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## Connecting Couples Intervention: Improving couples' empathy and emotional regulation using embodied empathy mechanisms.

### ABSTRACT

This article provides an overview of the conceptualisation, implementation and effectiveness of our manualised intervention for connecting couples. The aim was to foster emotional regulation, multifaceted empathy and conflict resolution via Emotional Activation Therapy (Hauke & Dall'Occhio, 2013, 2015). Embodied elements of imitation, movement synchronisation and embodied cooperation were incorporated. Qualitative research method was used for the data with two couples: one healthy spouse and one spouse with borderline personality disorder. Contents and implementation of the intervention modules are described. Results showed that after the individual emotional survival strategy (Sulz & Hauke, 2010) was choreographed and imitated by their spouse both couples reported greater emotional attunement, relief, validation and a deeper perspective of their spouse's previous hidden intentions and primary emotions. The couples tipping points (e.g., conflict reflected as emotional dysregulation and asynchronous interaction movements) were adjusted based on cooperative embodied movement solutions. Concrete action projects were designed to develop emotional mastery. Pre to post-test change scores following 20 hours of intervention showed that the couples reported greater relationship satisfaction, a more securely attached relationship and increases in some sub-scales of empathy. Broader applications are discussed with suggested adaptations to group couples' therapy.

**Key Words:** Borderline Personality Disorder, Conflict Resolution, Couples, Embodiment, Embodied cooperation, Emotional Regulation, Empathy, Imitation, Synchronisation.

### 1. Motivation and objective: Types of marital therapy and their limitations

**Behavioural:** Behavioural models have been systematically empirically validated and aim to increase positive behaviours, reduce the frequency of negative behaviours and provide training

in communication and problem-solving skills (Jacobson & Margolin, 1979; Hahlweg et al., 1984). The model is limited as it does not address the role of cognitive or affective processes between couples. This is important as positive affective experience is the pivotal ingredient influencing partner satisfaction (Doss et al., 2005; Johnson & Greenberg, 1985). Behavioural approaches also do not address the hidden agenda between couples where each person's position is embedded with deep personal meaning.

**Cognitive behavioural:** Cognitive-behavioural couples' therapy (CBT) attempts to address the role of cognitions and has two basic targets: a) dysfunctional interactions between spouses is influenced by problematic behavioural patterns and b) cognitive distortions leading to inappropriate emotional responses between spouses. CBT teaches relationship skills and prompts cognitive changes in each person relating to specific aspects of the couple's relationship (Baucom, Sayers, & Sher, 1990; Davidson & Horvath, 1997). CBT reflects the classical 'sandwich' model of cognition whereby how we think about what our partner does sits as a mediator between the activating event in the environment (e.g., what our partner says) and our emotional and behavioral consequences. The body of each couple is seen as an output unit of the behavioral consequence or action of each couple's thoughts (Barsalou, 2011). The therapist's job is to help the couple to control their feelings and become differentiated controlling their emotions using reason.

**Emotionally focused therapy (EFT):** EFT uses an empirically validated theory of adult bonding as the premise for ameliorating couples' relationship problems, with meta analysis showing a large effect size for outcome measures (Johnson et al., 1999). Early neurobiological research showed that emotions or the 'intuitive sense of the matter' are seen as essential to problem solving. Affect in the model is considered central for understanding, compassion and change and central to how couples treat each other. Changes in affect occur by focusing upon the emotional experience underlying the positions each partner takes in relation to the other and then integrating them as the couple's inner experience (Dalgleish et al., 2015; Johnson & Greenberg, 1985; Johnson et al., 1999).

**Predictor variables:** Meta-analysis of marital therapy is not decisively clear as to the effectiveness of one type of marital therapy over another (Shadish et al., 1995) and the strongest predictors of outcome variables are not well established. Marital therapy is effective and a predictor for good outcomes of a number of couples' presenting problems (e.g. Shadish et al., 1995; Sholevar, 1981). Shadish et al in their meta-analytic study found that when therapists use behavioral treatments in a laboratory setting, therapy is more likely to produce a greater effect than non-behavioral interventions in less controlled settings.

Other influencing outcome variables such as couple characteristics, severity of marital problems, therapist style and cohesion have been less well studied. Snyder, Mangrum, and Wills (1993) found that the more severe the presenting problem, especially negative marital affect, the less effective marital therapy is. Younger non-depressed couples not emotionally disengaged from the relationship, with flexible gender roles have better outcomes in behavioral marital therapy (Jacobson & Addis, 1993). Further more Bray and Jouriles (1995) studied therapist style and cohesion and found that therapists who are collaborative, assertive, responsive and cooperative whilst using skillful body language had more effective therapy sessions. The authors noted that affective changes among couples are of crucial significance for positive results.

The research studies cited above show that the desired changes in couples are attained if therapies are targeted at specific aspects of the couple relationship. However, there are doubts as to whether such steps towards change are also accompanied by an increase in partner satisfaction (Doss et al., 2005) – a most important marital therapy outcome measure (Baucom et al., 1998).

**Emotional regulation and relationship satisfaction:** Emotion regulation is a critical predictor of partner satisfaction from a long-term perspective (Bloch et al., 2014). When couples are confronted with problem situations that are highly emotionally charged they often resort to a style of interaction suggestive of a survival mode. Research by Gottman and Levenson (1988) demonstrated the importance of autonomic arousal in predicting longitudinal course of relationship happiness. They showed that couples in conflicted interactions are autonomically aroused into a state of alarm and defence. This results in limits on their capacity to process information, to listen or show empathy. Instead conflicted couples constantly try to justify their own behaviour and express criticism and contempt (Gottman, 1994b); make abstract negative ascriptions (Bradbury & Fincham, 1990); become embroiled in unproductive avoidance cycles, emotional disengagement (Christensen, 1988) and conflict escalations involving negative affect. Biological research by Panksepp (1998) and Porges (1991; 1994) demonstrated that when people are in distress they are biologically driven to first respond by social engagement. If this is achieved, it can inhibit the activation of adrenalin and cortisol thus preventing mobilisation (fight/flight) or immobilisation (shut down). Emotion regulation (down regulating negative affect and maintaining calm) in marital therapy helps couples to be more successful in overcoming these negative states, especially during conflict. Further more recent research by Gottman and Schwartz (2015) shows that increasing positive affect between couples does not just emerge from reducing conflict but in itself needs to be targeted therapeutically by improving the couples' friendship and secure attachments. In sum neuroscience inspired research suggests that marital therapy must include: a) down regulating negative affect and its escalation during conflict and b) increasing positive affect in conflict and outside of conflict.

## 2. Embodiment as an adjunct to marital therapy intervention.

**Embodied cognition:** Our research attempts to accomplish these important therapeutic objectives for distressed couples. There is some effectiveness research incorporating physiological arousal as an important moderating skill in conflict management for couples but Shadish et al. (1995) estimated that less than 7% of studies of marital therapy outcomes have been conducted in real world clinical settings.

Furthermore there is a need to demonstrate both the efficacy and effectiveness of newly emerging dynamic models of marital therapy that take into account the role of the body. Traditional marital therapies view cognition and emotions as amodal and not embedded within the body.

Traditional models of socio-cognitive processes have long availed of the 'computer metaphor' to model and understand inner processes. Based on this classical perspective, the body is viewed as an output unit, hardware for processing action instructions formulated in advance through the computation of abstract symbols in the central processing unit. In light of recent insights strongly influenced by neurobiological findings, this perspective may require some updating. According to these findings, cognitive processes and conceptual knowledge are 'embodied'. Our conceptual system is rooted in our perceptive and motor system: it uses this system through neuronal channels and is decisively shaped by it. Cognition serves action and the dynamic and adaptive functions of social cognition (Smith & Semin, 2004). Accordingly, all of the understanding we are able to develop about the world, ourselves and others is consolidated in concepts formed by our acting, moving bodies.

