

# Treating Trauma Through Expressive Art



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## Maria Ojascastro

- Mixed Media artist
- Center of Creative Arts faculty
- MFA from Washington University
- Community Arts Trainer
- Siteman Cancer Center
- Kemper Art Museum
- Employee Assistance Program Association
- Brown School of Social Work
- Center for Survivors of War Trauma and Torture

## Erika Ottolini

- Licensed Professional Counselor
- Certified K-12 School Counselor and Teacher
- Master's of Arts in Teaching and Master's of Education in Counseling
- Center for Survivors of Torture and War Trauma
- Open Door International Mentoring program for immigrant youth in St. Louis
- Clinical therapist in private practice specializing in adolescence
- Trained at the University of Missouri - St Louis
- Nationally board certified

# Expressive Art



- Soften experienced trauma
- Gain trust and open conversation
- Examine loss or trauma by creating something physical
- Vehicle for personal expression and healing
- Change representation of feelings
- Express feelings that are beyond words

## Types of Expressive Arts

- Visual arts: drawing, painting, sculpture, collages
- Movement/dance
- Mindfulness: yoga & breath work
- Language arts: storytelling, essays, poetry
- Drama
- Play/sand-tray therapy
- Music & drumming

## Art Therapy vs. Expressive Art



- Practiced by individuals with a Masters in Art Therapy
- Practiced by artists, educators, volunteers, therapists, students...

# Art Therapy

- Requires knowledge of and skills in usage of visual art (drawing, painting, sculpture, and other art forms) and the creative process
- Application of theories and techniques of human development, psychology, and counseling

## Experience, Memory and the Brain

- Memories are “organizing framework” for neural development
- Repeated experiences strengthen neural pathways
- Pathways become sensitized which leads to memory development
- “Indelible impressions of the world” Bruce Perry, MD
- Different types of memories: motor, emotional and cognitive

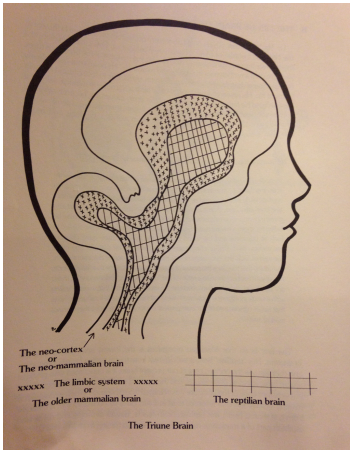
## How Trauma is Experienced, Stored and Re-experienced

- Fragmented memories
- Imprints on nervous system (sensory impressions, emotions, motor patterns)
- Fight/flight/freeze mechanism stuck in repeat when memory gets triggered
- Pattern continues long after event has occurred
- Much of this unavailable to verbal recall

# Trauma and Memory

- Chronic stress/trauma sensitizes neural pathways
- Over-develops certain regions of the brain involved in stress response
- Other parts of traumatized brain remain inaccessible to verbal interactions
- Alternatives to “talk” therapy must be used

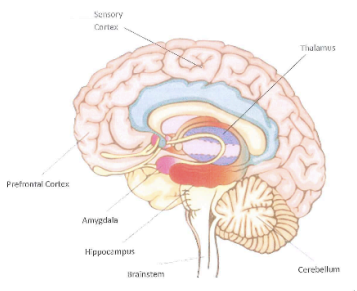
## Evolution of the Brain



- organized from bottom up: brainstem to cortex
- organized from inside out: amygdala to PFC
- Triune brain framework (reptilian, mammalian, neo-mammalian)

