

# **Trauma Informed Additional Programme (TIA-P) – Using group EMDR for working with victims and perpetrators who come into contact with forensic services**

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# Content

- Defining and understanding trauma
- Trauma – the client in the room
- EMDR as a treatment for trauma
- TIA-P
- Outcome data
- Implications for practice

# Running a standard offending behaviour group...



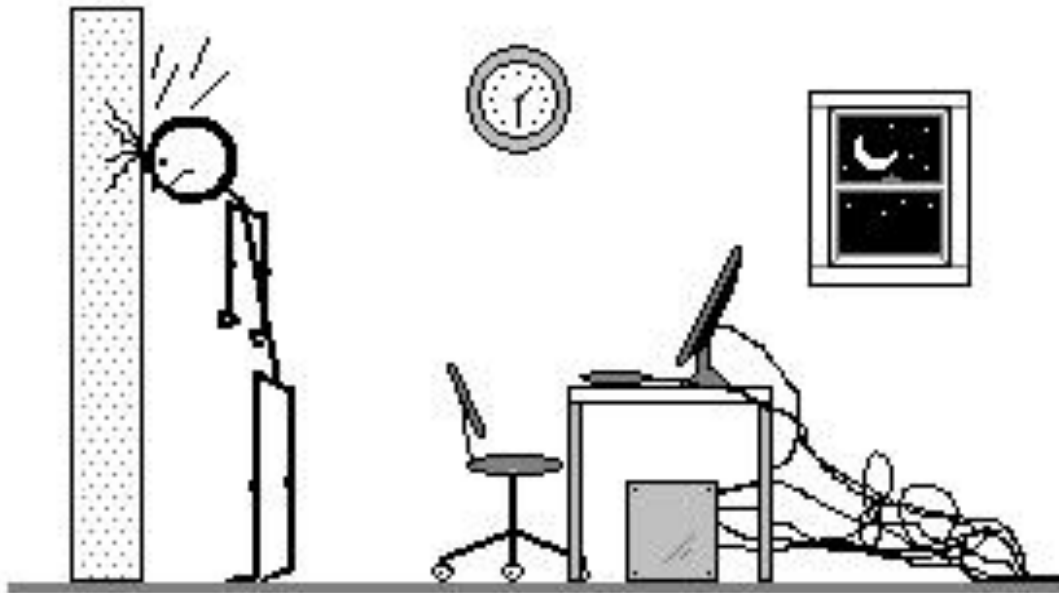
# Running a standard offending behaviour group - continued



# Running a standard offending behaviour group...



# Running a standard offending behaviour group...



# Running a standard offending behaviour group





# Running a standard offending behaviour group...





# Efficacy of treatments..

- High drop outs
- Poor retention of knowledge
- Poor treatment effects

Why?

# Effects of Trauma

- 1) Reminders of the exposure (flashbacks, intrusive thoughts, nightmares)
- 2) Activation (including hyper-arousal, insomnia, agitation, irritability, impulsivity and anger)
- 3) Deactivation (including numbing, avoidance, withdrawal, confusion, de-realisation, dissociation and depression)

# 1) Reminders of the exposure

- Neurological processes can serve to increase the way in which trauma memories are stored and rehearsed. This has been noted to occur under exposure to stress which causes the release of glutamate chemicals in the brain which affect the plasticity of receptors.
- Sherin and Nemeroff (2011) noted that this can result in difficulties with learning and memory, thereby contributing in all likelihood to consolidation of trauma memories in PTSD.
- According to de Quervain (2008), norpinephrine and stress hormone activity may be critically involved in the processes of learning and extinction, both of which are “abnormal” in PTSD. That is, the client over learns fear responses and cannot extinguish fear. For example, norepinephrine enhances the encoding of fear memories and glucocorticoids block the retrieval of emotional memories which, when combined, explains the way in which flashbacks and re-experiencing the trauma may occur.
- In addition, it has also been noted that in those exposed to trauma, rehearsal may take the form of both nightmares and flashbacks of the experience (Duke et al., 2008) as well as fear which Jarymowicz and Bar-Tal (2006) suggest could lead the individual storing both conscious and unconscious memories which can lead to “pre-emptive aggression” (p. 367). This could include a client engaging in an apparently “unprovoked attack” on others because in their mind others are going to attack them even when there is no evidence of this. An example could be a client attacking staff or police who simply want to talk to them.