Current findings show that the perceived situation is depicted in a modality-specific form but not transformed amodally – as was traditionally posited (Damasio, 2011). All content that can be viewed as the result of the organism's interaction with the relevant social situation is recorded by the brain as sensorimotor patterns related to: (1) visual impressions and the associated eye and neck movements, movements of the entire body; (2) physical touch and activity in the situation; (3) older memories of the situation; and (4) triggering of additional emotions related to the situation.

Such modality-specific neuronal states, which are active during interaction with the environment, also represent the interaction-specific memory contents. Thus, the representation of a cognitive-affective concept is locatable in modality-specific terms and 'embodied', i.e. connected to physical states. Being the owner of a concept means having the capacity to reactivate these modality-specific neuronal areas, which were also active during perception. These patterns are reactivated in part; sub-sets of neuronal and physical activation are extracted and become accessible in the form of symbols or images, for example when someone tries to grasp the meaning of words and actions in an interaction situation. The body is prompted to

move through a simulation of corresponding experiences with the help of these modality-specific systems, which also serve the purposes of action and introspection (Barsalou, 2011). The starting point for this kind of simulation can be the activity of our own body, e.g. our movements, the voluntary assumption of a particular posture, the adoption of a facial expression etc. This kind of stimulus influences quantifiable emotional, cognitive and motivational variables (Shafir et al., 2013). A particular body posture, a certain facial expression, a defined pattern of breathing not only prompt changes in autonomous reactions, but also activate conceptual knowledge at the same time. Access to this conceptual knowledge is obtained with the help of simulation processes. The embodiment techniques developed by us trigger these simulations. In addition to the characterization of different target emotions with which we frequently work, we describe the embodiment techniques we use below.

In summary neuroscience inspired research shows that cognitions and emotions are embodied and modal (Shapiro, 2011). The implication is that concepts partially originate in the subjective experiences anchored in the body and are simulated by the activation of the corresponding aspects of such experiences. Interventions that include the body have been coined 'bottom-up' in theoretical orientation. In contrast conventional marital therapies have a largely top-down (meta-cognitive) orientation. Top down marital therapies are characterised by couples using language expression for an experience and sets of beliefs and emotions identified and examined. The therapist helps the couples to interpret and re-interpret their experiences using language only. Whereas a bottom up orientated marital therapy approach may be defined by the following characteristics: a) the therapist helps the couple to place their focus on sensory perceptions, physical perceptions and impulses, movements of the whole body and parts of the body and to observe these movements in interaction with their partner to gain access to the roots of emotional experience, to the automatic impulses and pre-lingual processes; b) the therapist aids the couple to induce their sensor-motor input, e.g. by tensing, moving, conscious breathing etc. in order to make automated processes and categorizations conscious; and c) the therapist focuses the couple on the here and now to help the couple avoid resisting automatisms.

**Embodied Empathy and Interaction.** Empathy is essential for ones' emotional development and to have a successful, close satisfying relationship. Empathy is a vicarious emotional response to the perceived emotional experiences of others and includes empathic concern, emotional contagion and sharing or mirroring the feelings of another person. Cognitive empathy is about inferring the mental states and intentions of another person (Preston & de Waal, 2002).

Empathy is now viewed as a multidimensional construct including affective, cognitive and more recently kinaesthetic components (Blair & Blair, 2009). Previous research examining the effects of empathy interventions for couples have implemented affective and cognitive empathy programs relying on verbal communication and have neglected the kinaesthetic dimension (Kim

et al., 2013). Consequently, various authors have proposed a motor theory of empathy (e.g. Gallese, 2009), relating to the internal simulation of body movements, gestures and facial expressions. Authors whose arguments are based on developmental psychology see the starting point for the emergence of empathy in these pre-linguistic, purely physical experiences. Several variants of movement therapy approaches try to make use of this aspect in the conception of interventions for different patient populations (Behrends, Müller & Dziobek, 2012; this volume; Samaritter & Payne, 2013; this volume). We draw on the described positive impacts of imitation and synchronization described below on the couple relationship in the conception of our intervention method.

Two recent studies focused on bottom-up interactional movement interventions to enhance empathy in conflicted couples and in high functioning adults with an autism spectrum disorder (Behrends et al., this volume; Kim et al, 2013). The conflicted couples were able to develop body empathy and attunement to their partner and showed a better understanding of their partner's intentions. For the adults with autism, results revealed that the experimental group showed significantly greater emotional inference compared to controls. Behrends et al., (this volume) identified elements of coordinated dance movements found to develop empathy, group cohesion and prosocial behaviour being: a) imitation, b) synchronous movement and c) embodied cooperation. The authors refer to imitation as the intentional or unintentional behavioural matching of someone else's movements, facial expressions, gestures and verbalisations and is responsible for feelings of bonding between people. In the context of our model, imitation means with first observation and then with a small time delay the reproduction of a given movement by another person as exactly as possible. The mirror neuron mechanism has been hypothesized to generate imitation of movements and also empathic functions (Oberman & Ramachandran, 2007).

The sharing of emotions, the affective component of empathy, corresponds to a non-conscious, bottom-up processing of information. The cognitive component includes the top-down processing of information and serves in the control and modulation of the empathic experience (Decety & Lamm, 2006). Empathy makes it possible to resonate with both the positive and negative emotions of other people. In the state of empathy, it is important that we are always aware that what is involved is the other person's emotions with which we are resonating. If this self-other distinction does not exist, emotional infection results, a precursor of empathy already found in babies. The self-other distinction is based on the existence of a clearly perceived boundary between the self and one's partner. Sometimes in seriously disturbed but emotionally close couples, the self -other distinction is scarcely present and empathic stress can arise resulting in strong aversion reactions to the suffering of their partner as a form of self- protection (Singer & Klimecki, 2014). It is therefore imperative that couple interventions include a self- focus to address important classes of needs necessary for the healthy development in building up a couple. This can be illustrated in figure 1 below.

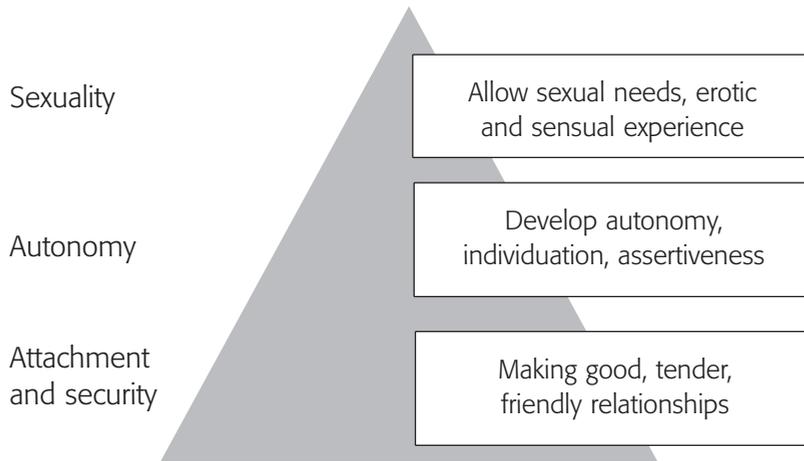


Figure 1: Three classes of couples' needs necessary for their central development in therapy

Synchronous movement is the interpersonal coordination of similar or different movements by two or more people in the dimension of time (Lakens, 2010; Behrends et al, this volume). Synchronous movement has been shown via the process of cooperation, to increase affiliation, group cohesion, and prosocial behaviour (Kirschner & Tomasello, 2010; Kokal et al., 2011). Synchrony is different from other movement forms of interdependence such as imitation, because for it to emerge, the following conditions must be fulfilled (Delaherche, et. al, 2012): (1) maintenance of a sufficient time window of joint attention and activity relating to each other and reciprocal 'behaviour tracking'; (2) temporal coordination of the activity levels, the orientation and movement of the body, the facial expression (as in a kind of 'partner dance') in a limited time window; (3) contingency (e.g., the behaviours of the interacting partners clearly relate to each other) and; (4) adjustment: empathy with the partner's state and corresponding adjustment of one's own activity.