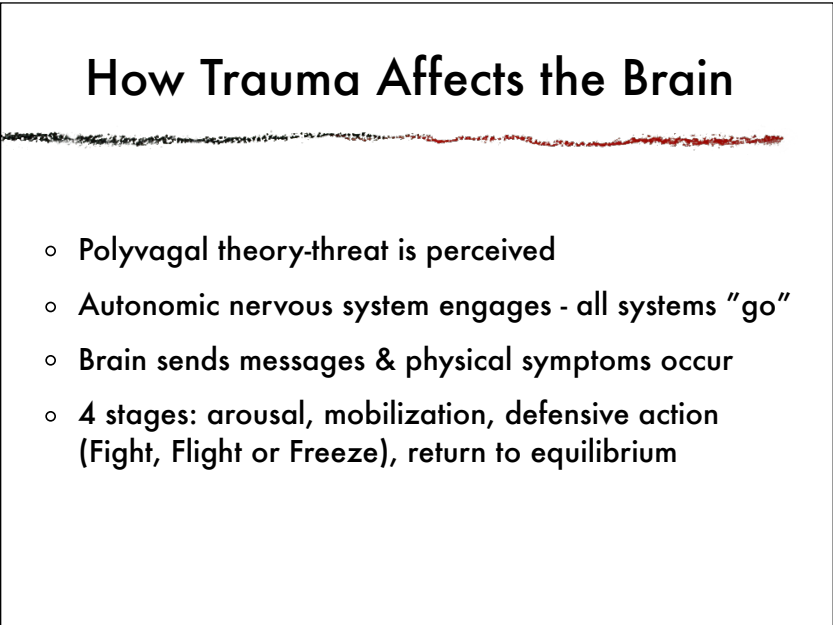
## Key Parts of the Brain Affected by Trauma

### Areas of the Brain



- Amygdala (alarm system)
- Hippocampus (database)
- Pre- frontal cortex (executive officer)



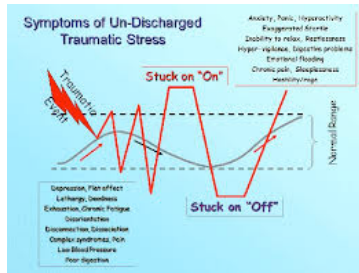
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- ## Review ANS
- Para-sympathetic (fight or flight) and Sympathetic (rest and digest) responses
- 
- The diagram illustrates the Autonomic Nervous System (ANS) pathways. A central brain diagram shows the Medulla oblongata and the Vagus nerve. The Parasympathetic pathway (left) is associated with the Vagus nerve and the Chain of sympathetic ganglia. The Sympathetic pathway (right) is associated with the Chain of sympathetic ganglia and the Solar plexus. The diagram shows the effects of these pathways on various organs: eyes, salivary glands, heart, lungs, stomach, liver, and bladder.
- Parasympathetic**
- Stimulates flow of saliva
  - Slows heartbeat
  - Constricts bronchi
  - Stimulates peristalsis and secretion
  - Stimulates release of bile
  - Contracts bladder
- Sympathetic**
- Dilates pupil
  - Inhibits flow of saliva
  - Accelerates heartbeat
  - Dilates bronchi
  - Inhibits peristalsis and secretion
  - Conversion of glycogen to glucose
  - Secretion of adrenaline and noradrenaline
  - Inhibits bladder contraction

### Para-sympathetic (fight or flight) and Sympathetic (rest and digest) responses



# Problem with "Freeze"



- Fight or flight energy does not get released
- Results in unhealthy states of hyper-arousal and hypo-arousal

# Polar Bear Alert

National Geographic: Polar Bear Alert: <https://www.youtube.com/watch?v=iH8cZrqdHcA>

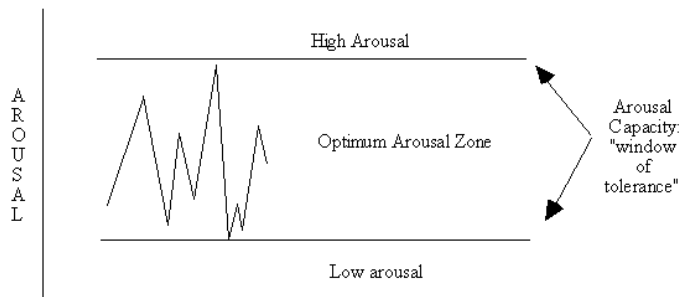
# Healing the Traumatized Brain

- Key to healing from trauma is to open new neural networks
- Accessed through expressive arts
- Hebb's Principle – neurons that fire together, wire together (new memories created)
- Use concept of neuroplasticity - brain has huge capacity for growth, regeneration and healing