## 2) Activation Effects

- It is noted that physical abuse in childhood has been associated with predicting antisocial deviance in adulthood (Manly et al., 2001) and that physical, verbal and emotional abuse are significantly associated with antisocial lifestyle traits (Patrick et al., 2007).
- A history of childhood abuse has also been associated with impulsivity, irresponsibility, hyperarousal, reduced trust, intensified negative emotions and proneness towards boredom and a need for stimulation (Solomon and Heide, 2005).
- Furthermore, Jaffee et al. (2004) noted that a child exposed to maltreatment may develop antisocial traits even in the absence of genetic vulnerabilities and an increased likelihood of using violence. Hence, clients may present during assessments and treatment as mistrusting, suspicious of the professional's motives, believing that others are out to cause them harm even when they are kind to them and their emotional responses may appear disproportionate to the situation.
- Sustained hyperactivity of the autonomic nervous system which is exhibited by elevations in heart rate, blood pressure, skin conductance, and other psychophysiological measures (Sherin and Nemeroff, 2011). These are all bodily functions which are associated with "flight" responses in terms of preparing the body to escape from danger.

## 2) Activation effects continued

- They may also present with increased “fight” responses due to changes in brain chemistry. Thus, telling them to “calm down” or telling them they are “safe” is not sufficient because their body is telling them otherwise. In addition, deficits in the hippocampus may also make it difficult for them to switch off this stress response and judge what is a safe and unsafe environmental contexts (Pitman et al., 2002).
- Simply expecting the client to “calm down”, therefore, is unlikely to be effective. Furthermore, once triggered, changes in the frontal cortex mean that it is more difficult for the client to inhibit their response (Rauch et al., 2003).
- PTSD clients also show increased amygdala responses to general emotional stimuli that are not trauma-associated, such as emotional faces in terms of finding these subliminally threatening (Bryant et al., 2008). Thus, what may appear as a safe, contained and calm environment may to the client appear terrifying, threatening and an object to protect themselves from.
- Todorov and Bargh (2002) suggested that individuals who are exposed to aggression related stimuli develop hostile attributions which influence their social information processing and that this is outside of the person’s conscious control (Linder et al., 2010). Furthermore, Zelli et al. (1995) found that aggressive individuals only made unconscious hostile attributions when asked to give automatic and spontaneous responses as opposed to controlled responses.

# 3) Deactivation Effects

- Solomon (2006) argue that derealisation and dissociation is a way of coping with hyper-arousal by “shutting down”. They also argue that in an attempt to dampen this arousal, trauma survivors may seek to dissociate from their experiences by using alcohol and drugs which may “impair judgement and reduce inhibition, making violent acting out even more likely” (p. 222).
- Early childhood sexual abuse has been linked with deficits in the ability of declarative memory (Bremner et al., 2003) which is the ability to consciously recall facts, events and knowledge due to a reduced hippocampal volume (Stein et al., 1997).
- Specifically, this may lead the person to be unable to recall the events during which a learned behaviour happened and the specific deficits are associated with an inability to find the language and words to described emotional experiences (Bremner et al., 2003).
- Simply asking the client to explain why they engaged in certain behaviour, such as offending will be difficult for them to recall and verbalise.

# Client in the room

Daydreaming

Poor empathy

Pacing

Poor problem  
solving

Confused offence  
accounts

Foot tapping

Concentration poor

Can't remember

Unconscious hostile  
attributions

Distracting others





# Links between trauma and offending behaviour

- There is a growing body of research into the prevalence and impact of prior psychologically traumatic experiences on psychological functioning, impulsive externalizing and violent behaviour (Ford et al., 2007). Within forensic samples rates can be as high as 90%
- More aggressive individuals report higher rates than non-aggressive individuals (Sarchiapone, Carli, Cuomo, Marchetti, & Roy, 2009).
- Experiencing childhood abuse has also been associated with increased risk of later child abuse perpetration (Milner et al., 2010), often using similar forms of abusive behaviour on their victims that they were exposed to as children (e.g. Felson & Lane, 2009).

