Tradition VS. Neuroscience

We are exquisitely social creatures. Our survival depends on understanding the actions, intentions and emotions of others.

Giacomo Rizzolatti
Biologically Based Fear Responses (Forbes & Post, 2007)

1. Lying
2. Manipulating
3. Stealing
4. Hording
5. Aggression
6. Defiance/“Button Pushing”
7. Poor Eye Contact
8. Food issues
   1. Gorging
   2. Starving
   3. Purging
9. Sleep issues
   10. Enuresis
   11. Encopresis
   12. Self harm

IN THE BEGINNING......

Reptiles hatched their young and then they quickly scurried away.

Then Came The Mammals

As mammals developed their brains grew, requiring maturation to take longer and the young to stay near others to fully develop. Social engagement behaviors developed such as sucking, vocalizing, and changing facial expressions to keep the young connected to the community.
Mirror Neurons

“We are exquisitely social creatures. Our survival depends on understanding the actions, intentions and emotions of others. Mirror neurons allow us to grasp the minds of others not through conceptual reasoning but through direct stimulation. By feeling, not thinking.” ~ Giacomo Rizzolatti

IN THE BEGINNING......

1. The carrot existed before the stick
2. The DOPAMINE REWARD SYSTEM developed to give life sustaining behaviors a reward.
3. FOOD, WATER, NURTURANCE (gentle touch, cuddling, a kind word) and REPRODUCTION all produce mood elevation and euphoria from the release of dopamine.
4. Connection with others is so important, that when you help someone else, you receive two times as much dopamine as you do for helping yourself.

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Looking for Dopamine in all the Wrong Places

Addictions
1. Drugs
2. Gambling

Self harm
1. Manipulating
2. Lying
3. Stealing
4. Hording
5. Aggression

Food issues
1. Gorging
2. Starving
3. Purging

“I am not aware of any other factor in medicine – not diet, not smoking, not exercise, not stress, not genetics, not drugs, not surgery – that has a greater impact on our quality of life, incidence of illness, and premature death from all causes.” – Dean Ornish MD, on the healing power of love and intimacy

Love & Survival

The Scientific Basis for the Healing Power of Intimacy

DEAN ORNISH, M.D.

“Tradition vs. Neuroscience
Fear vs. Love
There is no fear in love, for love drives out fear.” – Paul Tillich
John the Evangelist

Finding Hope LLC
Tradition vs. Neuroscience
Fear vs. Love

Tradition and Fear
1. Anger is a primary emotion.
2. When people act out they are being 'willfully disobedient, manipulative and controlling.' (Forbes, 2010 pg. 11)
3. When children’s early needs are not met, they become enrage, angry and vindictive.
4. They become contemptuous of people and are “doomed to a life of hurting others.” (Randolph, 1997)

Neuroscience and Love
1. “There only two primary emotions: love and fear.” (Forbes, 2010 pg. 11)
2. “People act out because they are afraid. Behavior is the language of a person who has lost their voice.” Karyn Purvis
3. When one’s needs are not met they experience overwhelming stress and fear, which damages their ability to regulate and control their impulses.
4. Humans act out as a survival mechanism when they have not experienced protection.

The Anger Onion

In the brain...
Irritation = Threat

(Forbes & Post, 2007)

You will see or feel anger, aggression, risk taking & self-injurious behavior...

Think sadness or fear

Tradition vs. Neuroscience
Fear vs. Love

Tradition and Fear
5. The only way to break people of anger based control, is to provide them the swift, harsh consequences geared at breaking their will and teaching them that they must trust adults.

Neuroscience and Love
5. A strong will helps a person get the attention they need to survive. When one must accept negative attention over positive, one’s spirit is already broken.