# Treatments for Trauma

- All access healing through creation of new neural networks
- Sensorimotor - Pat Ogden, MD & Peter Levine, MD
- EMDR - Bessel van der Kolk, MD
- Attachment healing - Bruce Perry, MD
- Mindfulness - Ronald Siegel, PsyD.

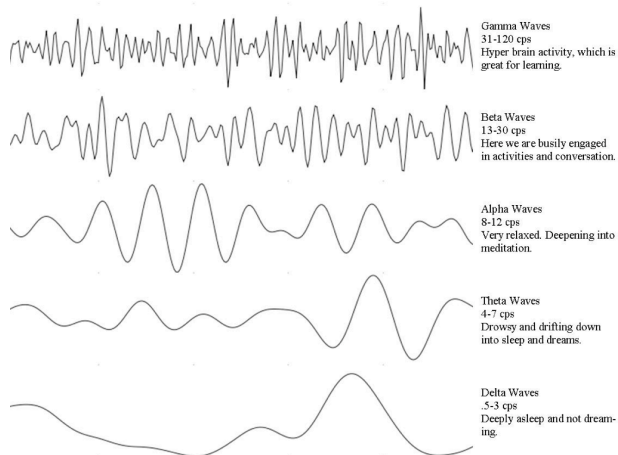
## Window of Tolerance - Pat Ogden, MD.



## How Art Can Positively Alter the Brain

- Puts brain within "window of tolerance"
- Achieves different brain states ideal for healing
- Accesses non-cognitive memories stored in body
- Amygdala calmed and reduced in size
- Cortisol and adrenaline levels decrease
- Dopamine and oxytocin levels increase
- Hippocampus regains normal size and can again recall useful information
- PFC has access to more oxygen, dopamine receptors
- Pathways open up to executive functioning
- New neurons fire and wire together - creating new memories

# Wave Forms of the Brain



## Expressive Art

- Soften experienced trauma
- Gain trust and open conversation
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- Vehicle for personal expression and healing
- Change representation of feelings
- Express feelings that are beyond words



## Soften Experienced Trauma



- <http://www.bbc.co.uk/news/magazine-23415097>

## Gain Trust and Open Conversation



## Examine Loss by Creating Something Physical

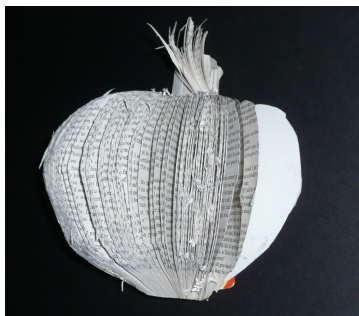


## Vehicle for Personal Expression and Healing





## Change Representation of Feelings



"Art gives feelings a form. If we feel bad about something,... through art we can change the representation of those feelings." Eric Jensen, Arts with the Brain in Mind

## Express Feelings that are Beyond Words



- "With song, brushes and buckets of paint, children in Boston are using the arts to try to express feelings about last week's marathon bombings for which even their parents do not have words"
- "...the children in our community sometimes need a place to express things that are beyond words, and using their hands and having a place to tangibly put their energy is really important."
- "No more hurting people. Peace."