# Trauma and offending cont

- Studies also find exposure to childhood trauma is related to subsequent perpetration of intimate partner violence (Merrill, Hervig, & Milner, 1996; Reitzel-Jaffe & Wolfe, 2001; Schumacher, Feldbau-Kohn, Slep, & Heyman, 2001),
- homicidal ideation, person offenses, and problem behaviours (Clark, Reiland, Thorne & Cropsey, 2014)
- physically and/or sexually violent behaviours in adulthood (Jakupcak & Tull, 2005).
- It is related to violence in populations with psychosis (Sarkar et al., 2005; Spidel et al., 2010).
- It is also related to instability of employment (Sansone et al., 2012) and relationships (Colman & Widom, 2004).

# Trauma and Substance Misuse

- Substance use may also lead to greater trauma exposure, for example Afful, Strickland, Cottler, and Bierut (2010) found higher rates of interpersonal violence, in particular rape or sexual assault in women (58% vs. 33%) in treatment vs. community samples.
- The common pathway theory suggests that both trauma and drug use are symptoms of the same underlying factors, such as a low distress tolerance and a tendency to use avoidant coping to manage negative emotional states, such as dissociation or risk-taking—phenomena common to substance abuse and reactions to trauma (e.g., Najavits & Walsh, 2012; Otto, Safren, & Pollack, 2004). These explanations could also be used to explain the relationship between trauma and violence (Clark et al., 2014).

# Constraints of current treatment approaches

- Do not account for emotional memories
- Do not account for the impact of trauma on brain development
- Do not account for the impact of trauma on cognitive functioning
- Are highly cognitive
- Are verbal/language based
- Underestimates the 'state' of the client

# One Brain...or Two?



How many brains do you have - one or two? Actually, this is quite easy to answer...you have only one brain. However, the cerebral hemispheres are divided [right down the middle](#) into a right hemisphere and a left hemisphere. Each hemisphere appears to be specialized for some behaviors. The hemispheres communicate with each other through a thick band of 200-250 million nerve fibers called the corpus callosum. (A smaller band of nerve fibers called the anterior commissure also connects parts of the cerebral hemispheres.)

# Eye Movement Desensitisation and Reprocessing (EMDR)

- EMDR is a recognised intervention for the treatment for PTSD in the NICE (UK) Guidance due to the efficacy of this as a treatment in reducing symptoms associated with trauma.
- EMDR has the benefit of not requiring participants to verbally recall in detail their experiences, rather EMDR works by assisting the client to process emotional memories through activation of the left and right side of the brain.
- EMDR attends to the role of neuropsychological changes in the brain as well as treating non-verbal and non-visual memories associated with trauma.
- EMDR has been noted to be based on information processing models which are compatible with theories of offending behaviour (Worthington, 2012).

# How does EMDR work?

- Parnell (2007) EMDR transforms psychological memory to objective memory, that is, “memory that feels emotionally charged, alive and self referential into functional and devoid of emotional charge memory” (p. 7).
- EMDR allows the client to store the memory in the filing cabinet of their brain whereby they can access it if they want to but the memory is not stuck looping in the here and now and when they do access that memory it is because they have chosen to and it is experienced less emotionally.
- Recent research suggests EMDR works by encouraging both sides of the brain to be active by using horizontal shifting eye movements known as **bilateral stimulus (BLS)** (Propper and Christman, 2008).