'Timing' is the decisive element here and this is why synchrony differs from imitation. Accordingly, synchrony can arise in every interactive context, in cooperative (dancing, playing music), competitive (fighting), linguistic (telephone conversation) or non-linguistic (motor) activities. Every form of synchrony generates interaction. The significance of this finding in relation to the psychotherapeutic context was not identified for a long time. Ramseyer & Tschacher (2006) reviewed the empirical literature and revealed that synchronized behaviour in interaction has a considerably beneficial influence on the relationship and on perceived empathy of

the other. In a study of their own, they quantified non-verbal synchrony based on the coordinated movements of same-sex therapist-patient dyads. They were able to show that higher levels of non-verbal synchrony have a positive influence on both the perceived relationship quality and the entire therapy process (Ramseyer & Tschacher, 2010, 2011). Also greater non-verbal synchrony was indicative of a greater reduction in symptoms and perceived self-efficacy. One study conducted outside the psychotherapeutic context succeeded in demonstrating the clear influence of intentionally generated synchrony vs. asynchrony (Lumsden et al., 2014). Compared with asynchronous movements, synchronous movements increased the feeling of self-worth of participants and the sense of connection and agreement (self-other overlap) with their partner. This study replicates and extends earlier findings on the topic of intentional synchrony vs. asynchrony. Launay et al. (2013; 2014) demonstrated it was possible even in very short sequences of virtual social interaction, to have very clear impacts on feelings of mutual sympathy and trust.

Embodied cooperation is defined as two or more individuals in motion who coordinate their actions in space and time to achieve a common goal requiring dynamic detection and appropriate response to one's partner's movements (Marsh, Richardson, & Schmidt, 2009). It is a more complex form of synchronisation and includes moving into the same direction or performing a joint turn in a complimentary mode such as in leading and following (Valdesolo et al., 2010). Moving together via dance for example in the Cha-Cha has built positive couple connection and kinaesthetic empathy via embodied cooperative mechanisms (Kim et al., 2013).

Senim & Cacioppo (2008) adopt findings from the research on embodied cognition as a starting point for the development of an innovative understanding of social cognition. People are influenced by other's movements depicted isomorphically on their own bodies via neuronal mirroring (Gallese & Goldman, 1998; Rizzolatti & Sinigaglia, 2010). A cascade of sensorimotor processes is triggered in all those involved in the situation. These sensorimotor processes are: (1) jointly generated by co-acting organisms; (2) time-bound and multimodal; (3) arise in the absence of an explicit communicative content or particular communicative objectives and (4) serve the purpose of continuous joint monitoring for dynamic adaptation. Gallese (2009) also points to the fact that our acting body becomes the central information source in relation to the behaviour of others. He suggests that embodied simulation plays the decisive role in the emergence of empathy and refers to the associated intersubjectivity as intercorporeality.

Dance movement therapies (DMT) targeting movement inducing empathy components have enhanced kinaesthetic and emotional perceptions of self and others, positive self awareness, group cohesion, expressive and social communication skills and reduced aggressive behaviour in a wide range of clients with varying mental illnesses (Koch et al., 2014; Milliken, 2002). In DMT assessment and therapeutic change proceeds in the non-verbal realm of movement,

touch, rhythm, and spatial interaction (Goodill, 2005). For a more systematic view of movement analysis the Laban Movement Analysis is usually referred to in literature using the acronym BESS (Body, Effort, Shape, Space). Recent research suggests that the Laban movement concepts are embodied. Schubert (2005) for example argues that vertical positions of body shape are perceptual symbols of power. Schubert posits that thinking about power involves mental simulation of space and can be interfered with by perception of vertical differences in height. Results suggested that power is represented in perceptual form as a vertical difference. Natanzon & Ferguson (2011) demonstrated that forward movement is cognitively associated with achievement goals and concluded that goal pursuits are grounded in the body. The embodied character of intensity remains less clear, however intensity dimensions of movement such as frequency of repeated movements, the degree of tension/relaxation or vitality affects (qualities of feeling) such as bursting, fading away, surging and explosive movements are studied within both Laban (Laban, 1960; Laban & Lawrence, 1974) and Kestenberg's et al's (1999) movement analysis systems. DMTs are well suited to working with intensity based vitality affects in their therapeutic movement interactions. Preliminary research by Michalak et al., (2009) analysed gait patterns associated with depression to explore the embodiment theory hypothesis that there is a reciprocal relationship between bodily expression and the way emotions are processed. Results showed that depression/sadness is embodied with gait patterns characterized by reduced walking speed, arm swing, large lateral swaying movements of the upper body and a more slumped posture.

In our intervention model the leading and following exercises elicited the frustrated partner dance resulting in increased 'intensity' such as body tension and negative affect. The embodiment of psychological closeness (approach) or distance (avoidance) to one's spouse was viewed within the Laban movement concept of 'space'. Psychological size such as being smaller (below), taller (above) or equal to our partner was viewed within the Laban movement concept of 'shape'.

### 3. The Model

We describe an approach based on an adapted version of Emotional Activation Therapy (Hauke & Dall'Occhio, 2013; 2015) incorporating the above neuroscience inspired movement concepts of imitation, synchronisation and embodied cooperation. The aim was to support more positive emotion regulation in the spouses, reduce conflict and to increase emotional connection and partner satisfaction as a result. The model of our therapeutic process is comprised of three sequential components seen in figure 2 below.

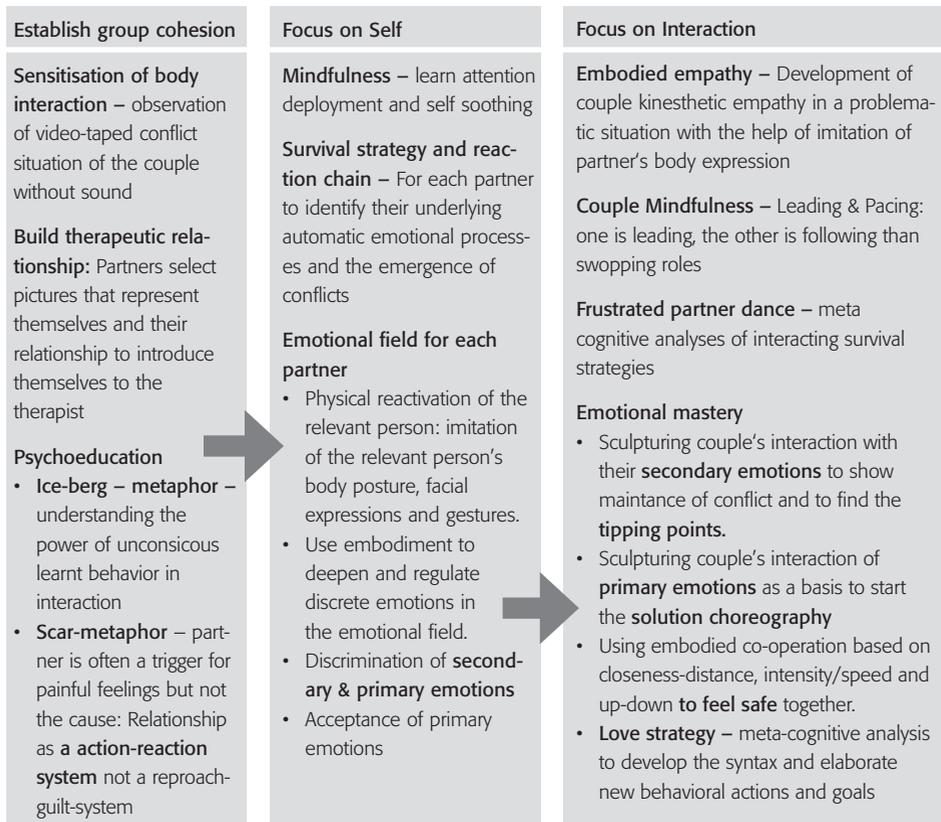


Figure 2: Modules and central methods in the model of the therapeutic process of a single couple

### Establishing relationships via cohesion

Our model is sequential as cohesion with the therapist and between the couples is considered necessary before self-focus or interaction-focus can be successful. Sensitisation of body interaction exercise involved free movements together with the therapist to music in a circle such as tapping, sweeping, shaking and simple dance movements to improve body feeling. Through psycho-education of the scar-metaphor couples learnt that their relationship with their spouse is part of an action-reaction-system developed from their scars that emerged first in their early life history (schemas or ways of seeing the world).

