### Tri-County Batterer Intervention Provider Network Meeting Minutes March 13, 2018

Present: Chris Huffine (Allies in Change); Jason Kyler-Yano (Portland State University); Jacqueline Pancoast (Eastside Concern); Regina Holmes (ARMS); Matt Johnston (DVSD); Linda Castaneda (Castaneda Counseling); Nanci Jarrard (VOA Home Free-Safe Start); Tammie Jones (Multnomah County DV Court)

Minutes by Jason Kyler-Yano, edited by Chris Huffine

# Presentation: Neurobiology of Trauma by Chris Wilson, Psy.D.

Introduction/Background: After getting his doctorate Chris Wilson did BIP work at the Men's Resource Center and Allies in Change. He developed a specialized practice in evaluations with abusive men. His current focus is on the neurobiology of trauma in DV and in general in the U.S. and internationally. He works with law enforcement, courts, military, and others. He usually gives talks on the neurobiology of trauma in victims but today he'll talk about the neurobiology of trauma in perpetrators as well. He has seen guys who made great change in group and then say that they don't understand why their partners haven't seen their change and don't treat them differently based on that change. Today's talk will explain what we know about how the neurobiology of trauma influences perpetrator change and partner resistance to change. This sort of thing shouldn't be shared with psychopathic individuals because they are able to use this info to improve the effectiveness their controlling perpetration.

Disclaimer: Abusive behavior is always the choice of the abusive person. There is no excuse for this behavior, including trauma. However, understanding how trauma affects the brain can help us identify where we need to focus our efforts in getting abusive partners to change and how to more effectively help them with this change process. Trauma doesn't cause abusive behavior, but it can aggravate it as well as complicate efforts to help change those behaviors.

### Organizing:

How we organize others is how we let others know what we want. Organizing is demonstrated and executed through conversations and interactions through words, attitudes, bodies, tones, and facial expressions. Abusive men organize their partners based on all of these means of communications *and* with their abusive behavior. The addition of fear and threat to organizing becomes a powerful way to influence people. This "abusive organizing" trains victims below their consciousness, or in other words, sub-cortically. In groups, organizing can be seen through how men organize the stories they tell about their partners, and how they organize the group and each other (positively or negatively). The concept of organizing can also be used to disarm abusive men by asking, "how are you organizing your partner in this experience?" before using "power and control" language.

Brain Basics: Trauma and the Brain

Experiencing extreme threat, terror, and/or horror plus a lack of control and/or perceived control can lead to real changes in the brain both at the time of a traumatic incident as well as after the incident. When the brain behaves in ways that we label as symptomatic of PTSD, it is necessary to acknowledge that it is merely doing what it is programmed to do. As such, in some ways the "Disorder" label in PTSD is somewhat misleading and inaccurate. It is safe to assume that many participants in BIPs have some history of trauma.

#### Brain Basics: Circuitry and Networks

Brain circuitry that has been baked into our brains over centuries (i.e., when we were more prey than predators), is made up of attachment circuitry and defense circuitry. Attachment circuitry is reflected in a low resting heart rate, a calm demeanor, and making eye contact. The execution of the parasympathetic nervous system that slows us down and results in these attachment circuitry characteristics is based on the sense of safety and comfort that first developed when we were group-based communal communities. Conversely, the defense circuitry is reflected in an elevated heart rate, an anxious demeanor, and darting eyes. The execution of the sympathetic nervous system mobilizes our systems in preparation to defend ourselves. Experiencing trauma can lead to a "sensitized defense circuitry" even after only a single incident and can have long lasting effects that can't just be wished away by a changed partner.

Brain networks are formed after repeated activation of the same neurons in order to increase efficiency and can be understood through the phrase, "when neurons fire together, they wire together." Trauma can change the circuits and networks in both the abusive partner and the victim. One implication for abusive men of long established brain networks are that short programs are not enough to change a neural network.

# Brain Basics: Prefrontal Cortex and Limbic System

The prefrontal cortex is the part of the brain that is responsible for top-down attention and focus, the integration of data, and logical decision making. It allows us to talk about our experiences, feelings, identities, and beliefs, but can be compromised in the face of stress. As such, a participant or a victim overcome by stress might not be able to tell their story coherently in part because of this compromised prefrontal cortex. When we are under immense stress, we are also not relying on logic and instead relying on our neural networks that have been developed over years of repetition and reinforcement of habits. If our habits include controlling and abusive organizing, then the associated behaviors are what we will fall into in times of stress.

