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# A Comparative Effectiveness Study of the Trauma Recovery Empowerment Model (TREM) and an Attachment-Informed Variation of TREM

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## Abstract Abstract

### **A Comparative Effectiveness Study of the Trauma Recovery Empowerment Model (TREM) and an Attachment-Informed Variation of TREM (ATREM)**

Melanie Masin-Moyer, University of Pennsylvania

Dr. Phyllis Solomon, Dissertation Chair, University of Pennsylvania

Dr. Malitta Engstrom, Dissertation Committee Member, University of Pennsylvania

**Objective:** An evidenced-based women's trauma group was modified to create a new protocol, Attachment-Informed Trauma Recovery Empowerment Model (ATREM), which included attachment-based concepts and strategies to determine if well-being could be enhanced beyond the Trauma Recovery Empowerment Model (TREM). A quasi-experimental design was used to test the hypothesis that ATREM would be associated with greater improvement in attachment security, perceived social support, emotion regulation, substance use, depression, anxiety, and PTSD symptoms than TREM.

**Methods:** Sixty-nine women completed the group interventions ( $n = 37$  ATREM;  $n = 32$  TREM), along with pre- and post-test questionnaires. The questionnaires included sociodemographic questions and the following standardized scales: Relationship Scale Questionnaire, Social Group Attachment Scale, Social Support Scale, Difficulties in Emotional Regulation, Brief Symptom Inventory 18, PTSD Symptom Scale, and modified versions of the Lifetime Stressor Checklist Revised and the Addiction Severity Index. The continuous variables were analyzed using paired t-tests for within-group comparisons and independent t-tests for between-group comparisons, and the categorical variables were analyzed using Chi-Square or Fisher's Exact Test.

**Results:** Both ATREM and TREM were associated with statistically significant within-group improvement in individual and group attachment styles, perceived social support, emotion regulation capacities, depression, anxiety, and PTSD. Only ATREM was associated with statistically significant improvement in individual attachment avoidance. The gains associated with ATREM did not exceed those associated with TREM as hypothesized.

**Conclusion:** This pilot study extends prior findings on TREM by demonstrating that novel infusions of attachment-focused strategies into this evidence-based practice can facilitate comparable growth across a variety of measures of well-being. ATREM was also able to promote significant reductions in individual attachment avoidance, a style of interacting often considered challenging to modify. ATREM's integrated design with cognitive-behavioral and psychodynamic elements holds potential to enhance responsiveness and effectiveness of TREM in meeting the diverse needs of women who have experienced trauma. Further, this study demonstrates the effectiveness of brief trauma-focused group therapy and provides insight into the emerging concept of group attachment style.

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**A Comparative Effectiveness Study of the Trauma Recovery Empowerment Model  
(TREM) and an Attachment-Informed Variation of TREM**

Melanie Masin-Moyer, LCSW

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## **Dedication**

I dedicate this dissertation to my father who instilled in me the value of a quality education, and did so without demands or pressure (he was usually worried I was stressing myself out and wanted me to relax). He did not need words, though, because his daily behaviors and choices exemplified the joy and satisfaction in being a lifelong learner well beyond degrees or grades. My father passed away before he could complete his doctorate, so I feel my doctorate in social work represents an accomplishment for both of us to share.

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I appreciate and admire the TREM participants who despite numerous hardships and responsibilities graciously offered their time to be part of this study. I am grateful to the three agencies that hosted the study: Libertae, NOVA, and Penn Foundation. I truly appreciate the enthusiasm and openness for my study at Libertae and could not have been welcomed with more warmth, professionalism, and respect than by NOVA. As my place of employment for over 20 years, I was not surprised by Penn Foundation's willingness to participate, but I was deeply touched by the lack of hesitation from the beginning and the on-going encouragement and interest that followed from numerous people, including Marianne Gilson and Karen Kern. I feel as if my success really mattered to them, and they were willing to do as much as possible to support it.

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## Table of Contents

DEDICATION	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF TABLES	ix
CHAPTER	
I INTRODUCTION AND BACKGROUND AND SIGNIFICANCE	1
Introduction	1
Background and Significance	4
Extent of the Problem	4
Trauma Sequelae	5
TREM Group Therapy	7
Role of Social Support in Trauma Recovery	12
Experience of Social Support in Group Therapy	13
Relevance of Attachment Theory to Social Support	14
Attachment Theory: Internal Working Models	15
Attachment Theory: Styles and Emotion Regulation	17
Mentalization	21
Attachment: Mediator Between Trauma and Psychological Distress	25
Attachment: Stability and Change	27
Attachment: Attachment: Impact of Life Events on Relative Consistency	28
Attachment and treatment: Bowlby's Perspective	31
Attachment and Treatment: Post-Bowlby	33
Attachment and Group Therapy	34
Can Group Therapy Facilitate Attachment Change in Individual Attachment Orientations?	36



Attachment-Associated Treatment Responses for Mental Health and Interpersonal Functioning	67
Attachment and Attrition from Group Therapy	71
Attachment and Group Functioning According to Group Format	72
Attachment and Group Therapy Dynamics: Re-conceptualizing Yalom	75
Group Cohesion	76
Interpersonal Learning	79
Helpful In-Group Behavior	80
Group Attachment Style	81
Attachment Informed-Treatment Strategies	85
Mentalization Enhancement in Attachment-Informed Groups	86
HYPOTHESIS	87
II METHODOLOGY	88
Research Design and Methods	88
Brief Overview	88
Design	88
Settings	88
Recruitment Procedures and Sample	89
Inclusion Criteria	91
Exclusion Criteria	91
Baseline Composition and Characteristics of the Sample	92
Retention, Participant Payments, Tracking Procedures	95
Data on Participants Who Did Not Participate/Not Complete the Study	97
Interventions—TREM and ATREM	99
TREM	100
ATREM	101
Group Assignment	106
Training of Intervention Personnel	106

Qualifications of Interventionists	107
Fidelity Assessment	107
Measures	108
RSQ	110
SGAS	111
SPS	112
DERS	113
BSI-18	114
PSS	115
ASI	117
Sociodemographic	118
LSC-R	118
Training of Data Collectors	119
Data Analysis	120
Human Subjects: Risk Reduction and Benefits	123
III RESULTS	126
Clinical Intervention Outcomes	126
ATREM: Within-group Change Over Time	126
Attachment	126
Social Support	126
Emotion Regulation	126
Mental Health/Substance Use	127
TREM: Within-group Change Over Time	127
Attachment	127
Social Support	127
Emotion Regulation	127
Mental Health/Substance Use	128
ATREM vs. TREM from Pre- to Post-Intervention Testing	129

Attachment	129
Social Support	130
Emotion Regulation	131
Mental Health/Substance Use	131
IV DISCUSSION AND IMPLICATIONS	132
Viability and Potential Benefits of ATREM	132
Between-group Findings: Threshold for Detecting Change	134
Sample Size and Retention	137
Treatment Duration	139
Experimental Design	141
Dilution and Potential Contamination	142
Delayed Response Potential /Follow Up	145
Fidelity	145
Facilitator and Group Member Attachment Style Interaction	147
Potential Moderators of Change	149
Potential Mediators of Change	150
Strengths/Limitations	152
Clinical Implications	154
Future Research	159
Conclusion	160
REFERENCES	162
APPENDICES	200