Couples were informed that when they are in close intimate relationships their spouse can trigger or metaphorically speaking touch these scars generating hurt feelings but that the spouse is generally not the original cause of the scar. Next couples can begin to understand and develop empathy for their partner and can learn to recognize their partner's emotional survival strategy.

The ice-berg metaphor also formed part of the psycho-education experience for participants who learn that pictures and images serve a bridge between the conscious and unconscious mind and act as translational tools between body and mind. Research shows participants who use imagery to describe feelings have better outcomes in therapy (Fink et al., 1989). The couples were asked to pick a picture that represented themselves and their relationship and to describe how they feel when looking at the picture. This exercise was designed to build cohesion.

### **Self-focus and characteristics of clients with Borderline Personality Disorder (BPD)**

Self-focus is considered to be a pre-requisite for interaction focus. The couples as individuals need to understand and have insight into their own emotional survival strategies and have developed some self-soothing and regulation of their emotions. This needs to occur prior to understanding how their individual survival strategy interacts with their partner in a frustrated partner dance. Whilst our model has applicability to all conflicted couples, we argue that BPD client couples are particularly suited to our model as past research has found them to be unresponsive to verbal couples' therapy. Further more therapy for individuals with BPD is often complicated by slow treatment gains and multiple relapses due to their strong emotional under-regulation tendencies (eg., difficulty controlling their anger) and relationship failures resulting from their intense fears of abandonment.

Individuals with BPD have a pervasive pattern of instability in their interpersonal relationships, alternating between extreme core schemas of idealisation and devaluation of their spouse. Those with BPD also have poor self-image and high impulsivity (American Psychiatric Association APA, 2013). Affective instability towards their spouse is often precipitated by their perception of them as neglectful, uncaring, withholding or abandoning. Outbursts of physical and verbal anger are often accompanied by feelings of guilt and shame which contribute to the self-perpetuating belief that they are bad. Individuals with BPD often destroy a good relationship with a healthy spouse especially when closeness grows (Bouchard & Sabourin, 2009; Links & Stockwell, 2001). Individuals with BPD can show empathy nurturing behaviours towards their spouse but it comes with the expectation that their spouse will be there to meet their own needs when demanded (APA, 2013) and if not then their spouse is perceived as cruelly punitive leading to eventual rejection of them (APA, 2013). Thus separation and divorce is common in BPD. Prognostically individuals with BPD undertaking therapy often show improvements within the first year (APA, 2015). Past research has rarely considered couple interventions for BPD due their characterization of pathology interfering with their capacity to sustain a satisfying marriage. Some practice guidelines for couples' therapy are indicated (APA, 2001) suggesting psycho-education for the healthy spouse about the nature of the disorder, however little direction is given for when couple therapy is indicated or which theoretical model is most effective.

Some research suggests that standard marriage therapy is contraindicated and worsens outcomes for both spouses with BPD due to their characteristic under-regulation of emotions and volatile impulsive explosions (Seeman & Edwards-Evans, 1979). New psychotherapies (e.g

dialectical behavior therapy) have emerged to treat individuals with BPD with results showing these treatments to be effective compared with treatment as usual in reducing self-harm and suicidality (Brazier et al., 2006; Binks et al., 2009; Zanarini, 2009). To our knowledge there is no research that has evaluated the use of embodiment interventions for couples with BPD to augment and enhance therapeutic outcomes.

Paradoxically marital status is a significant predictor of improved functioning for individuals with BPD (Links & Stockwell, 2001; APA, 2013), therefore it seems worthwhile to explore how best to support this diagnostic group to remain partnered. Empathy interventions and emotional regulation strategies employing the use of embodiment processes may be of great significance to clients with BPD by helping them to: a) broaden their scope of empathy within multiple modes; b) foster emotional regulation to reduce dissociation and anger and to c) build frustration tolerance to fears of abandonment.

To this end, working in cooperation with the couples where one spouse has BPD, we identify the emotional survival strategies adopted by the couples in situations that are viewed as critical by both. What is involved here are dysfunctional cognitive-affective schemas adopted by the partners – unconsciously in most cases (Hauke, 2013). The gaining of individual insight and knowledge in this regard establishes the basis for deeper mutual understanding. Table 1 below shows the comparison of individual survival strategies with a focus on either autonomy versus attachment as a central need. The anticipation of negative consequences from the expression of the primary emotion initiates the emotional survival strategy and can block the primary impulse and emotion through the emergence of secondary emotions. This leads to the problematic development of symptoms when the reaction chain can not be stopped. Primary emotions can be normative, adaptive and universal reactions within a given context. Secondary emotions are a reaction to these primary emotions and are learned responses (Sulz, 1994; Fruzzetti et al., 2008; Hauke & Dall’Occhio, 2013).

**Table 1. Comparison of emotional survival strategies with focus on autonomy vs attachment.**

Syntax	Autonomy Needs	Attachment Needs
Only if I always (dysfunctional behavior)	Pay attention to independence and superiority	Actively reach the attention and care of my partner
An Never Show (Forbidden impulses and feelings)	Never being needy, showing weakness	Show conflict and needs
Then I’m able to keep (satisfaction of core needs)	Strength, power, control	Security, harmony
And Avoid (Core anxiety)	Powerlessness, disappointment, rejection, being hurt	Being left and the relationship ending

Primary emotions are triggered reflexively by the situation and result in a primary impulse to act which forms part of this reflex. The anticipation of possible (usually intended or learned) consequences of the intended action results in a secondary emotion which is directed against the impulse and helps the individual to refrain from acting on it. Thus a biologically adaptive primary emotion no longer appears socially functional and to prevent the undesired consequences and ensure emotional survival, the primary emotion is stopped (Hauke & Dall'Occhio, 2013). Secondary emotions can cause a series of maladaptive reactions because the self-regulation of the person no longer corresponds to the original trigger. Most healthy individuals are able to stop this reaction chain before the end as they are able to correct their first impulses using their social and emotional regulation skills. However individuals with BPD may believe that their primary emotion (e.g., fear) is too extreme, cannot be controlled, so they put on the brakes and develop the symptom (eg, yell at their spouse, threaten to end the relationship) stemming from the secondary emotion (e.g anger). As a rule, problem situations are not only charged with a negative emotion but also 'cross-linked' with several both negative and positive emotions. It is the conflicting action impulses that often make it more difficult to move towards a constructive solution. Added to this is the fact that the purely verbal methodology of traditional marital therapies may be limited in this regard. The "emotional field" method offers an effective and time-saving alternative (Hauke & Dall'Occhio, 2013; 2015). Basic emotional regulation problems are revealed and modified in the context of a structured process. Work is done using the body to develop the primary and secondary emotions and then to regulate them via the self- focus neutral position using deep breathing with rhythmical hand movements. In the emotional field, clients learn that primary emotions can be revealed, regulated and managed after they have first learnt to control their secondary emotions which previously blocked their primary emotion. Clients move to the meta-cognitive position to understand the emotional field. Individual behavioural change projects ultimately emerge from the crossfire of the emotions involved. Figure 3 below shows an example of a hypothetical emotional field of an individual with BPD revealing this cross fire of emotions.

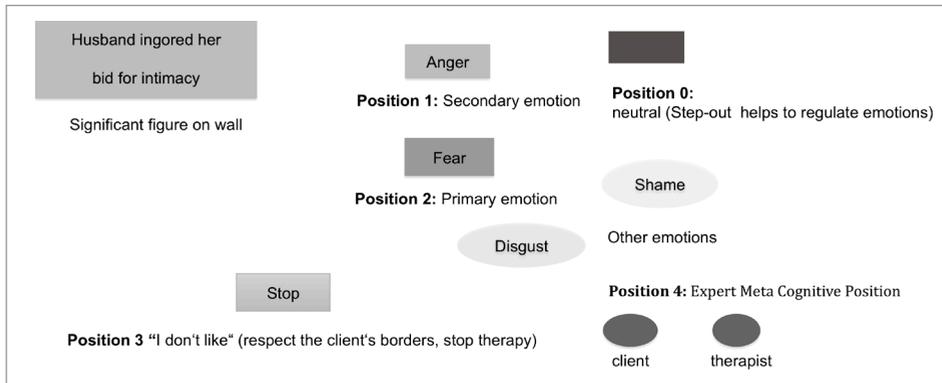


Figure 3. Hypothetical emotional field of a BPD client.