## Volunteers provided art projects at Ferguson library for displaced Students



# Collage



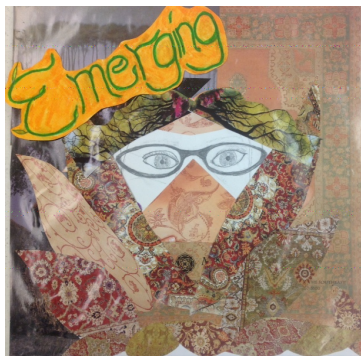
## Basic Materials

- *Magazines*
- *Scissors*
- *Glue*
- *Paper*
- *Markers*
- *Pencils & Erasers*



## Find

- *1 or 2 images*
- *1 or 2 words*
- *1 or 2 textures*



## Textures



## Next...

- Cut
- Glue
- Alter with color
- Be open and enjoy the process!



## Drawing is Thinking

*"The only meaningful work that anyone ever does is work that is done while you don't know exactly what you're doing."* Drawing is Thinking by Milton Glaser



## Optional

- Self-portrait
- Re-draw a word or image



## How to Use Project



## Q & A

## This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.



## Resources:

Arts with the Brain in Mind, Eric Jensen

Brainstorm: the Power and Purpose of the Teenage Brain, Daniel Siegel, MD

Buddha's Brain, the Practical Neuroscience of Happiness, Love and Wisdom, Rick Hanson, Ph.D.

Drawing is Thinking, Milton Glaser

Creative Process in Gestalt Therapy, Joseph Zinker

Expressive Art Therapies, Wendy Miller, MD

Introduction to the Musical Brain, Don G. Campbell

Meditation and Yoga in Psychotherapy: Techniques for Clinical Practice, C. Alexander Simpkins, Ph.D. & Annellen M. Simpkins, Ph.D.

Neuroscience for Clinicians, C. Alexander Simpkins, Ph.D. & Annellen M. Simpkins, Ph.D.

The Body Keeps the Score: Brain, Mind and Body in the Healing of Trauma, Bessel van der Kolk, MD

The Dao of Neuroscience, C. Alexander Simpkins, Ph.D. & Annellen M. Simpkins, Ph.D.

The Child's Mind: Mindfulness Practices to Help Our Children Be More Focused, Calm and Relaxed, Christopher Willard, PsyD.

The Mindfulness Solution: Everyday practices for Everyday Problems, Ronald D. Siegel, PsyD.

Traumatic Stress, The Effects of Overwhelming Experience on Mind, Body and Society, Bessel van der, MD

Yoga & Mindfulness Therapy Workbook for Clinicians & Clients, C. Alexander Simpkins, Ph.D. & Annellen M. Simpkins, Ph.D.

Mindfulness Skills Workbook for Clinicians and Clients: 111 Tools, Techniques, Activities, and Worksheets, Debra Burdick, LCSWR, BCN

Over 60 Techniques, Activities & Worksheets for Challenging Children & Adolescents, Susan P. Epstein, LCSW

Resilience Builder Program for Children and Adolescents: Enhancing Social Competence and Self-Regulation, Alvord, Zucker, Grados

Understanding the Effects of Maltreatment on Early Brain Development, The Child Welfare Information Gateway, October 2001

When Talk Isn't Enough: Embodied Awareness in the Counseling Room, Bessel van der Kolk, MD

Why Zebras Don't Get Ulcers, Robert M. Sapolsky

### Contacts:

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Erika Ottolini [erikaottolini@gmail.com](mailto:erikaottolini@gmail.com); 314/315-2311

### Websites:

Artist Paint Boarded up Storefronts on South Grand <http://vimeo.com/112951272>

Dance the Dream Ferguson <https://www.youtube.com/watch?v=jZL6IMZO68c>

Ferg-Flor students spend week with volunteers, St. Louis American  
[http://www.stlamerican.com/news/local\\_news/article\\_c60a96da-2a3a-11e4-b230-0019bb2963f4.html](http://www.stlamerican.com/news/local_news/article_c60a96da-2a3a-11e4-b230-0019bb2963f4.html)

[www.nicabm.com](http://www.nicabm.com) (site for the National Institute of Clinical Application of Behavioral Medicine)