Obedience developed by breaking one’s will is learned helplessness not trust.
Belief Systems: The Merging of Implicit and Explicit Memory

**Explicit**
- Is language based
- As a person matures, explicit memory starts and is woven together with implicit memory
- Our implicit “early lessons” when woven into explicit memory become “facts of life” belief systems that we seldom think to question

**Implicit**
- Majority of memory is implicit
- Implicit memory – includes sensory (visceral or body), emotional and procedural (picture) memory
- Often called “early memory”
- Most important social and emotional lessons occur during our earliest years, so we have little or no explicit memory of this because our hippocampus is not yet matured
Safety Script

This is a safe place, and I won’t let anyone ________
(name the behavior you want the person to stop), so I can’t let you __________
(again name the behavior you want them to stop) because this is a safe place.
Workbook pg. 10 & 11

The Stress Model:
The Individual’s or Child’s response

1. Implicit (visceral, emotional, body) memory comes in first at 1/14 millionth of a second.
2. Fear overacts our amygdala putting us into fight or flight or tend and befriend.
3. Anger is released to help us feel safe.
4. The overstimulation response kicks in (yelling, crying, pushing, clinching, throwing, hitting, AKA acting out or tantruming.)
5. Thinking becomes stressed and distorted and information cannot get to the cortex.
6. Empathy and understanding goes out the window. All our mirror neurons are seeing is fear which starts the cycle again from the top.
Wkbk. Pg. 24

The Stress Model:
The Staff’s or Caregiver’s response

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Wkbk. Pg. 24
The Stress Model: Rinse and Repeat

When this occurs repeatedly, Survival mode takes over which puts the limbic system and the implicit memory are fully in charge triggering:

1. Living in the past (Re-enactment symptoms)
2. Avoiding the present (Avoidant symptoms)
3. Worrying about the future (Hyperarousal symptoms/foreshortened future) \(\text{wkbk. Pg. 24}\)

Working with Trauma

There will be unknown traumatic cues like transitions, boredom, crowds, loud noises, laughter, bathing, going to their room, the basement, the garage, shed or the car, closets, belts, quick movements...

**The individual needs** Commitment, Empathy (it is not about you even though it affects you!) and Unconditional Love

**The caregiver needs:** Self care, Safe Connection with others That provides the parent commitment, empathy & love, and Translation of an individual's trauma symptoms.

Power Struggles: A Lose – Lose Battle

- If you WIN the Power Struggle...
  - You are now associated with the perpetrator; the person who had power over them and hurt them.
- If you LOSE the Power Struggle:
  - You are now associated with the person who did not protect them.
Fear (the limbic system) sees problems. Love (the cortex) sees solutions.

When power struggles occur repeatedly, both the caregiver and the individual have had multiple limbic hijacks until their nerves are raw.

Any negative experience either one has had trigger visceral (body) memories played out in their interactions.

Both see no hope for change or the future, and just want it to STOP!

Stop and...

1. Take a deep breath

2. Refocus and reframe the situation as a double limbic hijack. “You are both experiencing raw, painful emotions.” (Forbes, 2010 p.42.)

3. Walk away, if at all possible, so you can calm (regulate) and re-engage your cortex (thinking/loving brain.)

4. Remind yourself that while this is affecting me it is not caused by me and it does not reflect how the person feels about me – no matter what they say!
To tone down your buttons:

1. Identify the triggers to your implicit memories
2. What might have happened to me when I was the client’s age or lately?
3. What do I expect and how did that come to be my expectation?

*It’s most helpful to do this in advance of the stressor by making it a regular part of your day*

SOCIALIZING WITH SHAME

“The primary social emotion” - makes its initial appearance at 14 to 16 months. (Schore 1991)

“At 10 months, 90% of maternal behavior consists of affection, play and caregiving. In sharp contrast, the mother of the 13 to 17-month-old toddler expresses a prohibition on the average of every 9 seconds. In the second year, the mothers’ role now changes from a caregiver to a socialization agent, as she must now persuade the person to inhibit unrestricted exploration, tantrums, bladder and bowel function” (Schore, 1991)
SOCIALIZING WITHOUT SHAME
The Safety Script

“This is a safe place, and I won’t let anyone __________ you, so I can’t let you __________, because this is a safe place.”