# Group EMDR

- group therapy is a well-proven form of treatment for traumatised children and adolescents (Kristal-Andersson, 2000; Meichenbaum, 1994; Samec, 2001) and is a well accepted format for those in the criminal justice system.
- EMDR-Integrative Group Treatment Protocol (EMDR-IGTP) was developed due to the extensive need for mental health services - combines the Standard EMDR Treatment Phases (Shapiro, 1995, 2001) with a Group Therapy model (Artigas et al., 2000; Jarero et al., 1999).
- offers more **extensive** reach than individual EMDR applications (financial benefits with limited resources) and that the treatment may produce a more **effective** outcome than expected from traditional group therapy
- Jarero and Artigas (2010) argue that the advantages of this protocol are that unlike other group based PTSD interventions clients in the EMDR group are **not required to verbalise information about the trauma**.
- unlike other Cognitive Behavioural Therapy (CBT) approaches, group EMDR therapy can be completed on subsequent days **without the need for homework** (such as periods of exposure or diary monitoring, etc.).
- Jarero and Artigas (2010) propose that the nature of the group EMDR protocol is such that it can be **taught easily** to both new and experienced EMDR practitioners

# Trauma Informed Additional Programme (TIA-P)

- TIA-P is a nine session group based intervention which is designed as an adjunct for standard treatment interventions for clients with a history of trauma or high level emotional responses.
- Designed to be used in accordance with already existing and well validated groups and can be delivered where high levels of internal and external emotional responses act as therapy interfering.
- Benefit of the group is that it can be delivered prior to any current intervention (e.g. SOTP, FIP-MO, LMV, TSP etc) and thus enables clients to access standard therapies that they may not have been able to tolerate normally

# TIA-P group content

- utilises group EMDR techniques as well as neuro-psychologically informed meditation exercises to reduce physiological arousal, obtain bio-feedback and increase stress-protective neurobiological factors such as activity in oxytocin to promote resilience.
- Whilst this is based on complex psychological mechanisms the way in which the group and exercises are designed is easily accessible to therapists and simple for group members to understand. For example, BLS can be achieved through group members engaging in activities such as bongo drumming or shaking maracas whilst being given clear instructions.
- The manual then also provides therapists with tips and guidance on how to ground clients who are dissociating and day dreaming off.
- Additional exercises are provided for therapists to use within the subsequent target problem behaviour if intense emotional arousal is experienced such as finding fun ways to reduce hyper-arousal using BLS

# TIA-P

Table 1	A summary of the group content
Session 1	Consent and introduction for theory of EMDR and practice BLS
Session 2	Enhancing Safety – practise increasing safety using BLS
Session 3	My target problem behaviour – a time when I acted and a time when I didn't
Session 4	Flight or Freeze
Session 5	Using BLS to reduce negative emotions and the science of meditation (including practice)
Session 6	Using the senses to target negative emotions and finding self cues to enhance safety
Session 7	Enhancing resources for positive emotions and bio-feedback – listening to the body
Session 8	Using the body and BLS to reduce old negative memories and replace with safety
Session 9	Enhancing safety and positive emotions for the future

# The Group - outline

Enhancing Safety in the group –  
bringing safety objects, expanding  
their sense of self and identity,  
connection, grounding techniques



# The group - outline

- Self control
- Relaxation, Meditation, Mindfulness
- Pre-session physical activity - saccadic
- Emotion identification and regulation –  
(Attentional control and bio-feedback)



# Pilot Study

- Secure psychiatric hospital
- Female clients – N=8
- Mixed Diagnoses (Personality Disorders, Mental Illness, PTSD)
- Mixed offending histories (Fire-Setting, Aggression)
- TIA-P delivered prior to LMV