[www.MusicTherapy.com](http://www.MusicTherapy.com)

Painting for Peace [http://usnews.nbcnews.com/\\_news/2013/04/26/17917140-painting-for-peace-boston-children-turn-to-art-to-heal](http://usnews.nbcnews.com/_news/2013/04/26/17917140-painting-for-peace-boston-children-turn-to-art-to-heal)

<http://paulfromstokeuk.com/> Maria's favorite relaxing music from an independent musician

Poem by Broadway Stars <https://www.youtube.com/watch?v=FpTos6NroM>

Refuges overcome Trauma <http://www.bbc.co.uk/news/magazine-23415097>

Using Creativity to Bring Lasting Change <http://www.iol.co.za/lifestyle/people/using-creativity-to-bring-lasting-change-1.1538425>

## MUSICAL FREQUENCIES FOR HEALING

When a person listens to sounds, vibrations prompt neurons to fire and different activity occurs in the brain based on the frequency of the sound:

1. to activate energy, listen to music with a fast tempo (120-140 BPM); this tempo also calms ADHD.

Ex: most running songs. "Blurred Lines" by Robin Thicke

2. to ward off a cold, play music with a tempo of 80-90 beats per minute (BPM). This tempo enhances parasympathetic nervous system (pns) activity. This in turn reduces cortisol production and increases production of compounds that ward off colds and flu. [According to a study at Wilkes University, 15 minutes of listening at this BPM will boost levels of immunoglobulin A.]

Ex: "Ain't No Sunshine When It Rains . . ." by Bill Withers

3. to sleep more soundly, listen 30 min before bed to music with 60-80 BPM. This slows heart rate and induces relaxation by increasing production of relaxation hormones like oxytocin.

Ex: most '80's dance tunes. "I Love Rock and Roll. . ." by Joan Jett

4. to improve focus, listen to music at 60 BPM. This tempo enhances better concentration on problems and retention of information by activating the hippocampus and the cerebral cortex, key areas of the brain involved in making predictions, paying attention, and committing.

Ex: most relaxation or study music. "The Four Seasons," by Vivaldi

5. to relieve pain or depression, listen to music with a tempo slower than 60 BPM.

Ex: Instrumental music used in massage therapy

### Small Group Discussion Prompts

Even when there is not an “ah ha” moment, the act of producing art is often relaxing. Ultimately, the stress the person came in with is substantially reduced.

“Art seems to affect us beneath the surface of our rational or logical mind. It basically moves the mind to action on a different level, one that is more profound and less describable. “ Drawing is Thinking by Milton Glaser

“Drawing can be considered a form of meditation. Meditation involves looking at the world without judgment and allowing what is in front of us to become understandable. Art, in fact, may be the best we have to experience truth or what is real.” Drawing is Thinking by Milton Glaser

“With song, brushes and buckets of paint, children in Boston are using the arts to try to express feelings about last week's marathon bombings for which even their parents do not have words...Parents and their children turned out... to paint a 100-foot-long roll of wallpaper with swirls of color ...the children in our community sometimes need a place to express things that are beyond words, and using their hands and having a place to tangibly put their energy is really important.” Painting for Peace

“What is essential is the relationship between the hands and the brain. This could be encouraged by any activity where the brain and the hand are unified in an attempt to understand what is real.” Drawing is Thinking by Milton Glaser

“. . . every once in a while, perhaps through meditations or through art, we see freshly and without the encumbrances of our own history. “ Drawing is Thinking by Milton Glaser

“The only meaningful work that anyone ever does is work that is done while you don't know exactly what you're doing. ..” Drawing is Thinking by Milton Glaser

"Art gives feelings a form. If we feel bad about something, through art we can change the representation of those feelings." Eric Jensen, Arts with the Brain in Mind

“I never would ask anyone to reveal something that felt heavy on their heart, unless that's going to make it feel lighter.” Refugees Overcome Trauma