### Interaction focus and the frustrated couples dance

The intermeshing of the individual dysfunctional schemas can easily result in unsuccessful or misguided interactions being understood as a ‘frustrated couples dance’. Figure 4 below shows how interacting survival strategies of a couple can result in their escalation.

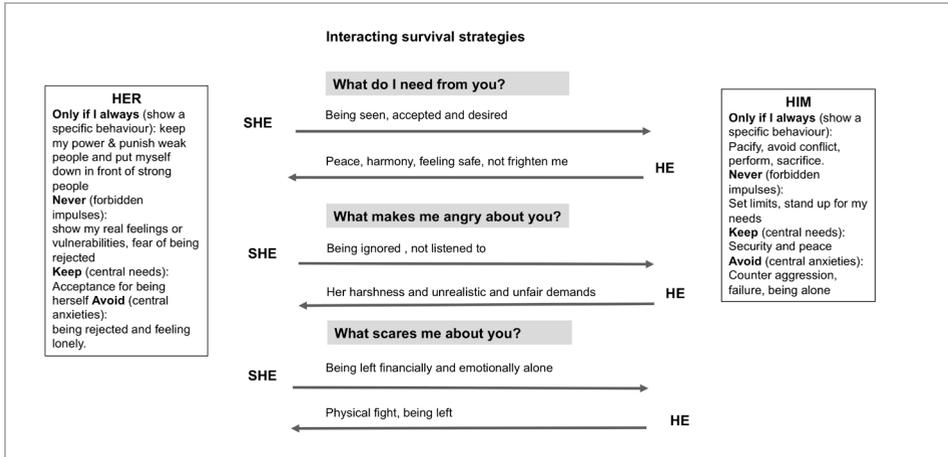


Figure 4. Interacting survival strategies of a couple resulting in escalation.

The communication resulting from the interacting reaction chain leads to problematic outcomes as seen in figure 5 below.

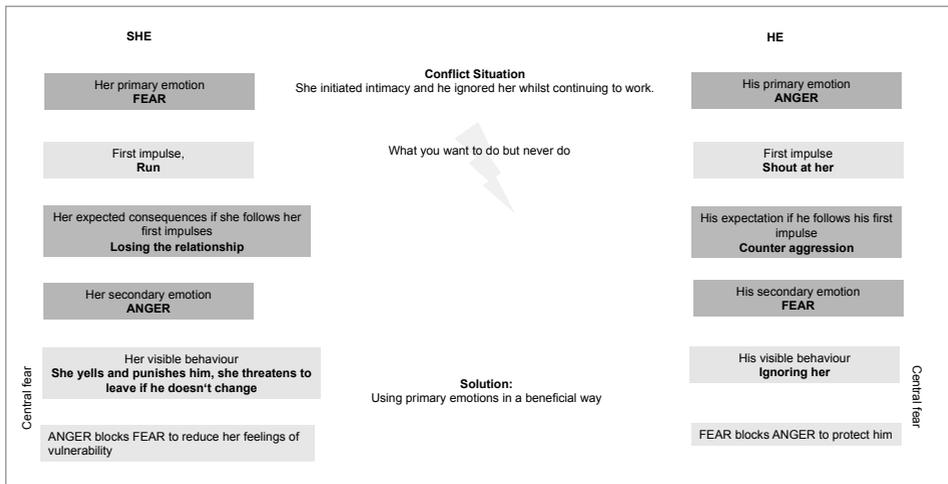


Figure 5. Interacting reaction chains resulting in escalation and problematic interaction

### **Practical implications of embodied empathy**

Guided processes of imitation and synchronisation support mutual understanding, development of empathy and the positive treatment of each other in the couple's relationship. Movement sequences using body postures and facial expression of partner A's feelings in the problematic situation and the imitation of these movements from both the therapist and partner B elicits embodied empathy. Partners swap roles so both can experience embodied empathy for the other.

### **Emotional Mastery**

After the embodied empathy experience each partner presumably gains a deeper understanding of the other's emotional survival strategy. Utilizing movement concepts of body, space (closeness vs distance), intensity/speed (relaxed vs tense) and shape (size is up, equal or down) the couples can begin sculptured interactions with their secondary emotions to understand how their conflict is maintained.

Once both partners in the relationship understand how their conflict is maintained a sculptured interaction of their primary emotions can be used as the starting point for the solution. From here choreography of a love solution can occur using movement figures allowing the couple to make adjustments with their body to regulate closeness and distance, size and intensity (relaxation versus tension) in a synchronous and commonly tuned, coordinated way utilizing embodied cooperation. After experiencing a satisfying solution so that both partners feel safe, the love choreography is formulated and verbalized and then treated within the usual CBT couples framework.

### **Concrete Couple Projects**

The elaboration of well-shaped targets using coping statements or syntax, behaviour plans and experiments is a central element of behavioural therapy work. When the body is deliberately integrated into concrete couple projects hurdles can be more effectively overcome and the motivation to change sustainably reinforced. The symptom therapy then follows the standard for couples CBT.

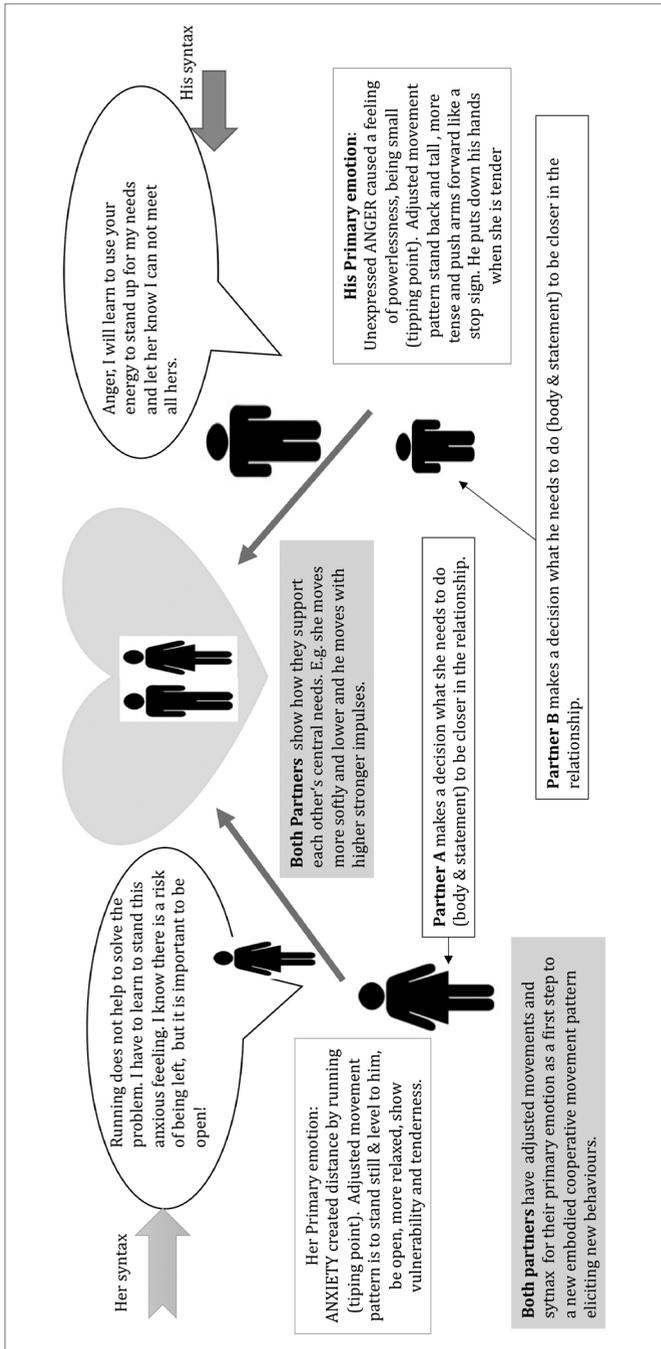


Figure 6. Sculpturing interaction of the couple's primary emotions as a starting point for the creation of a love solution using embodied cooperation.