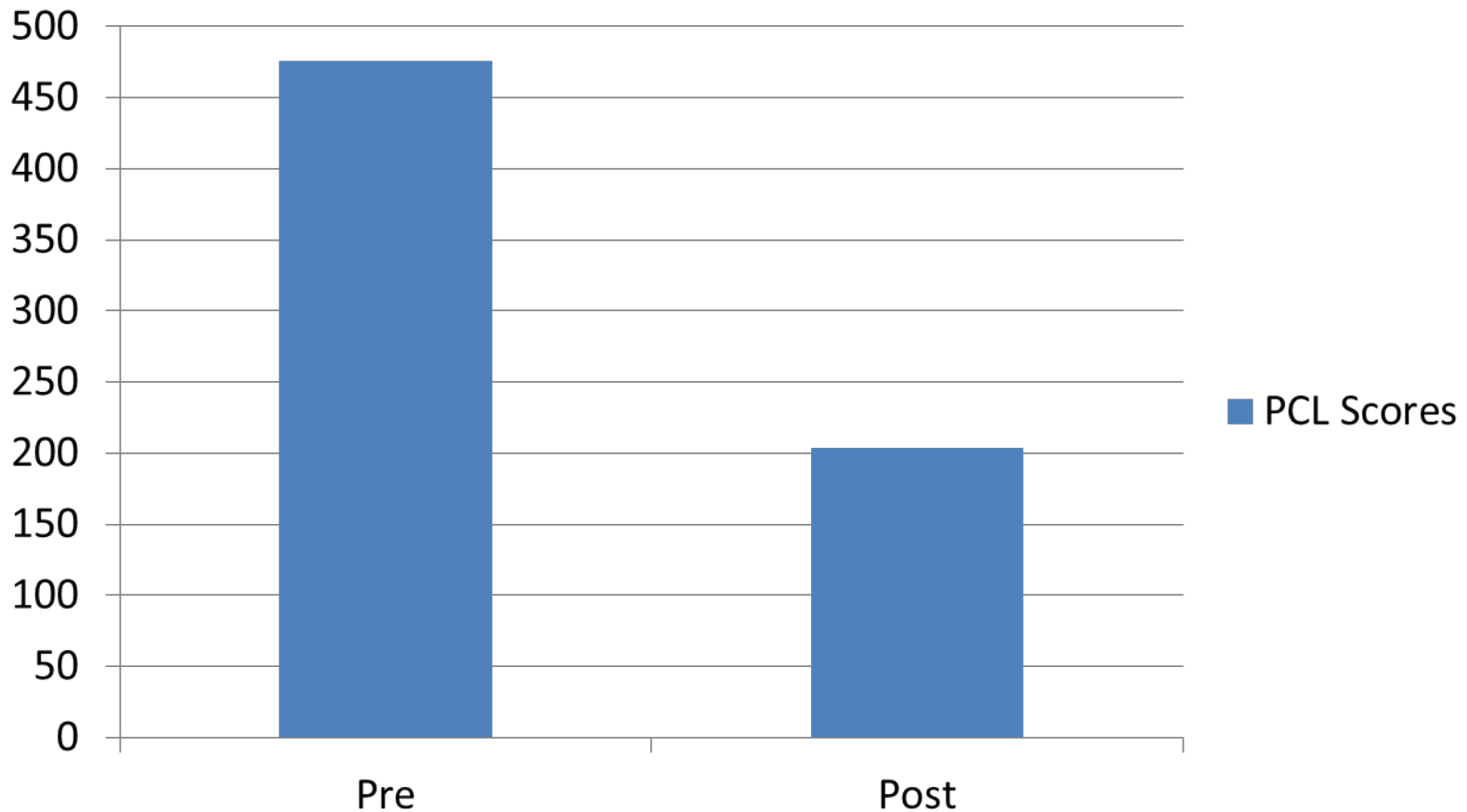


# Results

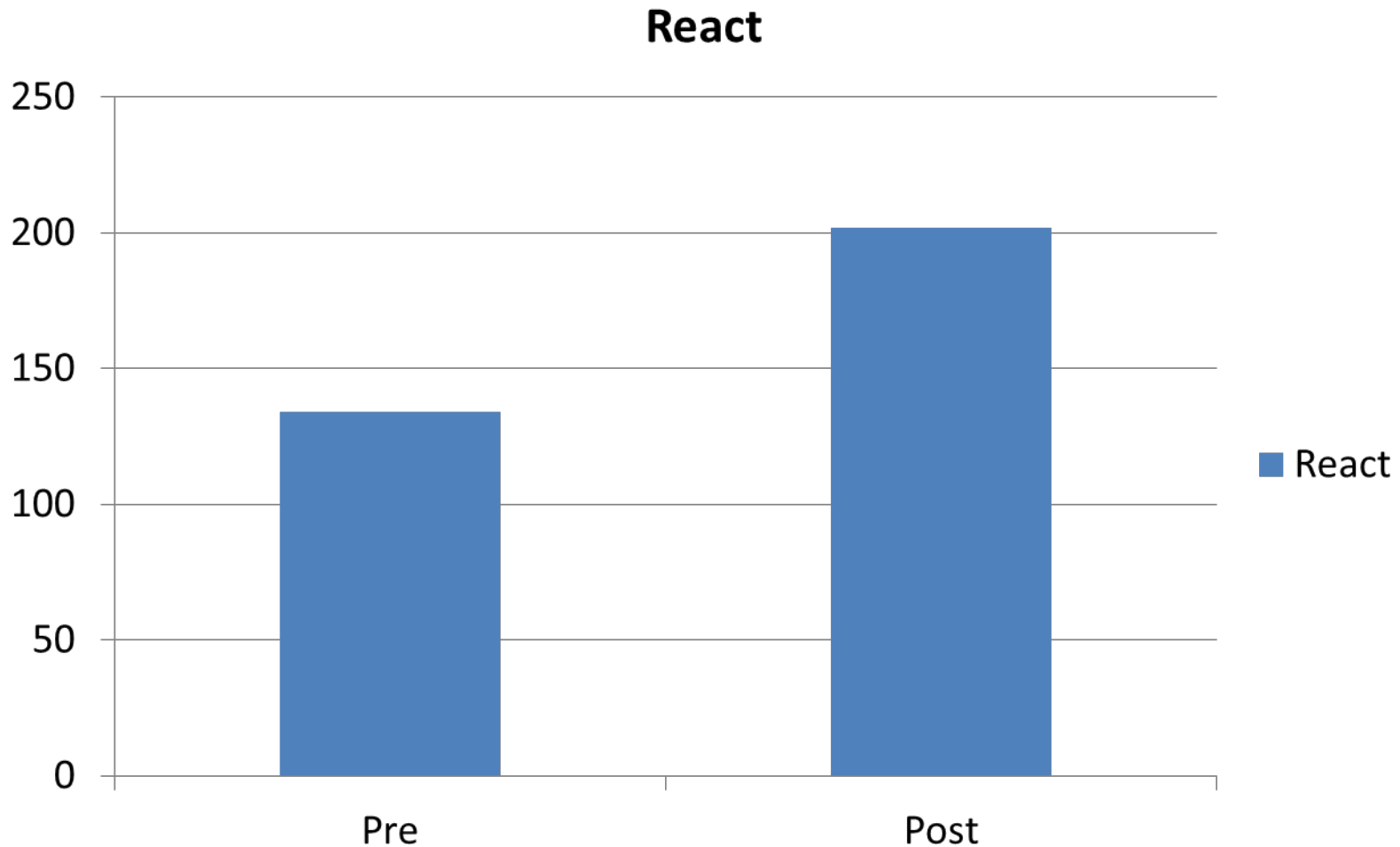
- ALL group members completed both TIA-P and LMV (previous attrition rate for LMV with this client group was 53.5%)
- C items significantly reduced on post HCR-20 scores independently scored
- Scores on PTSD also decreased
- Ability to not react to symptoms increased (measured using the 5 Facet Mindfulness Questionnaire)
- *“I’d never done a group before, I was too scared and worried we might have to talk about stuff but this was alright, I felt safe. I’m dead proud I finished it”*