## LIST OF TABLES

Table 1. Attachment Dimensions: General Patterns in Relationships	22
Table 2. An Adult Attachment Perspective on Group Psychotherapy Outcomes and Processes: A Summary of Relevant Studies	37
Table 3. Descriptive Demographics of Participants at Baseline	93
Table 4. Clinical Characteristics of the Study Participants at Baseline	94
Table 5. Demographic Comparisons at Baseline of Study Completers (Per Agency)	96
Table 6. Demographic Comparisons at Baseline for Study Completers and Non-Completers	98
Table 7. Mean Differences for Within-Group Pre- to Post-Test Changes	128
Table 8. Mean Differences Between ATREM and TREM in Pre- to Post-Test Changes	130

# CHAPTER I

## Introduction and Background and Significance

### Introduction

Sexual, physical, and emotional abuse are experienced on a deeply personal level, often resulting in individual and relational challenges throughout one's life. Group interventions are uniquely suited to address the interpersonal needs of survivors, because group work is inherently an interpersonal endeavor, providing opportunities for relational healing through interactions with a therapist, each individual member, and the group as a whole (Bussey, 2007; Knight, 2006). One such group is the Trauma Recovery and Empowerment Model (TREM), a group therapy curriculum for women trauma survivors who also struggle with mental health and/or substance use disorders (Harris & Anglin, 1998).

Based on the generally favorable research findings regarding the effectiveness of TREM, it has been classified as an evidence-based intervention by the Substance Abuse and Mental Health Services Administration (SAMHSA), a branch of the Department of Health and Human Services (Substance Abuse and Mental Health Services Administration, 2016). The reported findings, however, are not definitive and demonstrate inconsistencies across studies regarding mental health, substance use, and other trauma recovery outcome domains (Amaro et al., 2007a; Falloot, McHugo, Harris, & Xie, 2011; Morrissey et al., 2005a). The inclusion of attachment theory perspectives and treatment strategies has the potential to strengthen the impact of this model beyond the traditional version by facilitating individualization in a group setting, integrating right and left hemisphere processes, and meeting the needs of both the group

members and clinicians more fully and flexibly (Field, 2014; Marmarosh, Markin, & Speigel, 2013; Marmarosh, 2014; Tasca et al., 2006; Tasca & Balfour, 2014; Wallin, 2015). Members may experience enhanced attunement and responsiveness, in-the-moment relational processing, interpersonal learning, emotional regulation capabilities, and self-understanding (Marmarosh, 2015; Tasca, 2014; Tasca & Balfour, 2014). For clinicians, attachment inclusion may augment their current group practice by strengthening co-facilitator partnership, building confidence in managing complex interactions through new insights and strategies, and offering an additional avenue for interpersonal healing through application of the newer concept of group attachment style (Tasca, 2014; Tasca & Balfour, 2014).

Attachment perspectives and strategies were infused into TREM to create an attachment-informed modification of TREM (ATREM). ATREM builds on and deepens the core notions underlying TREM, which involve the idea that physical and sexual abuse erode emotional bonds with family, community, and even within the self (Fallot & Harris, 2002). Relationships for individuals with histories of interpersonal trauma are typically not experienced as safe havens (Herman, 1997), resulting in struggles to connect with others and reduced perceptions of social support from a variety of sources, regardless of actual availability (Burton, Cooper, Feeny, & Zoellner, 2015; Ford & Courtois, 2013; Muller, Gragtmans, & Baker, 2008). Relational disconnection alienates survivors from the protective and healing power of social support, which has been identified as a buffer against adverse emotional and behavioral effects and a key contributor to resilience among survivors of interpersonal trauma (Afifi & MacMillan, 2011; Burton et al., 2015; Evans, Steel, & DiLillo, 2013; Maercker & Hecker, 2016; Maheux & Price, 2016; McLewin & Muller, 2006; Muller et al., 2008; Panagioti, Gooding, Taylor, & Tarrier,

2014; Pearlman & Courtois, 2005; Sperry & Widom, 2013; Sylaska & Edwards, 2014).

Advances in neuroscience validate the vital contribution of mutually supportive relationships for emotional well-being (Banks, 2010; Banks, 2011; Banks & Hirschman, 2016). When people have healthy connections with others, neural pathways get the stimulation required to make the brain calmer, as well as more tolerant, empathic, and productive (Banks & Hirschman, 2016).

Inherent in the nature and function of group therapy is the ability to provide opportunities for connecting with others and experiencing socially supportive relationships that may not be available or utilized in an individual's natural settings (Knight, 2006; Lundqvist, Hansson, & Svedin, 2009; Marmarosh et al., 2013; Yalom & Leszcz, 2005). Unfortunately, it cannot be assumed that the mere participation in a group will be helpful for all individuals (McLewin & Muller, 2006; Shechtman & Rybko, 2004). A history of trauma appears to serve as a significant impediment to being open to socially supportive relationships, for relationships are typically not experienced as safe havens (Herman, 1997). Hence, ATREM was designed to extend the relational foundation of TREM by using attachment theory as a lens for understanding the social support perceptions and affective reactions in relationships among women with histories of abuse. Despite some consistent philosophies with attachment theory, TREM does not explicitly examine or address attachment styles, potentially limiting the ability of women with histories of trauma from maximizing the benefits intrinsic to group processes, most notably social support. The aim of the present study was to examine whether a manualized attachment-informed modification of TREM would contribute to healing from the effects of trauma beyond traditional TREM by conducting a comparative effectiveness study with a quasi-experiential design to address the following question:

Is ATREM more effective than TREM in improving attachment security patterns, perceived social support, emotion regulation, substance use, depression, anxiety, and PTSD symptoms?

With 90% of clients in public behavioral health care settings indicating histories of trauma, there is a critical need to examine the effectiveness of trauma treatment in fostering positive outcomes for individuals with mental health and/or substance use issues (Substance Abuse and Mental Health Services Administration, n.d.).

## **Background and Significance**

**Extent of the problem.** High prevalence rates for violence against women and girls have been well-documented (Dass-Brailsford & Myrick, 2010; Fallo et al., 2011; Felitti et al., 1998; van der Kolk et al., 2014). Nearly 20% of women indicate a history of rape at some point in their lives and 22% report being victims of severe physical violence by an intimate partner (Breiding et al., 2014). Among women diagnosed with mental illness or substance use disorders, 80% report having experienced traumatic events (Jansen, 2015; National Institute on Drug Abuse, n.d.). According to the U.S. Department of Health and Human Services, approximately 702,000 children were victims of abuse or neglect in 2014 (U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, 2016). When sexual victimization begins in childhood, there is an almost 50% chance of sexual revictimization at some later point in their lives (Walker, Freud, Ellis, Fraine, & Wilson, 2017). Children who experience repeated and prolonged forms of interpersonal maltreatment by attachment figures are especially vulnerable for experiencing



complex trauma which alters the emotional, cognitive, and behavioral development of the survivor in profound and lasting ways (Ford & Courtois, 2013; Herman, 1997; Pearlman & Courtois, 2005).