Wkbk. Pg. 10 & 11 & 25

No Blame or No Shame

- People are coping the best way they can -- our job is to help them find a better way.

- Requires building trust, creating safety, and staff sharing a trauma informed culture that creates a safe and healing environment

- Healing takes more than therapy. Support services can create therapeutic, healing experiences.

Biologically Based Fear Responses (Forbes & Post, 2007)

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Lying

Traditional and Fear
1. This is another way the person attempts to take control, assert power and avoid punishment.
2. It is a way or the person to impose the chaos they thrive on and that they are experiencing in their minds on others that they want to hurt.
3. Some people are born liars – These are the people who lie "for no reason."
4. It is a hallmark of "anti-social children." (Forbes, 2010, p. 46.)

Neuroscience and Love
1. It is a survival based behavior. It feels like life or death to them, so they will hold onto the lie at all costs.
2. The lying behavior is not directed at you personally (even though it affects you.)
3. The person is acting from past trauma experiences
4. A person cannot be taught the moral lesson of lying when they are in the act of lying. (Wkbk. Pg 28 - 29)

Lying is Learned When

Reality is not allowed to be real
The truth is what you need it to be to get the job done
(Wkbk. pg. 28 – 29)

Interventions for Lying
Identify their goal = their perceived need for the lie.
1. To Avoid Punishment?
2. To access a perceived need?
3. To solve a problem
(Wkbk. Pg. 28 - 29)
<table>
<thead>
<tr>
<th>Challenges</th>
<th>Strengths</th>
<th>I am Feeling</th>
<th>I need</th>
<th>Interventions</th>
<th>Person Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lying</td>
<td>Determined &amp; Creative</td>
<td>Afraid of Punishment</td>
<td>To be told &amp; shown that this is a safe place to make a mistake and tell the truth.</td>
<td>1. Identify safe people to ask. 2. Develop with them the words to tell what really happened. 3. Practice saying what happened. 4. Highlighting that they are still safe.</td>
<td>Who could help with this in your system? Name all people &amp; their roles that apply.</td>
</tr>
</tbody>
</table>
| Lying      | Determined & Creative | Trying to meet a perceived need | Help identifying the need & finding a new way to meet it. | Focus & reflect the underlying wish (need not the accuracy of the content. E.g., "It would be great to be able to..."

**Intervention for Denial**

“Right now I know it’s important for you to believe that you did not do that, but we’re going to keep talking about and working on these things.”

~Eliana Gil, (2013)
# Manipulation

*(The consolation prize of the disenfranchised)*

Is nothing more than a survival skill learned by those who do not have direct access to the resources they need to survive.

To address manipulation, teach people how to:
- directly seek what they need
- when it is safe to do so and
- identify and teach the safe adults in their lives to respond directly.

Wkbk. Pg. 29

<table>
<thead>
<tr>
<th>Challenges</th>
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<tbody>
<tr>
<td>Strengths</td>
</tr>
<tr>
<td>Struggles</td>
</tr>
<tr>
<td>Successes</td>
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<td>I am Feeling</td>
</tr>
<tr>
<td>I need</td>
</tr>
<tr>
<td>Interventions</td>
</tr>
<tr>
<td>What interventions would help meet these needs?</td>
</tr>
<tr>
<td>Person Responsible for the intervention (i.e.: CPST/therapist/parent/MD, etc.) (if known)</td>
</tr>
<tr>
<td>Who could help with this in your system? Name all people and their roles that apply.</td>
</tr>
</tbody>
</table>

| Manipulation |
| Determined & Creative |
| Afraid of asking directly for what I need or want |
| Practice with safe people directly asking for what I need or want |
| 1. Without charming, help them identify the difference between wants & needs. |
| 2. Identify safe people to ask. |
| 3. Develop with them the words to ask directly. |
| 4. Practice asking directly |
| 5. Rinse & Repeat |