# Post-Traumatic Stress Disorder Checklist

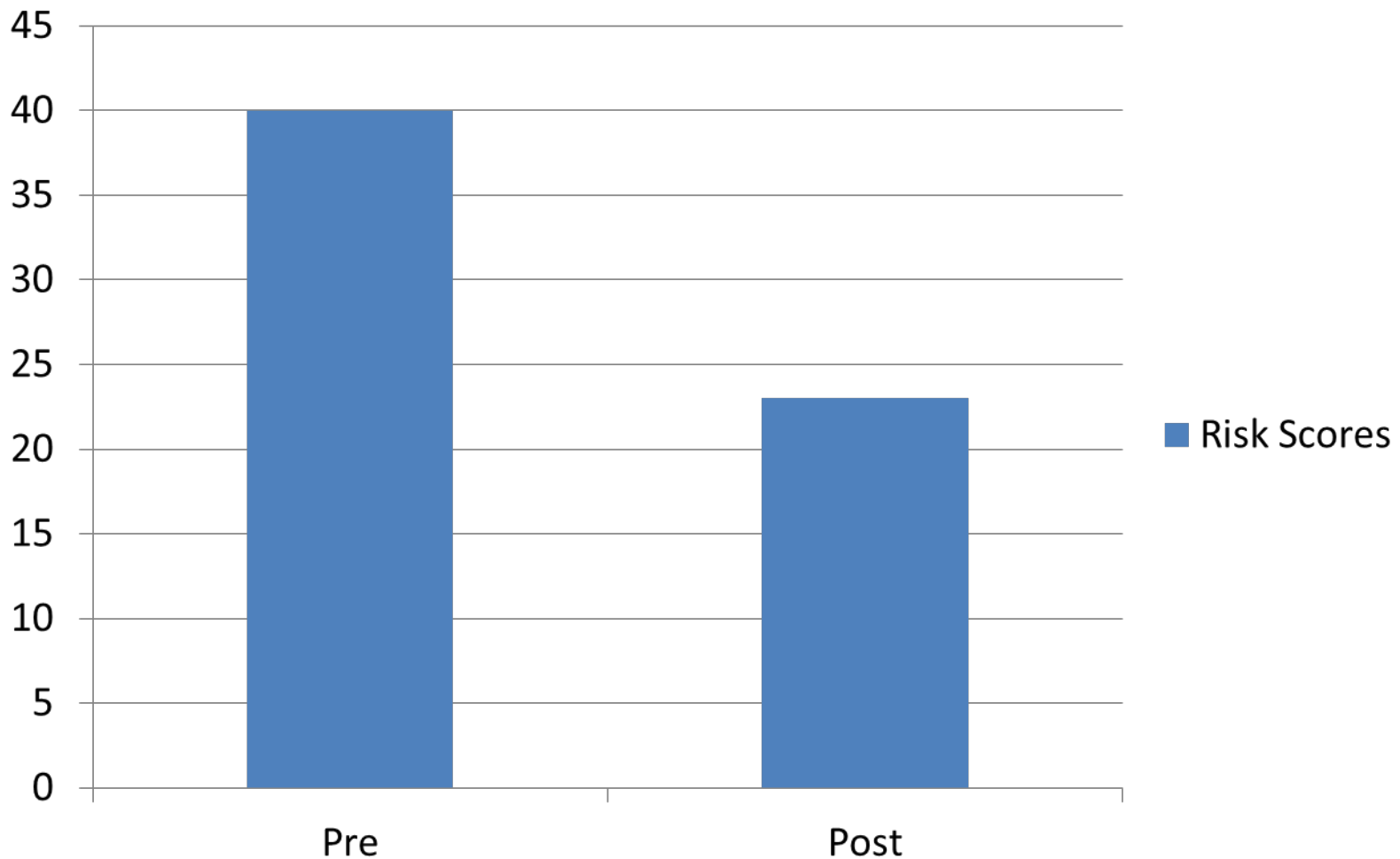
PCL Scores



# 5 Facet Mindfulness



# HCR-20 Risk Scores



# Conclusions

- Trauma and offending are intrinsically linked
- Current interventions do not adequately take into account the role of trauma and the effects this has on information processing
- There is a need for group based trauma informed aggression interventions
- This is the first group based aggression treatment programme to address the role of trauma and it seems to work – preliminary data – MORE TRIALS!!!



# Questions?

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