**Trauma sequelae.** Numerous studies involving adults with histories of child abuse and neglect have been conducted, and they consistently and overwhelmingly demonstrate a strong association with enduring, deleterious consequences, including chronic health ailments, depression, anxiety, ADHD, bipolar disorder, PTSD, drug and alcohol addiction, self-injurious behavior, eating disorders, low self-esteem, affect dysregulation, limited coping skills, and decreased self-understanding (Felitti et al., 1998; Fonagy et al., 1996; Hillberg, Hamilton-Giachritsis, & Dixon, 2011; Moses, Reed, Mazelis, & D'Ambrosio, 2003; Murphy, Elklit, Hyland, & Shevlin, 2016). Similar consequences are consistently reported by women who have experienced interpersonal trauma as adults, such as sexual assault and intimate partner violence (Devries et al., 2013; Möller, Bäckström, Söndergaard, & Helström, 2014; Nelson, Bougatsos, & Blazina, 2012; Spohn, Wright, & Peterson, 2016; Zinzow et al., 2011). Psychological consequences associated with sexual assault and intimate partner violence among women include PTSD, substance use disorders, depression, suicide, anxiety, and excessive fear (Devries et al., 2013; Möller et al., 2014; Spohn et al., 2016). Further, PTSD, depression, and substance use often co-occur for women with these types of trauma histories, potentially exacerbating negative outcomes (Zinzow et al., 2011). Chronic pain, gynecological problems, migraines, and gastrointestinal disorders are also associated with prior experiences of sexual assault and intimate partner violence (Nelson et al., 2012; Zinzow et al., 2011).

Interpersonal trauma not only has the potential to negatively impact the emotional and physical well-being of survivors but also challenges the quality of relational connections across the lifespan. Physical and sexual abuse have been attributed with “severing core connections” with family, community, and self (Fallot & Harris, 2002, p. 477). Women who have experienced interpersonal trauma, especially complex trauma, often have increased challenges relating to others, and their behaviors can make it difficult for others to relate to them, leaving them feeling distrustful and isolated (Ford & Courtois, 2013; Pearlman & Courtois, 2005; Saunders & Edelson, 1999). Judith Herman (1997), in her seminal work on trauma and healing, focuses on the interpersonal nature of trauma and how it can “shatter the construction of self that is formed and sustained in relation to others” (p. 51). Herman conceptualizes healing as needing to occur within the context of relationships to form new, healthy connections that mend the disempowerment and alienation involved in trauma sequelae. Allen (2013) echoes these sentiments by asserting that the fundamental pain and damage of trauma in attachment relationships is being left “psychologically alone in unbearably painful emotional states, and therapeutic amelioration entails restoring a feeling of emotional connection in attachment relationships” (p. 368). Hence, interpersonal violence requires interpersonal repairs (Herman, 1997; Ruisard, 2016). The healing potential of interpersonal repairs and the value of fostering healthy relational experiences are often foundational components of group psychotherapy (Yalom & Leszcz, 2005), including TREM (Harris & Anglin, 1998).

**TREM group therapy.** TREM is a manualized group therapy approach designed for women who have experienced interpersonal trauma and is considered an integrated group intervention as it concurrently addresses trauma, mental health, and substance use disorders

among women. The majority of the investigations on the effectiveness of TREM occurred through a SAMHSA-sponsored research endeavor conducted by the Women's Co-Occurring, Domestic Violence Study (WCDVS) between 1998-2003 in order to assess the effectiveness of comprehensive, integrated, trauma-informed treatment services for women as compared to treatment-as-usual through quasi-experimental designs at multiple sites (Huntington, Moses, & Veysey, 2005; McHugo et al., 2005b; Moses et al., 2003). In one study with urban women in two community mental health settings, Fallot and colleagues (2011) asserted that their results reflect "partial confirmation" (p. 85) for TREM given that participants significantly improved with respect to several outcomes, including anxiety, drug and alcohol problem severity, and personal safety, but not for PTSD, depression, or overall mental health symptom severity.

In contrast, another WCDVS study (Amaro et al., 2007b) found significant improvement in overall mental health symptom severity and PTSD symptoms in their sample drawn from urban community-based methadone residential and outpatient substance abuse treatment centers. Another dissimilar outcome involved a lack of significant changes in drug or alcohol severity between TREM and the control group. While substance use severity did not significantly change, Amaro et al. (2007b) found significantly higher rates of drug abstinence for TREM over the control group, representing some accordance with Fallot et al. (2011).

Toussaint, VanDeMark, Bornemann, and Graeber (2007) implemented a modified version of TREM for women in a co-occurring disorders residential treatment center and similarly showed mixed results regarding effectiveness for PTSD, mental health, and substance use outcomes compared to treatment-as-usual (TAU), but with a trend for TREM towards improvements in mental health that reached significance at 12-month follow up. TREM also had

a significantly positive impact on the dissociative and trauma coping domains of PTSD symptomatology and sense of safety compared to the comparison group, but no significant differences were found between the groups for drug or alcohol use.

A meta-analysis of all nine locations of the WCDVS study (Cocozza et al., 2005) sought clarification on the varied outcomes by focusing on program-level effects of integrated trauma treatment along with treatment effects as compared to a comparison/control group. With this aim, they assessed trends between and across study sites, examining a variety of trauma interventions, including TREM. Without disaggregating specific interventions, they concluded that treatment groups displayed more favorable outcomes than TAU with an overall trend of significant improvements for PTSD and drug use severity and approaching significant improvement for mental health symptoms. These findings generally fit the pattern for the TREM-specific studies. Overall, the meta-analysis found larger effect sizes were attributable to more comprehensive integrated treatments.

A recent study of TREM (Cihlar, 2014), involving a small sample of urban women who were formerly incarcerated, utilized several of the same outcome measures for mental health, PTSD, substance use severity, and trauma-related coping skills as the WCDVS studies for purposes of comparison. Cihlar also incorporated a relationship and role functioning measure. Although no significant differences for any of these outcomes emerged, medium to large effect sizes were found for most of the outcomes for the TREM group, suggesting its positive impact. Further, a correlation was found indicating that the more sessions attended, the larger the improvements in mental health, PTSD, and substance use symptoms. While it is necessary to adopt appropriate caution in the application of these findings due to the small sample size, this

study tentatively provides evidence of convergence with some of the WCDVS studies and divergence with others. This study expands on the WCDVS research by focusing more explicitly on relationships by using a psychometrically sound measure to track changes from pre- to post-intervention of relation to self and other, thereby providing a link between TREM and constructs relatively consistent with attachment theory. Given TREM's philosophy of the critical importance for women to experience a safe and supportive community through which new connections can be made that promote trauma recovery (Fallot & Harris, 2002), this link between TREM and relationship enhancement is a critical one to explicitly and concretely address in efforts to clearly establish the benefits of TREM.

With some similarity to the Cihlar study (2014), Paquin, Kivlighan, and Drogosz (2013) examined the impact of TREM on PTSD symptoms among participants with legal involvement outside of the auspices of the WCDVS. In the Paquin et. al (2013) study, though, the women were incarcerated during their involvement in the TREM intervention, and a more direct focus was aimed at relationships through an organizational psychology lens. The researchers were interested in the degree of congruence in opinions on group climate which was operationalized as the fit or match between an individual and other group members regarding perceptions of engagement, avoidance, and conflict in group dynamics. The idea of person-group fit was selected because of its high relevance to interpersonal trauma survivors who often struggle to experience a sense of belonging and acceptance and instead feel isolated and emotionally disengaged from others (Courtois & Ford, 2012; Herman, 1997), conditions which TREM is designed to diminish by fostering healing engagements. The investigators applied Yalom's (2005) notion of group outliers to the concept of group climate to explore connections between

degree of fit and changes in PTSD symptoms. They hypothesized that as congruence emerged between individual and group perceptions of group climate (increased convergence) during the 22 weeks in TREM, PTSD symptoms would decline. In other words, an individual who, over the course of TREM, remained an outlier with divergent perceptions from the group may not experience the benefits of group membership in terms of alleviating PTSD-related distress. Consistent with their hypothesis, when there was a decrease in differences between individual and group ratings of avoidance, there was an associated reduction in PTSD symptoms. This treatment outcome could potentially be accounted for by an attachment-based explanatory framework given that the operationalization of group climate as engagement, avoidance, and conflict resonates with basic tenets of attachment theory. The authors did not espouse an attachment mindset but attachment concepts involving patterns of relational behavior and the importance of attention to individual differences in creating a sense of safety in the group space offer depth to the interpretations of their findings.