The limbic system is the set of coordinated parts of the brain responsible for encoding and consolidating memories (in preparation for more advanced work by the prefrontal cortex). The limbic system is where the defense circuitry operates. When the limbic system is tasked with processing traumatic memories, the hippocampus, which is responsible for contextualizing different sensory inputs, has a difficult time labelling and grouping information and memories together.

### Brain Basics: Threat and Vigilance

The brain is constantly mapping the environment for safety and threat through a pattern recognition process called neuroception. Our map of safety and threat are influenced by our past

experiences as well as our socialization. When we are socialized to and our experiences lead us to be overly vigilant then we overly interpret stimuli as threatening, whether or not they are actually a threat to us. The process of building a vigilant map of threat occurs in part because our mirror neurons help us react in habitual ways in response to familiarly threatening stimuli. These mirror neurons are connected to the limbic system so that when we see an angry face, we mirror the face and those mirror neurons become connected with the angry emotion. This association is then sent to the prefrontal cortex to interpret.

So in part, our job is to reveal to our guys the unconscious associations their brains are making and to support them changing their conscious awareness of interpretations of emotions in our mirror neurons. Knowing this can inform how we interact with participants, particularly by communicating with them using "soft eyes" (that reflect empathy for their situation and their humanity) and by providing transparency when choice is not available to them. Soft eyes and transparency promote procedural justice which essentially tells men that "despite this consequence that you are having to face (and perhaps that I am having to deliver to you), I still honor your experience and humanity."

Vigilance is influenced by neuroception (for example a vigilant reaction to hard but not soft eyes) and is subjective and contextual. An example of how men's privilege influences their perceptions of threat and their levels of vigilance can be seen in their relatively lower experiences of threat, compared with women, when walking down a dark alley or street. Threat detection involves the amygdala which is a sub-cortical structure that assesses and maps threat below consciousness. The subjective and contextual characteristics of vigilance help us to understand how victimization that occurs in a place where you are supposed to feel safe causes neuroconflict. An intimate partner is supposed to map onto safety and attachment circuitry but is subjectively experienced as threatening when they are abusive.

Three takeaways about threat and vigilance that relate to our work with abusive partners are 1) participants may perceive facilitators behaviors as threatening, 2) partners may perceive facilitators behaviors as threatening, and 3) threat perception comes before thinking/logic.

# The Brain and Long-Term Threat:

When we experience high stress and fear, our prefrontal cortex becomes impaired and our defense circuitry takes over in order to protect ourselves. An impaired prefrontal cortex and an engaged defense circuitry means that we are less able to have top down attention, to integrate data, and to make logical decisions. What do we have in these situations? We have habit and reflex. Since we evolved as prey, our first reaction is most likely to assess, then flee if possible (to live another day), and then fight to aid in our fleeing. Secondary aggression is fighting in service of fleeing. This is not the case with our guys when they are acting abusively. They do not fear for their lives when they fight (they generally demean their partners' defensive fighting is cute), and instead only flee if they are worried about getting in trouble (e.g., arrested) for fighting.

Some victims never flee or fight because of the development and activation of their attachment circuitry after being groomed by their perpetrator to map him to safety inhibits their threat circuitry. We default to attachment circuitry so when there is circuitry conflict with threat,

attachment wins a lot of the time. Losing control from circuitry conflict, fear, and the realization that abuse is not stopping can lead to mental defeat which can be seen in survivors "giving in" to marital sexual assault and reflexive immobilization (e.g., dissociation, freezing). We can think of abusive men as sharks disguised as dolphins. They take advantage of the attachment circuitry which dampens your threat circuitry with oxytocin by posing as dolphins that we want to associate with because people don't want to date sharks.

Traumatic memories can lead to bottom up attention and memory based on an emotional reaction instead of a top down prefrontal cortex reaction which makes it difficult for victims to identify accurate characteristics. Because our memories are based on sensory information, traumatic memories are influenced by altered encoding and consolidation. The long-term impact of traumatic memories include hypersensitive amygdala, poor differentiation between threat and safety, and hypervigilance. These long-term effects can be seen in victims' behaviors as well as BIP participants' hypervigilance to facilitators.