**We try more often** ... to help our partner to feel safe in the relationship

**We allow each other** ... to show our primary emotions to get our central needs fulfilled.

**Each of us takes the risk to** ... be frustrated in a central need.

**We want to learn** ... to overcome our impulses pushed by our secondary emotions.

Figure 7. Syntax of the love strategy used to make concrete couple projects.

Figure 7 shows the syntax of the love strategy used to facilitate concrete couple projects and Table 2 gives an example of each couple’s projects and how their partner can support them.

Table 2. Hypothetical concrete couple projects.

His Projects	How she supports him	Her Projects	How he supports her
Learn to set limits without hurting her feelings	Show love in a variety of ways	Be tender, use soft voice and body	Gently say ‘no’ to intimacy without ignoring her, negotiate another time.
Being more spontaneous with intimacy	Learn to delay gratification	Develop greater frustration tolerance.	Fulfill some of her physical needs

In summary, there is a paucity of research investigating the impact of embodiment approaches for clients with BPD in couples’ therapy who have a healthy spouse. The purpose of this study was to conceptualise, implement and evaluate our couples’ intervention program based on emotional activation, regulation and mastery incorporating movement concepts of embodied empathy, imitation, synchronisation and embodied cooperation. A second aim was to evaluate how effective the embodiment model of intervention is for BPD clients in couple therapy.

## Method

**Research Participants:** Two couples voluntarily participated in the study one from Australia and one from Germany. The couple from Germany was used as a pre-pilot case study and was used show replicability to the larger pilot case study from Australia. The researchers explained

the purpose of the intervention and gained couples' written informed consent to use their data and to video record them.

**Pre-Pilot. Couple Case Mr and Ms A:** Ms. A is 31 years old and works as a secretary. She has a DSM V diagnosis of BPD and depression. Mr. A is 33 years old and works as a sales person. He has no mental health disorder. The defacto couple live together and have been in a relationship for three years with no children. Both are afraid of physically escalating conflicts and report long standing (more than two years) infrequent sex (two times in a month) due to her lack of desire. Both of them want to have more intimacy, sexual contact and eventually children

**Pilot-Couple Case Mr and Mrs C:** Mrs C is 37 years old and works and lives together with her husband Mr C. Together they have one child. Mrs Cs highest level of education is high school. She received previous individual and couple psychotherapy. Mrs C has provisional borderline cluster B traits and previous Early Onset Dysthymia. Psychosocial, medical and environmental problems include financial difficulties, and a lack of social support with a conflicted and avoidant relationship with her mother and estrangement from the rest of her family. There is family history of addiction and depression. Mrs Cs parents separated when she was a young child and she reports an unstable and at times poor childhood.

Mr C is 33 years old, has post graduate degree and no mental health disorder. Psychosocial and environmental problems include financial difficulties and lack of family support. Mr C reported a close family unit until his parents separated when he was a teenager. After his parents' separation Mr C's older sister and brother became aggressive towards him. There is a paternal family history of alcoholism.

The couple have lived together for a decade. They reported no previous break ups however Mrs C has threatened to on several occasions. Neither couple reported previously being in a serious relationship. Mr C reported experiencing only one serious crisis in the relationship whereas Mrs C reported more. Current couple stressors included financial difficulties, mismatched libidos, concerns about health and the stress of child care. Mrs C noted that they are both competitive with each other resulting in power struggles and her expressed anger if he does not give her space. Mr C in response becomes passive, overly agreeable and seeking excessive reassurance about the wellbeing of Mrs C. Both wanted to break out of their power struggles, develop greater intimacy and closeness, find a way out of their financial problems.

## Materials

The Davis (1983) Interpersonal Reactivity Index (IRI) measured multidimensional empathy. The 4 subscales with 7 items in each is scored out of 28 on a 5 point Likert Scale ranging from "Does not describe me well" to "Describes me very well". The higher the scores the greater the empathy. The four subscales are Perspective Taking (spontaneously adopt the psychological point of view of others), Fantasy (tendency to transpose oneself imaginatively into the feelings

and actions of fictitious characters), Empathic Concern ('other-oriented' feelings of sympathy and concern), and Personal Distress (measuring 'self-oriented' feelings of personal anxiety and unease in tense interpersonal settings). See Davis (1994) for a review.

The Experiences in Close Relationships Scale- Revised (ECR-R: Fraley, Waller & Brennan, 2000) Short Form contains 36 items assessing individual differences with respect to attachment-related anxiety and avoidance. For further information see Sibley and Liu, (2004). The higher the scores the greater attachment related anxiety and avoidance. Items are rated on a 7 point Likert scale from 1 (strongly disagree) to 7 (strongly agree).

The Relationship Assessment Scale (Hendrick, 1988) is a 7 item measure of general relationship satisfaction. The higher the score the higher the relationship satisfaction. Items are scored on a 5 point Likert scale from 1 (low satisfaction) to 5 (high). The Brief Patient Health Questionnaire (Brief PHQ: Kroenke, Spitzer & Williams, 2001) is a 9 DSM-IV item scale scored from 0 (not at all) to 3 (nearly every day) measuring depression and has a clinical cut off score of 10. The higher the score the greater the severity of depression. All scales are self-report measures and have adequate reliability and validity and some normative data.

## Procedure

Qualitative data was collected using: a) semi-structured interviews of the couples' opinions about the modules of intervention; b) their worksheet responses; c) video analysis of their movement patterns and communication style, choreography of their interacting survival strategy and their love solution. Adaptive problem solving statements and concrete projects were written on the work sheets. The working protocol for the program followed three phases as outlined in figure 2. The couples received 20 hours of intervention over the three phases.

The following-leading module was designed to elicit the interacting survival strategy (frustrated partner dance) reflected as "tipping-points" in the couple interaction. Past experience for both couples indicated that their interaction could escalate quickly to conflict and both would become emotionally dysregulated, as if someone pressed a button. This is the definition of "tipping-points" in the interaction. When either partner felt uncomfortable in the movement interaction they were asked to raise their hand. The therapist assisted the couple to analyse and solve the problem via embodied cooperation, not via cognitive analysis. Initially prior to finding the tipping points, the leading partner used simple movements like lifting up their arms, stepping to the side, moving forwards backwards and the following partner copied. It looked like a conversation without words. The couples had to negotiate with their eyes, body cues and intention the change of roles from leading to following. An example of a tipping point is the leader moving too fast or backing the follower into a corner where one or both indicated discomfort or unease. After the tipping point was identified the therapist assisted the couple to analyse what happened and what changed in the interaction and aided the couple to make an adjustment with their body to move in embodied cooperation based psychological size (big, equal, small), distance and intensity.

## Results

### Qualitative analysis

#### Emotional Mastery

##### Description of the 'Solution – choreography'

The couple chose a sequence of four movements, which formed part of their adjustment experience while doing the leading-following exercise that felt good for both of them to resolve the tipping points. These movements formed the basis of the solution choreography. First they decided that when she feels on shaky ground, awkward and tense that he will maintain the leading position, they will maintain eye contact and he will reach out to join their hands with arms up high feeling proud, she leans on him to stabilise herself. Second they agreed that when she feels uncomfortable following him and feels they are going 'backwards' that she will take the lead and the responsibility by taking a large step forward with her head held high and he will assist her by pausing to offer her space to 'move forward' and then follow her out. Third they both agreed that he needs to slow down when taking the lead so they can both relax and she can follow him more sensitively and accurately, enhancing their joy. Finally, they ended the solution choreography in a waltz like dance symbolic of their wedding day which was one of their most memorable moments of their married life. In the dance she takes the lead then they swop roles, they are close, in synch, both empowered and happy, gently rocking in a waltz position with their chest to chest.