Given TREM's generally favorable outcomes from the WCDVS and other studies (Fallot et al., 2011; Paquin et al., 2013), further research is warranted to clarify discrepancies and identify methods to enhance its effectiveness. One such method may involve infusing attachment-informed insights and strategies into the TREM protocol. Attachment theory blends well with other treatment approaches and can be fluidly incorporated into even highly structured group treatment models, potentially making a successful group protocol even more effective (Marmarosh et al., 2013; Schwartz, 2015). While a relational focus is well-represented in various TREM topics, an explicit consideration of attachment patterns and their clinical implications is not emphasized in the treatment protocol. TREM's relationship-focused

discussions lack a grounding in a larger attachment-based conceptual framework that, when made explicit, could potentially offer deeper insights into the long-term and pervasive influence of attachment ruptures on present intrapersonal and interpersonal functioning. Attention to attachment may be highly beneficial for enhancing well-being, even in integrated treatments for women, because insecure attachment has been shown to function as a mediator between childhood victimization and psychological distress and predicts substance use among women involved in the criminal justice system (Winham et al., 2015). Allen (2013) contends that for many clients with interpersonal trauma histories to form healthy therapeutic alliances and benefit from therapeutic relationships, specific attachment-related skills need development. Furthermore, attachment ideology offers opportunities to mindfully process in-the-moment interpersonal experiences amongst group members that may facilitate the development of earned security (Wallin, 2015) through corrective emotional experiences within the safety of the group interactions. Group facilitators may also benefit from attachment-informed treatment approaches by having a depth of background information that can be used for more accurate attunement and timely responsiveness to the needs of the members (Marmarosh et al., 2013). Facilitators may be better equipped to meet those needs with new or enhanced strategies to address the complex dynamics that inevitably occur during group interactions. Attachment can serve as an underlying explanatory framework for these complex dynamics, rendering them more comprehensible as remnants of survival strategies (Chen & Mallinckrodt, 2002; Rom & Mikulincer, 2003; Smith, Murphy, & Coats, 1999; Tasca, 2014). The infusion of attachment theory may engender confidence in clinicians through deepened insight and expanded repertoires of intervention strategies. Attachment-informed insights and strategies may support facilitators in

accomplishing such tasks as fostering healthy relational experiences, including socially supportive interactions, which are often foundational components of successful group psychotherapy.

**Role of social support in trauma recovery.** Socially supportive relationships represent one type of interpersonal connection that can contribute to trauma recovery and overall well-being of women who have histories of interpersonal trauma, because social support can function as a buffer against or an ameliorator of the damaging outcomes of abuse (Evans et al., 2013; Hyman, Gold, & Cott, 2003; Maheux & Price, 2016; Panagioti et al., 2014; Sperry & Widom, 2013). Gottlieb and Bergen (2010) define social support as “the social resources that persons perceive to be available or that are actually provided to them by nonprofessionals in the context of both formal support groups and informal helping relationships” (p. 512). The perception of social support is noteworthy, because a person needs only to have a sense of the availability of social support, not even utilize it, to experience its contribution to resilience (McLewin & Muller, 2006). Social support has been linked to factors that directly coincide with the needs of women who have been abused as children, such as increased self-esteem and social competencies along with decreased psychopathology, like PTSD, depression and anxiety (Evans et al., 2013; Hyman et al., 2003; Maheux & Price, 2016; Muller et al., 2008; Panagioti et al., 2014; Sperry & Widom, 2013; Stevens et al., 2013). Additionally, women who disclose experiences of sexual assault or intimate partner violence and receive positive social reactions, and accompanying emotional support, report greater perceptions of control over their recovery, more adaptive coping, reduced PTSD and other mental health benefits, and fewer negative



physical health symptoms (Bryant-Davis et al., 2015; Sylaska & Edwards, 2014; Ullman & Peter-Hagene, 2014).

Although social support may play a vital role in trauma recovery, trauma survivors often cannot experience its beneficial effects. Individuals with histories of child maltreatment tend to report less social support from families, spouses, and friends in terms of perception, utilization, and quality (Muller et al., 2008; Pearlman & Courtois, 2005; Stevens et al., 2013). Even 30 years after experiencing child maltreatment, adults have reported significantly lower levels of perceived social support compared to a matched group of adults without childhood abuse histories (Sperry & Widom, 2013). Women may be reluctant to disclose experiences of sexual assault or intimate partner violence due to negative or mixed reactions that may occur (Ahrens, 2006; Overstreet & Quinn, 2013; Ullman & Peter-Hagene, 2014). Consequently, the protective and healing benefits to be garnered from a healthy social support system may seem too risky to pursue or feel unattainable for survivors of interpersonal trauma, leaving them isolated and at an increased vulnerability for distress (Lundqvist et al., 2009; Stevens et al., 2013; Sylaska & Edwards, 2014; Ullman & Peter-Hagene, 2014).

**Experience of social support in group therapy.** A therapeutic relationship, in the form of individual psychotherapy, can offer a secure context for interpersonal healing to occur. Group psychotherapy broadens the therapeutic milieu beyond the dyad, thereby offering more prospects for relational healing through interactions with one or more therapists, each group member, and the group as a whole. Inherent in the nature and function of group therapy is the ability to provide safe opportunities for experiencing socially supportive relationships that can help a person feel understood, accepted, and valued (Bussey, 2007; Lundqvist et al., 2009; Marmarosh

et al., 2013; Yalom, 1995). Unfortunately, it cannot be assumed that the mere participation in group therapy will be helpful for all individuals (McLewin & Muller, 2006; Shechtman & Rybko, 2004). Social support is beneficial when individuals are open to receiving it in the context of relationships (Muller et al., 2008). However, traumatized women's isolation and mistrust often constrains needed openness even in formal therapeutic settings, suggesting that focused efforts, not just exposure to other people within a group, may be required to create healthy interpersonal connections (Lundqvist et al., 2009).

**Relevance of attachment theory to social support.** John Bowlby's attachment theory provides a cohesive framework for illuminating the roots and clarifying the manifestations of individual differences in social support perceptions and utilization, especially for adult survivors of child maltreatment (Muller et al., 2008). McLewin and Muller (2006) assert that because the conceptualization of adult attachment is closely linked to intimate relationships, and these relationships serve as a potential source of social support during times of stress, these concepts need to be examined concurrently to add depth of meaning to findings on social support. While the notion of social support and the theory of attachment share some conceptual commonalities, these constructs only partially overlap and, therefore, describe distinct phenomena (Priel & Shamai, 1995). Attachment theory can be considered a higher order construct that includes social support as one of its characteristic features such with support-seeking behavior representing one observable manifestation of an individual's attachment style (Blain, Thompson, & Whiffen, 1993; Perrier, Boucher, Etchegary, Sadava, & Molnar, 2010; Priel & Shamai, 1995; Shaver & Mikulincer, 2007; Smith et al., 1999). Within the specific realm of trauma, a focus on attachment in conjunction with social support has been highlighted as

particularly advantageous to furthering an understanding of the social cognitive variables associated with PTSD (Woodhouse, Ayers, & Field, 2015). Furthermore, assessment measures used in research demonstrate the interconnections of attachment and social support. Some measures of perceived social support include a category defined in terms of attachment, while in other cases validation of perceived social support measures are based on their correlation with the construct of attachment (Gottlieb & Bergen, 2010; Lundqvist et al., 2009).