# Stealing

1. Stealing is another way for the person to gain control over adults.

2. It is a way for the person to fill the empty holes in their heart.

3. Do not allow the person to borrow things “or accept undeserved gifts.” *(Thomas, 1997)*

### Neurobiology and Love

1. Stealing is an external attempt to gain dopamine to calm dysregulation. It is a addictive behavior.

2. Stealing creates a rush which is the release of dopamine, the neurochemical released when someone experiences love.

3. Reconnect the dopamine reward system with positive relational experiences.

Wkbk. Pg. 30
What an individual needs from you to stop stealing

1. Keep them close to you.
2. Give their hands something to do like hold a list or push the cart or a young child can hold your hand.
3. With a teen or adult explain the role of dopamine and help them identify other ways to get it.
4. For Therapists: Have them draw how they feel when they are entering the store. Have them draw how they feel when they steal and identify what else gives them these feelings.

**Hording and Gorging**

**Tradition and Fear**
1. The person uses food to create conflict to remove themselves from the emotional bonding that occurs at mealtime.
2. People horde and gorg food to receive nurturance without attachment.
3. To regain control, put locks on the pantries and refrigerators & alarm their bedroom doors to avoid eating in the night.

**Neurobiology and Love**
1. The person still has body memories of not being loved and fed.
2. The person did not receive the nurturance that comes with being fed or the regulation the comes from the eye contact during that process.
3. These people learn that soothing & regulation happens not in connection with relationship but in connection with food.

What an individual who is gorging and hording needs from you:

1. See this behavior as a sign of stress. Remain patient and know they are not doing it to upset you (even though it affects you.)
2. Approach them with empathy not shame.
3. Encourage them to talk with you about how they’re feeling so you can help them with negative feelings and celebrate with them the positive ones.
4. Normalize the desire to eat when stressed and offer to help each other when you are worried.
5. Provide the person with healthy snacks they can access at will.
Interventions for Food Issues

1. Discuss favorite foods
2. Plan menus
3. Have caregiver or positive person do steps 1 & 2 and go shopping for the food with client
4. Make placemats
5. Identify what they would like to talk about over dinner
6. Prepare & enjoy a meal together
7. Plan ways to have weekly if not daily meals with positive people (Resilience factors 1 & 2)
8. Plan birthday parties or other celebrations

Kitchen Set & Toy Food

Food = Love (AKA Nurturance)

- Neglect will be acted out through stealing and/or hoarding of food
- Sexual Abuse will be acted out on food
- Cooking, in play or at home, with a caregiver or safe adult is very healing

Mom and Baby Interventions

We have noticed that our young people raised in domestically violent homes, when introduced to the playroom go to the baby dolls, hold them, cuddle them, feed them, and rock them — even the boys do this almost instinctually. It is so exciting as you see their brains drawing them to what they need to heal; the very interactions they missed.

Proving once again...We are hardwired for connection!
Aggression

**Tradition and Fear**
1. Trauma survivors thrive on a high level of adrenaline.
2. They come from violent environments “and are comforted by it.” (Forbes, 2010, p. 72.)
3. It is a way for the person to create the same chaos around them that they feel inside. *(wkbk. Pg. 32)*

**Neuroscience and Love**
1. Aggression is a fear based response caused by a limbic hijack. An angry person is a scared child.
2. They have neuronal maps for aggression as a way to solve problems and deal with stress.
3. They are afraid and seeking regulation.
A person acting aggressively, needs you to:

1. Understand that the person is not trying to create chaos because chaos does not feel good even if it is familiar.

2. Understand that the person is seeking regulation.

3. Address your own fear and stay regulated, so you can help the person regulate. Create the atmosphere you want in the room.

4. The louder their voice gets, the quieter you should get.

---

**Aggression**

5. **Breathe** – Take slow deep breaths, it will help them do the same. It will change the atmosphere in the room.