##### Description of individual concrete projects

Her individual projects were to increase her independence by trusting herself and her decisions and taking full responsibility for them instead of blaming him when he takes the lead and she is unhappy with the outcome. A second individual project was to remove the disgust and develop self acceptance by tipping and purging the 'waste of other's negative messages dumped on her' out of the bucket and into the garden for regeneration. The purge also involved some goals around weight loss. Mrs C also made a decision to stay put and learn to tolerate her discomfort anxiety when she wants to run away from relationship problems. Her final project was to feel her sadness and show her vulnerability and tenderness by asking for a hug from Mr C therefore making her anger redundant so it can no longer scare Mr C.

His individual projects were to get in touch with his anger and use the energy of the emotion to help him set limits with her or break the interaction to calm down when she becomes critical, blaming or yells. A second project was to learn to tolerate his discomfort anxiety when he sets some limits with her. A third individual project was to obtain a better work life balance and to find some solutions to their financial problems.

Table 3: Couple Mr and Mrs C.

Survival strategy	Hers	His
Only if I always (show a specific behaviour):	Pacify and please authority figures or rebel against and confront those perceived as weak	Hide, back down, over accommodate and change to suit others
Never (forbidden impulses):	Show vulnerability, be herself.	Show anger or any strong feelings
Keep (central needs):	Attention, Connection, Control	Peace, connection in the relationship
Avoid (central anxieties):	Abandonment, Losing Control, Taking responsibility for solutions to solve the financial problems	Aggression and criticism
Interacting survival strategies	Her from him	Him from her
What do I need from you?	Regular spontaneous intimacy, Financial stability.	Showing affection and tenderness
What makes me angry about you?	Challenging authority, passive over compensation	Being blamed
What scares me about you?	Abandonment	Aggression, criticism, being yelled at, threatening to end the relationship.
Emotions	Hers	His
Primary emotion	Disgust	Anger
Secondary emotion (1)	Anger	Fear
Secondary emotion (2)	Fear	
Secondary emotion (3)	Sad	
Tipping Points – Signals	Hers	His
<i>Closeness vs. Distance</i>	When he lead her into a corner too fast, she felt trapped and frozen.	When she allowed him to push her into a corner, he was confused and fearful expecting her to step forward to take the lead and get out. He was unsure and confused pausing when she stayed there.
<i>Psychological size (small, tall)</i>	In the corner she felt small, Disempowered	
<i>Intensity (tension, relaxation)</i>	He leads arms up and one leg up, she felt awkward and off balance, wobbling.	When she did not take the lead he slowed down, as if to stop, after a while he got tense when she did not read his signals to take the lead.

### Description of the couple concrete projects

To support her emotional regulation, they negotiated that he will read her early signs of flooding (e.g., raised voice, talking over him, breaking eye contact) and give her a signal that she is flooding (stop sign and flapping hands slowly as if to gesture calm down) and suggest they take a break until she is calm again, giving her space. Next the couple wanted to practice the solution choreography when she approaches, walking with a big step towards him to signal she is ready. He is to wait and not reapproach. Finally, they wanted to work on developing rituals of repair, talking about feelings and listening to each other without interruption. On this project he agreed to let her go first in talking about her feelings for as long as she needs, whilst giving her strong eye contact and his full attention. She wanted to work on being tender and soft in her voice, maintaining eye contact, not interrupting him or dismissing his feelings when it is his turn.

**Table 4: Couple Mr and Mrs A.**

Survival strategy	Hers	His
Only if I always (show a specific behaviour):	Do my best, try to be the centre of attention and try to feel special to fulfil my needs	Ease back down and do things well
Never (forbidden impulses):	Come too close, show weakness or let go	Acknowledge my mistakes, be offensive and say what I need
Keep (central needs):	Attention, being seen and safety	Harmony and closeness
Avoid (central anxieties):	Being alone and hurt	Being alone and hurt
Interacting survival strategies	Her from him	Him from her
What do I need from you?	Being safe in the relationship	Showing affection and sex
What makes me angry about you?	Highlight her weakness e.g. sports	Permanent arguing
What scares me about you?	Break up	Break up
Emotions	Hers	His
Primary emotion	Disgust	Anger
Secondary emotion (1)	Anger	Guilt
Tipping Points – Signals	Hers	His
Closeness vs. Distance	When he comes closer too fast and without her control	When she wants him to come close, he can't trust her and feels insecure and uncertain
Psychological size	When he is much smaller like begging on his knees	

## Emotional Mastery

### Description of the 'Solution – choreography'

The couple chose a sequence of three movements, which was part of their experience while doing the leading-following exercise. One solution for her was to use mindfulness of the couple to decide if he is allowed to come closer for an embrace. He wanted to address when he has the feeling that her signs for his approach are not clear. They started together in an experimental field, with rules for managing hurtful moments and regular feedback. They decided to be on the same eye level and that she has the leading position. They stand in front of each other and she gives him clear signs of how to come closer. With her hands, she shows him the size of his steps. Important is that they have eye contact the whole time, that she has enough space behind her, that he waits for her sign and that she is mindful of how close she really wants him.

### Description of concrete action projects

His projects were to stay on the same eye level and ask for his needs e.g. a hug on the couch. Her projects were to develop mindfulness exercises to regulate her emotions and to tune into his needs. She wanted to learn to give him clear signs and not just avoid his advances e.g. to say that hand holding is ok, but not a full body hug instead of suffering, resenting and exploding at him. Their couple project was to establish a weekly routine of talking to each other about their needs and feelings, starting with the solution sequence.

### Analysis

Results from the recorded interviews of the couples' experience of the modules were analysed according to agents and contents of change. Both couples were able to identify their own changes, their partner's changes and their relationship changes. After module 2 both partners suffered a lot from watching the video taped problematic situation, exasperated that neither of them could understand the point of view from the other. Both couples reported feeling an increase in physiological symptoms of flooding (e.g. tense, increases in heart rate). However, they both responded with comments reflecting enhanced body and feeling awareness of themselves and their spouse interacting in frustrated conflict. Both couples reported an understanding of each other without words and increased insight into how they 'appear' to their spouse.

All participants reported changes in understanding their own survival strategy developed from childhood and how it impacts negatively in their daily life in emotionally intimate relationships. E.g. Mrs C reported "I realised that my anger hides my feelings of disgust and hurts my partner." All participants reported positive physical effects such as deep relaxation throughout the mindfulness module. They also reported a mutual increase in positive sentiments and displayed a sense of closeness towards each other.

Responses were varied between the couples when the emotional field was elicited, deepened and discriminated. Both women showed some avoidance and blocking tendencies when deepening the primary emotion and reported the experience as difficult and emotionally

intense. Both couples reported greater emotional attunement, relief and the feeling of being validated in their needs and feelings. Couples reported they felt a deeper perspective of their spouse's emotional reactions and better understood their spouse's previous hidden intentions. Both couples reported mutual agent and content changes through the leading and following exercise. By undertaking an embodied cooperative task of moving out and then into synchrony both couples reported powerful feelings of empathy through these interactional movements as well as rapid and powerfully effective movement solutions to feel good together. These movement solutions made symbolic sense to the couple, were deeply satisfying and joyful, and were supportive in helping the couple to stay positively emotionally regulated and connected. The individual concrete action projects identified by all participants were reported to be functionally related to their negative emotional states and chosen also for their mutual benefit to support and enhance their relationship.

## Quantitative Analysis

Table 5. Average item response scores from the ECR-R from pre to post-intervention for Mr and Mrs C.

	Mrs C		Mr C	
	Pre	Post	Pre	Post
Attachment Style				
Anxiety	*6.0	3.2	2.6	1.2
Avoidance	3.0	3.2	2.0	1.1

NB. \*towards meaningful change. Female Attached anxious  $m=3.56$  ( $sd= 1.13$ ), Attached Avoidance  $m= 2.92$  ( $sd= 1.21$ ); Male Attached anxious  $m= 3.57$ ,  $sd=1.1$ , Attached Avoidance  $m=2.94$ ,  $sd=1.13$  (Fraleigh, Waller & Brennan, 2000).