**Attachment theory: Internal Working Models.** The essence of attachment theory is the embodiment of relationships as preeminent forces in the lives of individuals “from cradle to grave” (Bowlby, 1982, p. 208). Attachment styles develop from repeated interactions between a baby/young child and primary caregiver as the caregiver manages the interplay between the child’s innate need for proximity when feeling distressed and the child’s natural inclinations to explore the world while feeling safe. If caregivers are attuned and sensitively responsive to the child’s needs, a secure base is formed and provides a foundation for healthy personality and emotional development (Bowlby, 1988; Brisch, 2014). Implicit mental schemas about the nature and worth of self and the availability and supportiveness of others, known as internal working models (IWMs), along with methods of emotion regulation, also evolve out of a child’s early interactions with caregivers (Cassidy, 1994; Collins & Feeney, 2004; Marmarosh et al., 2013; Maxwell, Tasca, Ritchie, Balfour, & Bissada, 2014; Mikulincer & Shaver, 2005; Thompson, 1994; Thorberg & Lyvers, 2009).

The sense of interpersonal security or insecurity (the attachment style) that develops from early relational experiences is generalized beyond the original dyad and continues to guide and influence attachment-related affect, ideas, perceptions, expectations and behaviors in future

relationships throughout a person's life (Bowlby, 1982a; Bowlby, 1982b; Dykas & Cassidy, 2011; Marmarosh et al., 2013). For example, teens with secure attachment styles and IWMs comprised of positive views of self and others have been found to report higher perceived social support from family and friends (Blain et al., 1993). Secure individuals will seek more emotional and instrumental social support in times of need than individuals characterized as attachment avoidant or anxious (Florian, Mikulincer, & Bucholtz, 1995). Applying an attachment perspective led researchers to conclude that mental representations of self and others act as filters for perceptions, creating biases that motivate or inhibit support seeking behavior based on an individual's implicit predictions and evaluations of the quality, worth, and availability of social support (Blain et al., 1993; Cloitre, Stovall-McClough, Zorbas, & Charuvastra, 2008; Florian et al., 1995). More specifically, individuals with secure attachment orientations trust that the significant people in their lives will be available to comfort them when they are undergoing problems and, consequently, will turn to these people in times of need.

Additionally, when an individual is around unfamiliar people, IWMs are automatically and implicitly activated to access past information about known others so that he or she has a basis to anticipate and interpret the intentions, actions, and reactions of these new people (Dykas & Cassidy, 2011). Even with known others, such as romantic partners, IWMs are relied upon to interpret ambiguous messages (Collins & Feeney, 2004). Individuals characterized with insecure attachment styles are prone to construe ambiguous social support messages from partners more negatively and judge them as less helpful or well-intended than individuals with secure attachment styles (Collins & Feeney, 2004). Although these studies focus on a singular IWM, attachment theorists generally contend that people possess more than one IWM which can enable

individuals to have adaptive flexibility in social situations (Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Brisch, 2014; Keating et al., 2014; McLewin & Muller, 2006; Smith et al., 1999). All IWMs, though, are not thought to be equally accessible, a process likely dependent on the recency and frequency of activation of particular mental schemas, resulting in the emergence of a primary IWM that is relied upon across various situations (Brisch, 2014; Holtz, 2005; Keating et al., 2014; Mikulincer & Shaver, 2010; Smith et al., 1999).

**Attachment theory: Styles/orientations and emotion regulation.** Starting with Mary Ainsworth, a host of researchers have built upon Bowlby's notions of attachment with the focus evolving from children to parents, romantic couples, other close relationships, and, most recently, to groups (Betherton, 1992; Hazan & Shaver, 1987; Marmarosh et al., 2013; Smith et al., 1999). Initially, attachment patterns were divided into discrete categories, and although terminology varies, the most typically accepted labels for adults are secure, preoccupied, dismissing, and fearful (Bartholomew & Horowitz, 1991; Marmarosh et al., 2013). Later, two dimensions of attachment, based on Bowlby's explanation of IWMs as view of self and other, were explored in more depth and determined to underlie the four categories (Griffin & Bartholomew, 1994b). Presently, a dimensional model continues to be advocated for in measuring attachment but with a new characterization of the two dimensions based on a factor analysis of self-report measures (Brennan, Clark, & Shaver, 1998; Mikulincer & Shaver, 2010). This analysis revealed that most of the numerous constructs loaded onto the two dimensions of attachment anxiety and attachment avoidance which are thought to provide a more comprehensive description of attachment tendencies than previous models and have stronger internal consistency (Brennan & Shaver, 1995; Brennan et al., 1998; Mikulincer & Shaver, 2010;

Woodhouse et al., 2015). Research strongly supports the accuracy of measuring attachment tendencies along the two continuous dimensions of a person's relative degree of attachment avoidance (of closeness, emotional expressiveness, and dependency) and attachment anxiety (about being abandoned, unloved, and rejected) (Brennan & Shaver, 1995; Brennan et al., 1998; Gallagher, Tasca, Ritchie, Balfour, & Bissada, 2014; Levy, Ellison, Scott, & Bernecker, 2011; Marmarosh et al., 2013; Mikulincer & Shaver, 2010; Taylor, Rietzschel, Danquah, & Berry, 2015; Wallin, 2015; Woodhouse et al., 2015). The results are meant to be depicted, not as discrete categories, but as occupying different placements on intersecting continuums which can be depicted orthogonally, based on degree of adherence to these two dimensions. The intersection of these continuous lines creates four quadrants which many researchers utilize to conceptualize attachment in terms of the four delineated categories which include secure or one of three types of insecure attachment styles: preoccupied, dismissing, or fearful (Brennan & Shaver, 1995; Kinley & Reyno, 2013; Konrath, Chopik, Hsing, & O'Brien, 2014; Marmarosh et al., 2013; Pearlman & Courtois, 2005; Saunders & Edelson, 1999; Woodhouse et al., 2015). It is important to keep the continuum ideology in mind despite the commonly referenced categories, because the continuum highlights the nuances of differences, not just between, but also within each quadrant such that an individual possesses degrees of attachment anxiety and avoidance (Bartholomew & Horowitz, 1991; Marmarosh et al., 2013; Taylor et al., 2015; Wallin, 2015). If a categorical approach is adopted gradations of behavioral variability are obscured by the singular label which fails to reflect that an individual's best fitting category may only be a couple of points above the next highest category, meaning participants' relational behavior often reflects elements of more than just their assigned category (Bartholomew & Horowitz, 1991).

