE THE SUN SHINING ON ME.

51

My Voice

Written by "Elizabeth"

GIVING MYSELF PERMISSION,
PERMISSION, PERMISSION, PERMISSION

GIVING MYSELF PERMISSION,
PERMISSION, PERMISSION, PERMISSION

52

My Voice

Written by "Elizabeth"

TO HEAR MY VOICE, AS GOOD AS YOU, TO
HEAR MYSELF, TOO

53

My Voice

Written by "Elizabeth"

MY VOICE, QUIET AT FIRST THEN LOUDER
AND LOUDER
WE ALL HEAR NEW STRENGTH, COMING
FORTH FROM DEEP INSIDE

54

My Voice

Written by "Elizabeth"

POSITIVE, UPLIFTING THINGS CONFIDENCE
IN SPEAKING OUT
REFLECTING A SOUL THAT HAS GROWN,
LIKE A TALL MAJESTIC TREE

55

My Voice

Written by "Elizabeth"

GIVING MYSELF PERMISSION,
PERMISSION, PERMISSION, PERMISSION

GIVING MYSELF PERMISSION,
PERMISSION, PERMISSION, PERMISSION

56

My Voice

Written by "Elizabeth"

TO HEAR MY VOICE, AS GOOD AS YOU, TO
HEAR MYSELF, TOO

57

Music and Neuroscience Resources

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58

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59