6. Remind the they are in a safe place.

7. Use the safety script for limit setting.

8. Replace, “Calm down” with “How can I help you feel safe?”

---

**Defiance**

**Tradition and Fear**

1. They are testing limits to challenge the adults in charge.

2. They are doing this to gain control over the relationship.

3. If they do not complete a task, they are being manipulative and controlling.

4. Parents must force them to comply before they can have a healthy parent-child relationship.

**Neurobiology and Love**

1. Defiance is a fear reaction preceded by a freeze. If pushed, it will result in more fear and lead to aggression.

2. The person perceives a request as a threat.

3. Trauma damages short term memory and the ability to sequence, so they often cannot complete the task requested.

4. They have trouble in predictable areas: schoolwork, chores, bath time, bedtime & all transitions.
Someone who is being defiant needs:

Help predicting and protecting:
1. Predict, Practice and Plan
2. Give a 5 minute warning for transitions
3. Connect the request/limit with safety
4. Give clear, concrete descriptive vs. evaluative directions
5. Give space (physical & emotional) for compliance
6. Pay it forward - Tell them what you know they are going to do (that is positive)
7. Use a Success Calendar to record daily something they did to accomplish something in a positive way, made the world a better place, helped someone, etc.
8. Use Descriptive instead of Evaluative praise

Descriptive VS. Evaluative Praise

Descriptive:
- Describes qualities and allows the listener to identify the value.
- Is specific
- Highlights the area in between; the “shades of grey”
- Promotes an internal locus of control

Evaluative:
- Describes the value as seen by another.
- Is general
- Promotes binary “either or” thinking
- Promotes an external locus of control

Descriptive VS. Evaluative Praise

- **Descriptive**
  - You have made a picture with bright colors
  - You found a way to keep them safe
  - You walked away instead of fighting with your brother!

- **Evaluative**
  - What a pretty picture
  - I like the new ending to your story.
  - Good job avoiding a fight
Interventions for Sleep Issues & Nocturnal Enuresis

Before Bed:
1. Identify daily successes
2. Rewrite unpleasant parts of the day
3. Identify one challenge from the day
4. Make plans for the challenge
5. Write dreams
6. Remind the individual they can change dreams while having them

Interventions for Morning Issues

Waking Up with Diana Ross
1. Before bed decide with the individual on a wake up song. It can be one you make up together or one that you both know.
2. In the morning open the blinds and let some light in for 5 – 10 minutes.
3. Return to the room and start singing the wake up song.
4. Over time, have a contest to see who starts singing the wake up song first.
Interventions for Oppositional-Defiance: Bath/Shower Time

Remember:

• Bath time issues are fear based (often trauma related.)
• Body memories can be triggered by the removal of clothes or the act of bathing itself
• Many survivors may have attempted to keep themselves safe by not bathing in the hopes it would keep the perpetrator away.

Interventions for Oppositional-Defiance: Bath/Shower Time

• Offer to sit outside the door or bring in a transitional object that reminds them of you.
• Make sugar scrub with them
• Make bath time playtime with younger people using shaving cream, bubbles, toys, dolls and animals to clean, containers for filling and dumping.

Homework, Room Cleaning & Chores, OH MY!

Finding Hope LLC
When it is time to clean your child’s room, they need you to:

1. Remember the bedroom is a mind field of visceral trauma memories.
2. They cannot sequence and have a damaged short term memory.
3. Work to your (both the person & yours) favorite music.
4. Make it a playful activity you do together to give them positive memories to replace the negative memories.
5. Make list of things you will accomplish (not things you must do), hang it up & celebrate as you complete each task.
6. Note how the two of you make a great team and reminisce about other things you’ve accomplished with together.
7. Use lots of descriptive praise!

Trauma Survivors will need help with:

- Transitions AKA Shifting cognitive set = The ability to shift from one mind-set to another.
- Problem Solving = the ability to organize a coherent plan
- Requires the coordination of the Hippocampus and the Cortexes
- The amygdala can interfere with this when it must set off flight or fight chemicals too often.