Additionally, the continuous dimensions can account for the phenomenon that despite the preeminence of a particular attachment pattern for an individual, there can be degrees of variability or “multiplicity... of states of mind” within that individual in different contexts (Wallin, 2015, p.97). Some authors advocate for the use of both categorical and continuous classifications to enhance clinical specificity from the categories that can be informative in guiding treatment while not forsaking the superior reliability and comparability features that have been validated with a continuous approach (Woodhouse et al., 2015).

Regardless of approach, determinations are based on the degree of adherence a person exhibits to certain relational characteristics, mostly related to IWMs and emotional regulation patterns. The patterns of emotional reactions that are exhibited by an individual are as integral to identifying and understanding his or her attachment style as interpersonal thoughts and behaviors (Tasca et al., 2013a; Thorberg & Lyvers, 2009). Along with temperament, early relational experiences are considered a key underlying mechanism in the formation and maintenance of emotion regulation behaviors exhibited in adulthood with each attachment style representing a grouping of typical emotional responses (Cassidy, 1994; Cloitre et al., 2008; Fonagy & Luyten, 2009; Shaver & Mikulincer, 2007; Thompson, 1994; Thorberg & Lyvers, 2009).

Secure attachment reflects low attachment anxiety and avoidance with a positive view of self and others. Secure adults have a developmental history of trusted caregivers who were able to appropriately reflect back to them their subjective experiences (Fonagy & Luyten, 2009; Marmarosh, Markin, & Spiegel, 2013), setting a foundation for feeling known, cared about, and worthy as a unique individual. For those with insecure adult attachment styles, however, direct security seeking during childhood did not consistently, if at all, provide comfort or care, so these

children adopted alternative (also known as secondary or defensive) strategies to garner some sense of safety in the moment. Insecure attachment orientations are defined by either attachment anxiety or attachment avoidance, or both, being high. Attachment orientations can be recognized through predictable, patterned ways of regulating arousal when the attachment system is activated by relational distress involving habitual overreliance of the sympathetic nervous system with attachment anxiety and overuse of the parasympathetic nervous system with attachment avoidance (Farmer, 2008). Individuals with high attachment anxiety and low attachment avoidance typically engage in hyperactivating strategies when relational concerns are aroused which entail excessive and dramatic attempts to keep people close and hypervigilance for potential abandonment or rejection (Marmarosh et al., 2013; Shaver & Mikulincer, 2007). In contrast, individuals with high attachment avoidance and low attachment anxiety typically implement deactivating strategies when relationally uncomfortable which involve rigid attempts to maintain distance and autonomy to detach from attachment-related feelings (Shaver & Mikulincer, 2007). Individuals with high attachment anxiety and avoidance alternate between hyperactivating strategies when they fear abandonment and deactivating strategies when they fear rejection (Becker-Phelps, 2014; Marmarosh et al., 2013; Pearlman & Courtois, 2005; Riggs, 2010; Shaver & Mikulincer, 2007). See Table 1 for a detailed list of characteristic relational behaviors for each permutation of attachment anxiety and avoidance.



**Table 1--Attachment Dimensions: General Patterns in Relationships**

<p style="text-align: center;"><b><u>Secure:</u></b>  <b>Low Attachment Anxiety</b>  <b>Low Attachment Avoidance</b>  <i>(categorical—secure)</i></p> <ul style="list-style-type: none"> <li>• Positive views of self &amp; others</li> <li>• Adaptively regulates affect—not typically hypo- or hyper-aroused</li> <li>• Belief that connection provides comfort &amp; support as needed</li> <li>• View relationships as positive (not perfect)</li> <li>• Feel loved, accepted, &amp; competent in relationships</li> <li>• Constructive means of coping</li> <li>• Comfortable with intimacy &amp; autonomy</li> <li>• Healthy confliction resolution skills—attachment repairs</li> <li>• High level of cognitive consistency</li> <li>• Able to engage in mentalizing &amp; gain insight of self &amp; others</li> <li>• In groups: internal leaders &amp; well-liked</li> </ul>	<p style="text-align: center;"><b><u>Insecure:</u></b>  <b>High Attachment Anxiety</b>  <b>Low Attachment Avoidance</b>  <i>(categorical—preoccupied)</i></p> <ul style="list-style-type: none"> <li>• Negative views of self/positive of others</li> <li>• Hyperactivating strategies (hyper-aroused) when relationally distressed</li> <li>• Tendencies for jealousy, anger, dependence</li> <li>• Trapped in unwarranted crisis mode</li> <li>• Ultimately disappointed in relationships</li> <li>• Deprecation-idealization</li> <li>• Strong need for closeness</li> <li>• Hypervigilant for rejection &amp; abandonment</li> <li>• Need for frequent validation</li> <li>• May overwhelm others with their needs</li> <li>• Reluctant to express personal opinions or focus on personal goals</li> <li>• Function based on strong emotions (mentalizing impeded)</li> <li>• Magnify deficiencies to garner support</li> <li>• In groups: complimentary to others; quickly attach but easily hurt</li> </ul>
<p style="text-align: center;"><b><u>Insecure:</u></b>  <b>Low Attachment Anxiety</b>  <b>High Attachment Avoidance</b>  <i>(categorical—dismissing)</i></p> <ul style="list-style-type: none"> <li>• Positive view of self/negative views of others</li> <li>• Deactivating (hypo-aroused) strategies to block relational feelings</li> <li>• Suppress emotions</li> <li>• Denial of distress or need for closeness</li> <li>• Avoids relational vulnerability; suppress</li> <li>• Minimizes meaning &amp; impact of interpersonal events</li> <li>• Discomfort with intimacy</li> <li>• Excessive need for self-reliance</li> <li>• Avoids mentalizing</li> <li>• Present as strong &amp; overly competent</li> <li>• In groups: may seem annoyed at members viewed as “needy”; prefer tasks over emotional processing</li> </ul>	<p style="text-align: center;"><b><u>Insecure:</u></b>  <b>High Attachment Anxiety</b>  <b>High Attachment Avoidance</b>  <i>(categorical—fearful)</i></p> <ul style="list-style-type: none"> <li>• Negative view of self &amp; others</li> <li>• Feel unworthy of love &amp; acceptance</li> <li>• Deep shame, self-loathing; feel flawed</li> <li>• Frequently interpersonal trauma survivors</li> <li>• Highly dysregulated emotions</li> <li>• Approach-avoidance behavior</li> <li>• Confusing/unpredictable style of interacting with others</li> <li>• Dissociation</li> <li>• Hopelessness</li> <li>• Craves closeness but also fears it</li> <li>• Evade intimacy for self-protection</li> <li>• Mentalization impaired, limited, confusing, or inconsistent</li> <li>• Groups may feel especially dangerous</li> </ul>

**Mentalization.** The descriptions of secure and insecure attachment orientation are augmented by inclusion of the concept of mentalization. Mentalization, also termed reflective functioning, refers to the ability to consider the various thoughts, feelings, and motivations that could underlie behavior in oneself and others (Fonagy, 2006; Fonagy & Bateman, 2006; Marmarosh et al., 2013). The development of mentalization and attachment are linked in that mentalization abilities are initially cultivated within attachment relationships and may impact the next generation's attachment experiences (Allen, 2013; Allen, 2014; Asen & Fonagy, 2016; Berthelot et al., 2015; Ensink, Berthelot, Bernazzani, Normandin, & Fonagy, 2014; Jurist, Slade, & Bergner, 2008; Wallin, 2015). Mentalization is the foundation for forming and sustaining meaningful relationships and is essential to emotional well-being with connections to depressions, anxiety, and PTSD (Allen, Bleiberg, & Haslam-Hopwood, 2003).

