

# Pilot Study: Memory Recall and Non-Sexual Physical Touch Intervention in Couple with Trauma History

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## Abstract

- Touch has been associated with promoting feelings of trust, intimacy, and positive affect in romantic relationships. Yet trauma-related symptoms, such as restricted affect and anhedonia, may be a barrier to feelings of intimacy and connectedness in couples when one or both partners have a history of trauma (Riggs, 2014).
- This study aims to understand how non-sexual physical touch influences feelings of connectedness and intimacy among single- and dual-trauma couples.
- Biofeedback measures were collected while a pilot couple engaged in a memory recall and non-sexual physical touch intervention.
- The data collected from the current study may provide valuable insight into the objective and subjective experiences of intimacy and connectedness in single- and dual-trauma couples.

### RQs:

- How do partners with trauma history experience physical touch from their partner while discussing traumatic events?
- What is the experience of supporting partners as they listen to their partners share a trauma-related memory while engaging in NIS touch?
- How does physical touch influence feelings of connectedness among couples with trauma history?

H<sub>1</sub>: Both partners will experience increased feelings of intimacy and connectedness when sharing or listening to a trauma-related memory while engaging in non-sexual physical touch.

## Literature Review

Healthy intimacy in romantic relationships is characterized by the mutual enjoyment of physical touch between partners (Mills, 2001; Mills & Turnbull, 2001; Schwartz, 2001). Intimacy is characterized by touch and touch has been shown to foster feelings of intimacy between partners (Debot et al., 2013; Gallace & Spence, 2010). Mills and Turnbull (2001) and Schwartz (2001) developed models for healthy intimacy, which include sexual forms of touch and intercourse and non-sexual touch, such as hugging and hand-holding. When partners engage in non-sexual touch interventions, they demonstrate similar physiological measures of skin conductance and heart rate during the touch condition, suggesting affective touch may increase intimacy and improve feelings of partner support (Chantel-Goldman et al., 2014).

Touch has been associated with promoting feelings of trust, intimacy, and positive affect in romantic relationships. Yet trauma-related symptoms, such as restricted affect, infatibility, and anhedonia, may be a barrier to feelings of intimacy and connectedness in couples where one or both partners have a history of trauma (Riggs, 2014). The extant research literature suggests trauma, including childhood, adulthood, and cumulative trauma, can lead partners to disconnect from each other physically and emotionally (Mills & Turnbull, 2004; Nelson Goff et al. 2002; Nelson Goff et al. 2006; Riggs, 2014; Ruhlmann, et al., 2018). Physical and emotional disconnection between partners is often associated with isolation, defensiveness, and a lack of intimacy. In addition to the current literature, the author has experience working with single- and dual-trauma couples who have developed feelings of avoidance toward touch, including non-sexual touch. Based on the author's clinical experience as a licensed therapist working with couples, physical touch often becomes associated with re-traumatization and fears of intimacy because individuals' relationships with the self and others become compromised following traumatic experiences. Existing research suggests acknowledgment of the trauma and its impact on the victimized partner, as well as emotional vulnerability between both partners, are requisite to improving intimacy and connectedness (Mills & Turnbull, 2004). The present study integrates non-sexual physical touch and trauma-focused communication between partners using an experimental intervention.

## Methods

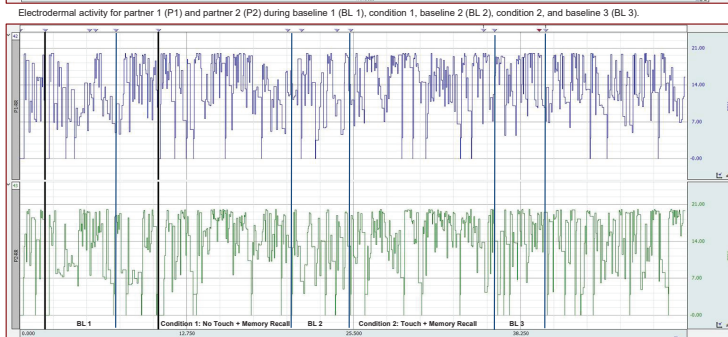
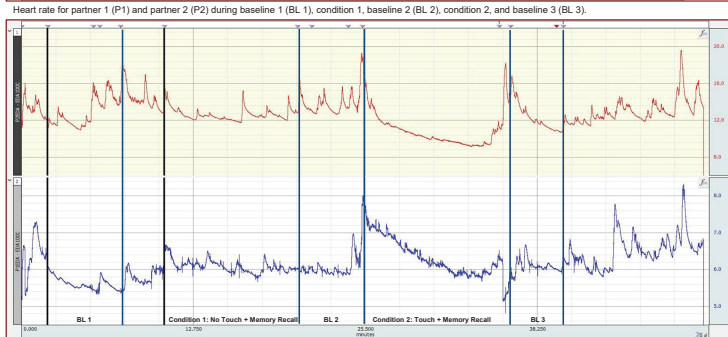
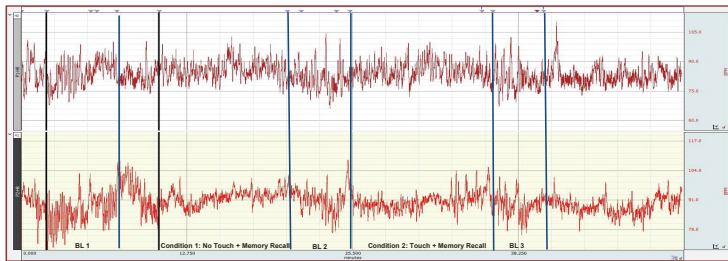
### Sample:

A dual-trauma couple where partners were aware of each other's trauma history and had been in a committed relationship for a minimum of 6 months. For this pilot study, trauma history was defined as an exposure to an accident, natural disaster, sexual, physical, or emotional abuse, or sexual or physical assault in childhood, adolescence, or adulthood.

Table 1 Demographics/ Characteristics of Participants		
	Partner 1	Partner 2
Age (years)	34	33
Gender	Cisgender Woman	Cisgender Man
Race	Caucasian	Caucasian
Level of Education	MS PhD in progress	MS
History of Trauma	Yes	Yes
Marital History	Yes	Yes
Living in Intimacy	Yes	Yes

Note: Partner couple identified as heterosexual and reported being in a committed relationship for 13 years.

- Screening Measures:**
- Researchers screened for risk of suicidality and intimate partner violence. Eligibility criteria included no risk of suicide and no indication of intimate partner violence. The pilot couple met eligibility criteria and the following screening tools were used to assess participant eligibility:
- Intimate Justice Scale
- ♦ Screens for psychological abuse and physical violence in couples (Jory, 2004).
- Ask Suicide-Screening Questions (ASQ)
- ♦ Assesses risk of suicide (Horowitz et al., 2017).
- The National Center for PTSD Trauma History Screen
- ♦ Assesses exposure to traumatic events (Carlson et al., 2011).
- The Impact of Events Scale-Revised
- ♦ Assesses subjective distress caused by traumatic events (Weiss & Marmar, 1996).



Respiration rate for partner 1 (P1) and partner 2 (P2) during baseline 1 (BL 1), condition 1, baseline 2 (BL 2), condition 2, and baseline 3 (BL 3).

## Methods (Continued)

### Pre-Test and Post-Test Measures

- Depression Severity:
- ♦ Patient Health Questionnaire (PHQ-9)(Kroenke et al., 2001).
- Relationship Satisfaction:
- ♦ Couples Satisfaction Index 4-Item Version (CSI-4 )(Funk & Rogge, 2007).
- Attachment
- ♦ Experience in Close Relationships-Revised(ECR-R)(Fraley et al., 2000).
- Mindfulness and Emotional Regulation
- ♦ Cognitive and Affective Mindfulness Scale-Revised (CAMS-R)(Feldman et al., 2007).
- Perceived Emotional Support
- ♦ PROMIS SF v2.0 Emotional Support 8a (PROMIS Health Organization and Assessment Center, 2014).
- Intimacy and Connectedness Scale
- ♦ 14-item questionnaire developed by the authors.
- Pre- and Post-Memory Recall Survey
- ♦ 5-item questionnaire developed by authors to assess participants' experiences before and after the touch + memory recall intervention.

### Biofeedback Measures:

- ♦ AcqKnowledge software used to measure EDA (Electrodermal activity) ECG (Electro-cardiogram), and respiration (BIOFAC Systems, Inc., 2015).
- ♦ Skin electrodes were placed on index and middle fingers of the non-dominant hand, right clavicle and left side of rib cage, and respiration belts were strapped around chest. Both partners were connected to skin electrodes and respiration belts.

## Results and Implications

### ♦ Discussion

- P1 ECG: Heart rate was higher during the no-touch condition and lower in the touch-condition.
- P2 ECG: Heart rate was lower during the no-touch condition and higher in the touch-condition.
- P1 EDA: More intensity in emotional arousal during condition 1 and more variance in emotional intensity in condition 2.
- P2 EDA: Lower intensity in emotional arousal during condition 1 and more variance in emotional intensity in condition 2.
  - May be explained by grounding interference.
- P1 RR: Increased breaths per minutes during condition 1 compared to condition 2.
- P2 RR: Increased breaths per minutes during condition 2 compared to condition 1.
  - Increased breaths per minute may be explained by dialog between partners, where P1 spoke more than P2 during condition 1 and P2 spoke more in condition 2 compared to condition 1.

### ♦ Implications

- The researchers intend to use data from the current pilot study to develop a mixed methods research design where qualitative interviews will be recorded and transcribed, in addition to collecting biofeedback and survey data.
- The data collected from the current pilot study provide valuable insight into the physiological effects of recalling a trauma-related memory while engaging in non-sexual physical touch.
- Findings from the current study may provide a future intervention for therapists working with single- and dual-trauma couples wanting to improve intimacy and connectedness as well as couples where at least one of the partners has a history of trauma and struggles with physical touch.
- Potential findings may also provide skills training and interventions for trauma-informed marriage and family therapy educators.

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