Interventions

Transitions:
1. 5 – 10 minute warning using a timer that shows the time passing with color not sound
2. Visual Schedules
3. Replace “No & Stop” with “Yes you can (when) & “Pause

Problem Solving:
1. “Bored” box
2. Homework/Chore/ Play Cards the individual can organize in any order they want.
3. Red, (Orange) Yellow, Green cards to indicate need for assistance
4. Red & Green snack cards
Other ways to say “NO”

**Hard to process words:**
1. Stop
2. No

**Easier to process replacement words:**
1. Pause
   - Hold that thought
   - That does not work for me/us, but ____ does.
   - You can finish or return to this
2. Time out
   - That does not work for me/us, but ____ does.

---

“No!” In Translation

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<th>No, I won't do it</th>
<th>No, I don't want it</th>
<th>Not now, later</th>
<th>No, you can't have it</th>
<th>No, I don't like it</th>
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“No!” In Translation:
Find a way to say each without using the word No

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### No! In Translation:

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### Regulation through Relationship

The first duty of love is to listen
Paul Johannes Tillich

### IS SELF-REGULATION A MYTH?

- Connection is so important that the area of the brain that controls facial expressions also regulates our heart and lungs.
- This means we can regulate our bodies through emotional expressivity, ingestion of food, (Yes, food IS comforting), listening and social engagement.
- We are designed so social relationships can calm us and support health, growth and healing.
SAFETY
The Building Block of Connection

- Our first experiences of safety occur in relationship.
- SAFETY (and fear) are felt first at a visceral (physically in the body) level.
- Messages are then sent from the viscera (internal organs) up through the body into the brain.
- What are your safe relational images? Where do you feel them in your body?

Experiences which strengthen connections also Improve Regulation (Rintoul, 1999)

1. Frequent, regular, and predictable
2. Occur in the context of a safe, warm, supportive relationship
3. Are associated with positive emotions (fun, humor, excitement, comfort)
4. Involve several senses
5. Are responsive to a child’s needs, interests, or initiative.
Ways to Help Someone Improve Their Emotional Regulation

1. Improve your own regulation – You can change the tone of the room with your presence.

“We are the environment of relationship.”
Carol Hudgins-Mitchell

2. Refocus and Reframe: Remember, it’s not about you (although it may be affecting you) or even about the behavior, it’s about the other person not feeling safe & being in a state of dysregulation

Ways to Help Someone Improve Their Emotional Regulation

Build a sense of safety with:

- Routines and Rituals – visual, color coded or tactile calendars can help
- Predict and Plan for each change or transition and even practice unexpected changes – Take turns picking who gets to plan the unexpected change practice.
- Refocus and Reframe when accidents happen – You can practice this too.

Ways to Help Someone Improve Their Emotional Regulation

Respond to the emotion rather than the behavior

- Get on or below eye level to engage mirror neurons
- If you can move closer, safely, do so
- If the individual backs away, step back a bit
- Talk softly
- Reflect the feeling - Using empathic feeling statements
- Breathe slowly – It will help the other person do the same
Ways to Help Someone Improve Their Emotional Regulation

- Sensory Soothing
  - Soothing activities that include rocking, music, rhythmic breathing and patterned thinking such as prayer, meditation, yoga. Meditation grows the calming parts of the hippocampus (limbic system)

- Occupational therapy techniques

- Create together transitional objects

Contact

Name: Carol Hudgins-Mitchell, M.Ed.; LSW; NBCCH
Title: Consultant & Trainer with Finding Hope Consulting, LLC
Phone: 513-256-2267
Fax: 513-677-0084
Email: Mschm01@zoomtown.com

Name: Mary Vicario, LPC-C-S
Title: Founder of Finding Hope Consulting, LLC
Phone: 513-680-4673
Fax: 513-245-0144
Email: Findinghopeconsulting@gmail.com