Habitually misattuned or unattuned caregivers often display poor mentalization skills. In an environment conducive to developing a secure attachment, however, a caregiver seeks to understand the deeper emotional implications of his/her child's surface behavior so that sensitive responses can be provided and modeled that resonate with the needs of the child (Fonagy & Luyten, 2009). As development progresses, this sort of caregiver will engage the child in discussions regarding the various emotional possibilities and underlying goals and meanings that could potentially account for one's own and others' actions (Ensink et al., 2014). Through these experiences, a child feels known and understood, learns about what is in his or her own mind as well as the minds of others, and gains clarity as to the identification and meaning of various emotional states (Ensink et al., 2014; Wallin, 2015). Without these experiences, such as in the case of maltreatment, children may develop into adults who struggle to form and maintain

healthy relationships (Ensink et al., 2014). Their attachment systems have a lower activation threshold as they are quickly inclined to perceive, or misperceive, relational experiences as emotionally threatening which then increases their arousal levels in ways associated with fight/flight/freeze responses (Fonagy & Luyten, 2009). They engage in their customary defensive, often maladaptive, strategies to protect themselves during this interpersonal stress. While in this state, their reflective abilities diminish or deactivate and automatic, reflexive, and emotionally-driven responding predominates (Fonagy & Luyten, 2009).

With inhibited, unstable, or underdeveloped reflective capabilities, a person lacks a buffer between feelings and action which is essential for creating the mental pause necessary for impulse control and managing potentially overwhelming emotions in healthy ways (Fonagy & Luyten, 2009; Jurist et al., 2008; Luyten, Fonagy, Lowyck, & Vermote, 2012; Wallin, 2015). Instead of being able to reflect on the possible meanings underlying their own and others' experiences, a preoccupied person, for example, may exhibit intense emotional reactivity based on feelings being experienced as unbearable and immutable facts (Fonagy & Luyten, 2009; Wallin, 2015). Individuals with preoccupied or fearful attachment styles often tend to be too overwhelmed in relationships to be able to think about their experiences in any depth. Individuals with a more dismissing pattern of relational behavior typically do not reflect on their experiences either but this is attributable to being cut off and disengaged from their feelings (Wallin, 2015).

Mentalization represents a point of core convergence concealed underneath the distinctive and divergent components of cognitive-behavioral and psychodynamic therapies (Allen, 2013). Since both therapeutic approaches can be traced back to a common core

involving understanding surface behavior in light of mental states, integration is not only possible but feasible. One form of mentalization involves conscious reflection and interpretation of deeper thoughts, feelings, and motivations underlying behavior, a predominantly left hemisphere (LH) endeavor (Wallin, 2015). Therapists can foster this skill by helping to bring implicit right hemisphere (RH) feelings and sensations into conscious awareness, at which point, explicit (LH) functions are required to put nebulous feelings and sensations into words for reconsideration. In CBT terms, this entails cognitive restructuring of faulty or unhelpful thinking, or, in psychodynamic terms, insight. Another form of mentalization is outside of conscious awareness, thereby tapping into implicit (RH) functioning, and is apparent when a person's nonverbal behavior, like tone or expression, accurately mirrors another person's emotional experience. Mentalizing provides a bridge between cognitive and psychodynamic approaches by recruiting both hemispheres which, according to recent advances in neuroscience, is required for treatment to be successful (Field, 2014). LH-activating manualized treatments may be implemented most effectively when based on a foundation of RH, in-the-moment, attunement and responsiveness which nurtures the therapeutic alliance that is unique to each therapist and client/group, while simultaneously abiding by a standardized, non-individualized treatment protocol.

The concept of mentalization offers some important insight into the struggles women with trauma histories encounter to feel safe and connected in significant relationships. Attachment-informed individual or group therapy may help women develop capacities for general and trauma-specific mentalization, along with building skills for emotion regulation and revisions of faulty IWMs, which may contribute to improved relational and mental health

functioning (Allen, 2013; Allen, 2014; Ensink et al., 2014; Jurist et al., 2008; Marmarosh et al., 2013; Wallin, 2015).

**Attachment: Mediator between trauma and psychological distress.** Attachment theory not only creates a framework for grasping and organizing patterns of interpersonal functioning, but also provides a potentially critical linkage between trauma and the development of psychological distress. An insecure attachment orientation is considered to be a contributor to the etiology of psychological distress and illuminates possible pathways from the experience of trauma to psychological issues (Bifulco et al., 2006; Brisch, 2014; Marmarosh et al., 2013; Sandberg, Suess, & Heaton, 2010; Tasca et al., 2013a; Winham et al., 2015). The differential impact of secure versus insecure attachment styles on adult well-being has been consistently demonstrated with over 100 studies finding that the more secure the attachment style, the less severe the symptoms of depression and anxiety (Marmarosh et al., 2013). Adults with preoccupied or fearful styles typically report the highest levels of depression and anxiety (Marmarosh et al., 2013), but contradictions in this trend have been found (Bifulco et al., 2006). In an effort towards resolving discrepancies, Bifulco et al. (2006) analyzed depression and specific types of anxiety disorders rather than examining anxiety disorders in aggregate. They used a measure of attachment that differentiated between mild, moderate, and marked levels of insecure attachment to clarify and strengthen the potential predictive power of who might be most psychologically vulnerable across the lifespan. These researchers found that marked and moderate levels of insecure attachment style predicted new episodes of depression and anxiety from the initial screening to the three year follow up. Attachment style was found to partially mediate the association between childhood abuse and the diagnoses of depression and anxiety

with fearful attachment being specifically linked to depression and social phobia, while a dismissive style was connected with generalized anxiety disorder. Similarly, Winham et al.(2015) found that among a sample of women on parole/probation, insecure attachment style was shown to partially mediate the relationship between childhood victimization and psychological distress. Attachment style was able to predict substance use among the participants whereas child victimization did not possess this predictive power. In a clinical sample of women with histories of child maltreatment, emotional regulation difficulties and low expectations of social support served as the specific aspects of an insecure attachment style contributing to psychiatric disorders (Cloitre et al., 2008). The relationship between child maltreatment and eating disorders has been found to be partially mediated by insecure attachment styles (Tasca et al., 2013a; Tasca & Balfour, 2014). An understanding of this mediational process, along with other aspects of attachment style, allows for a deeper and more sensitive understanding of the client as well as a starting point for generating opportunities for therapeutic gains by working towards the development of more secure attachment style (Winham et al., 2015).

The links between maltreatment, insecure attachment patterns, and mental health functioning are often complex and nuanced. While all three types of insecure attachment styles have been positively correlated with mental health symptoms, such as depression, the mechanisms underlying the development and maintenance of depression is likely different for each of the insecure attachment styles, requiring different therapist styles and strategies to promote symptom reduction (Marmarosh & Tasca, 2013; McBride, Atkinson, Quilty, & Bagby, 2006; Shorey & Snyder, 2006). In an effort to offer clarity to the complexities, Muller and

Lemieux (2000) further teased apart the relationship between mental health and attachment in their study of adult survivors of child maltreatment. They sought to identify which precise definitional components of attachment styles serve as risk factors in the development of psychopathology so that treatment interventions could be tailored to maximize beneficial gains. They found that a negative view of self was the specific element within insecure attachment styles that was most highly correlated with psychopathology, including depression and anxiety, especially when low social support was taken into account. They concluded that group interventions may be especially helpful in challenging these maladaptive self-beliefs and promoting more accurate and positive self-perceptions.