Results from Table 5 show that at pre-test compared to the normative sample for the anxious attachment style Mrs C was more than one standard deviation above the mean, which decreased to within one standard deviation of the mean at post -test. Mrs C remained within one standard deviation of the normative sample for her avoidance in interpersonal relationships from pre to post- intervention. Mrs C shifted from a preoccupied attachment style to a secure attachment style following intervention however her changes scores using test-retest reliability coefficients showed a trend towards a meaningful decrease but there was not a significant difference in the pre to post -test scores. Mr C showed a secure attachment style from pre to post- intervention. There was a small decrease from pre to post -intervention in his attachment related anxiety and avoidance placing him more than one standard deviation below the normative sample at post -test, however these were not meaningful changes.

Results from Table 6 below showed that for Mrs C there was no meaningful change from pre

to post -intervention for her perspective taking related empathy, which remained more than one standard deviation below the mean for the normative sample. Her empathic concern showed no meaningful change from pre to post – intervention and remained more than one standard deviation below the mean. Mr C showed little change in his empathy scores across all four sub-domains from pre to post intervention, except for his empathic concern which increased to within one standard deviation of the normative range at post -test. Mr C remained more than one standard deviation below the average for perspective taking ability.

Results from the Relationship Assessment Scale showed that Mrs C reported an increase in relationship satisfaction from 55% (20/35) to 77% (27/35) satisfied in relationship from pre to post -intervention. Mr C also reported an increase in relationship satisfaction following intervention from 82% (29/35) to 91% (32/35) however it is likely that his increase in relationship satisfaction was not as large as Mrs C due to his higher pre-intervention satisfaction score. Results from the Brief PHQ showed that neither Mr nor Mrs C reported any significant depressive symptoms both at pre and post- intervention.

**Table 6. Average item scores on IRI for Mrs and Mr C.**

	MRs C		Mr C	
	Pre	Post	Pre	Post
Perspective Taking (PT)	2.8	2.7	2.7	2.5
Fantasy (FS)	3.0	2.8	1.0	1.2
Empathic Concern (EC)	3.4	3.0	2.4	2.7
Personal Distress (PD)	1.6	2.0	1.0	0.9

## Discussion

The purpose of the study was to present an innovative couples intervention incorporating activation and regulation of the couples’ interacting emotional survival strategies combined with embodiment principles to find a solution to their conflict to enhance partner satisfaction. It was hypothesized that the couples would develop greater empathy at multiple levels, regulate their emotions when responding to conflicts and develop greater partner satisfaction through acceptable solutions supported first by the body. Our hypothesis is partly confirmed. Both couples reported greater relationship satisfaction and improvements in attunement to their partner and better understood their partner’s previous hidden intentions. Empathic concern for Mr C moved to within the average range and Mrs C developed more of a secure attachment style in her close interpersonal relationships. This may have been related to decreases in her attachment anxiety following intervention. Our results are consistent with recent research by Kim et al. (2013) who used embodiment interventions to improve couple’s empathy.

The results of this study also suggest that the theoretical framework of embodied cognition and embodied empathy transfers into the clinical context where one of the spouses has BPD traits. Our intervention incorporating embodiment elements was useful, acceptable and helpful in aiding emotional regulation, empathy and partner satisfaction for couples where one of the spouses has BPD. Our results are also consistent with research by Behrends and Dziobek (this volume). Furthermore, the results of our study suggest that embodiment approaches with conflicted couples whose verbal repertoires are limited could complement general marriage counselling programs that rely on verbal interventions.

### **Limitations and outlook on possible therapeutic applications**

As this was a pilot study, there were several limitations. First the ratings of the video were conducted by the therapists and not blind raters. Follow up measures of change scores on standardised tests were obtained only from one couple as the other was a pre-pilot case. More case studies are needed for replicability using qualitative and quantitative measures with a diverse range of couples from different ages, orientations, ethnicities and mental health disorders. Similarly, whether the couples were able to generalise these choreographed solutions into their daily life with their spouses to reduce conflict and enhance friendship, empathy and intimacy needs to be determined longitudinally. Future studies need to replicate our results on a larger scale to obtain quantitative data and to use tighter research controls involving a wait list control group and randomisation of couples into groups. The potential benefit of integrating marriage therapy interventions with dance movement therapy (DMT) could be further explored. There is already growing evidence from the literature that DMT improves mental health outcomes for a wide range of clinical groups including those with depression and affective symptoms (Pinniger et al, 2013) and trauma (Moore, 2007).

Research investigating the potential benefit of DMT for couples is still in its infancy (Woodley & Sotelo, 2010). Our results suggest that our model of intervention for couples could easily be integrated into DMT such as Argentine tango (Pinniger et al., 2013). A final application is to consider how our intervention program may be applied at a group couple level. A potential advantage of group over individual couple embodiment approaches is that group members offer synergy and vitality and can accelerate and expand the embodiment processes of imitation and synchrony. We propose that our modules have easy adaptation at a group level as suggested in Figure 8 below. We are currently running a 20 plus hour group pilot couples program with twenty-four couples.

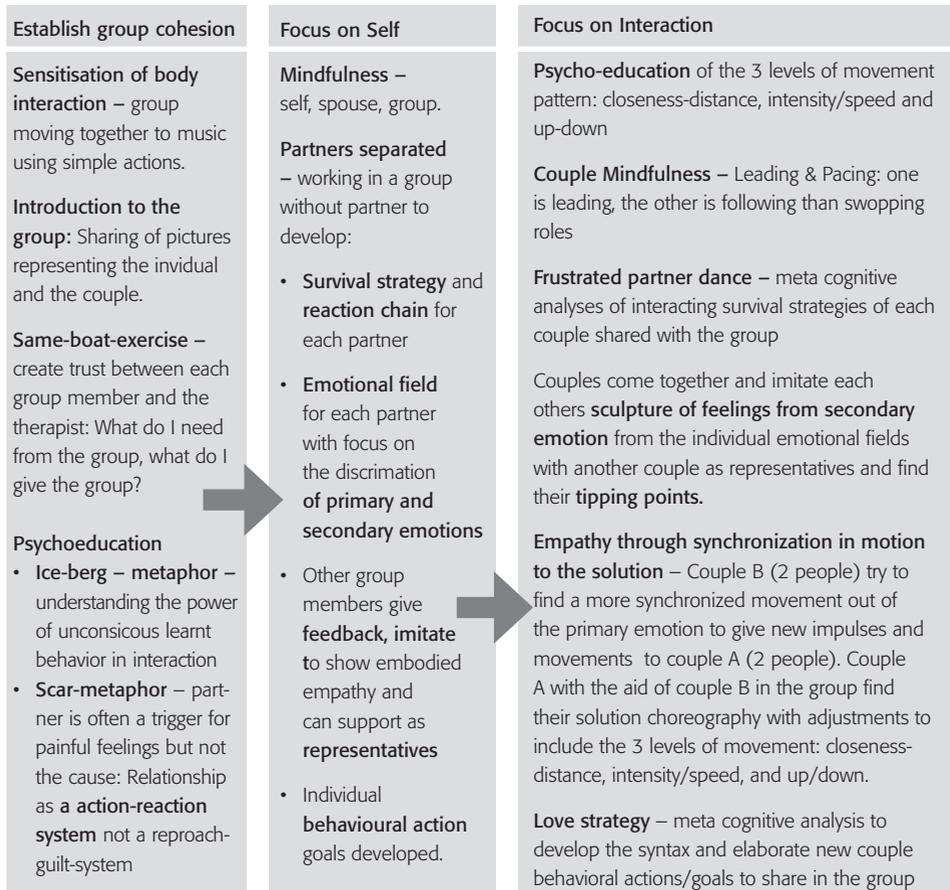


Figure 8. Suggested composition of a three day Group Program for connecting couples.

## Conclusion

Embodiment approaches utilising processes of emotional activation, imitation, synchronisation and cooperation may augment verbal couples' therapy interventions and lead to an increase in partner satisfaction, empathic concern and better emotional regulation via reductions in attachment related anxiety.

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