**Attachment: Stability and change.** Treatment approaches aimed at developing more secure attachment orientations are necessarily predicated on the belief that attachment patterns set in the first years of life can be changed, even in adulthood. While Bowlby contended that attachment patterns remain relatively stable and consistent over the lifespan, he also acknowledged that these patterns can be modified when the attachment system is activated, making it amenable to reappraisal, revision, and restructuring based on new relational experiences (Bowlby, 1973; Bowlby, 1982a; Bowlby, 1988; Brisch, 2014; Mikulincer & Shaver, 2010). Bowlby further elaborated on his views of attachment stability and lability (Bowlby, 1973) by theorizing that individual or group psychotherapy, anchored in a secure base of the therapeutic relationship, is conducive to altering attachment representations (Bowlby, 1988). Only recently has research been directed at exploring adult attachment changes as a consequence of therapeutic interventions (Kinley & Reyno, 2013).

The duality of change and stability is believed to be possible because the elasticity of the IWM allows for the accommodation of new, discrepant relational experiences that may possibly dilute, but not fully dismantle, the influence of the original mental model on adult relational behavior (Mikulincer & Shaver, 2010; Piquart, Feußner, & Ahnert, 2013; Zayas, Mischel, Shoda, & Aber, 2011). It should be noted that an alternative to this classical prototypical model of attachment development has been proposed. Both conceptualizations have research supporting their tenets (Fraley, 2002; Mikulincer & Shaver, 2010; Piquart et al., 2013). The revisionist theory adheres to a continuous view of change involving no core IWM or prototypical attachment remnants persisting throughout life (Mikulincer & Shaver, 2010; Piquart et al., 2013) This debate on the nature of the underlying mechanism of change, however, is beyond the scope of this discussion and does not alter the basic premise of observed continuity and discontinuity of attachment patterns based on contextual factors.

**Attachment: Impact of life events on relative consistency.** It has been hypothesized that attachment styles are expected to be relatively consistent over time and correlate moderately from childhood to adulthood under conditions in which the social context remains relatively stable and new information is within a realm that can be assimilated into existing IWMs (Hamilton, 2000; Mikulincer & Shaver, 2010; Piquart et al., 2013; Zayas et al., 2011). Assimilation is facilitated by IWMs functioning as filters or lens that new information passes through, resulting in people being guided towards relationships that will confirm their preexisting expectations as well as focus attention, sway interpretations, and elicit behaviors from others that continue to validate their established relational beliefs (Mikulincer & Shaver, 2010; Taylor et al., 2015). Discontinuities in attachment styles are accounted for by new or



changed experiences that present positive or negative information that is significantly incongruent with present IWMs, thereby initiating accommodations and updates of IWMs in order to address the dissonance and make sense out of the relational world (Fraley, Roisman, Booth-LaForce, Owen, & Holland, 2013; Mikulincer & Shaver, 2010). These accommodations can initiate change towards either more secure or more insecure attachment orientations, depending on the nature of the relational interactions.

Continuities and discontinuities (Mikulincer & Shaver, 2010) from childhood across adulthood can emerge from a variety of sources such as interactions with attachment figures, close friends, romantic partners, and therapists and from a variety of social contexts like stressful life events or life transitions. Just as in childhood, attuned and responsive experiences in close adult relationships can contribute to secure adult attachment tendencies, while unattuned, misattuned, unresponsive, and abusive interactions in close adult relationships can contribute to adult attachment insecurity. Attachment patterns formed in early childhood likely persist if relational experiences over the life course share continuities with those of childhood, but novel relational experiences that do not resonate with childhood interactions may result in alterations in attachment behaviors. Supporting the notion of the impact of life events on relational continuity/discontinuity, longitudinal studies have demonstrated a general trend of attachment stability from infancy to young adulthood (Hamilton, 2000; Waters & Merrick, 2000; Weinfield, Sroufe, & Egeland, 2000). Hamilton et al. (2000) reported that 77% of their participants retained their classification status from infancy to adolescence. The reclassifications that occurred represented both secure and insecure style changes. If adverse relational events take place over the course of development, this trend may be altered such that attachment pattern deviations

predominate over continuity (Weinfield et al., 2000). Weinfield et al. (2000) reported that discontinuity of attachment style was more common than continuity from initial attachment determination at 12-18 months old to age 19 in a sample of children considered highly vulnerable for unfavorable developmental outcomes, due to being born to mothers who were young, single, and financially limited. These researchers concluded that their results did not contradict attachment theory and instead represent “lawful discontinuities” (Mikulincer & Shaver, 2010) that are expected with the inordinately high frequency of adversity characterizing the life experiences of the participants. Further, in a sample of White children from middle income families initially assessed at 12 months of age and then again 20 years later, most individuals maintained their attachment orientation (72%). For infants originally classified as secure, stressful interpersonal life events in the intervening years were significantly associated with a reclassification to an insecure style. Stressful interpersonal life events were not significantly related to classification changes for those infants originally assessed as insecure, presumably reflecting on-going continuity of negative relational experiences (Waters, Merrick, Treboux, Crowell, & Albersheim, 2000).

In Mikulincer’s and Shaver’s (2010) review of the empirical studies on attachment continuity/discontinuity, they generally found support for changes in attachment style involving adverse life events. These findings were more robust for childhood attachment revisions than adulthood modifications, consistent with Bowlby’s contention that change becomes more constricted, but still possible, as one ages (Bowlby, 1973; Mikulincer & Shaver, 2010). Pinquart’s (2013) meta-analysis of attachment stability from infancy to early adulthood encompassed 127 studies and provides additional validation for the contention of increased

attachment instability, specifically from secure to insecure, among children in socially high risk situations. Time was identified as a relevant contributor to instability with the stability of secure attachment dropping substantially when measuring intervals of more than 5 years (Pinquart et al., 2013). Further, this finding strengthened when longer time intervals were used between assessments such that no significant stability in secure attachment occurred within a 15-year time span.

**Attachment and treatment: Bowlby's perspective.** Consistent with these findings on attachment stability and change, John Bowlby believed that growth in attachment security was possible (Bowlby, 1988). He purported the nature of therapeutic interventions provide the necessary ingredients for attachment enhancement, because engaging in treatment typically activates the attachment system by sparking a degree of stress or discomfort, especially if discussions are initiated about past or current relationships (Bowlby, 1988; Tasca, Balfour, Ritchie, & Bissada, 2007c). This activation, within a safe context, allows for corrective emotional experiences that can revise IWMs based on more accurate, helpful, and sensitive information. Developing a safe context, in the form of a therapeutic secure base, necessitates an appreciation and explicit recognition of the functional benefits derived from the defensive (secondary) attachment strategies employed by children with high attachment insecurity. These strategies likely operated as survival tools for managing the distress and negotiating the challenges inherent in dysfunctional caretaking relationships. While these methods may not be serving them well as adults, they deserve to be honored with empathy and acceptance as creative and persistent actions undertaken in circumstances in which other choices were likely severely limited or inaccessible. Empathy for the potential challenges in relinquishing these accustomed

methods of interpersonal interaction, regardless of how counter-productive or self-defeating they might appear, is also a key element of productive attachment-informed therapeutic interventions (Bowlby, 1988; Brisch, 2014). This way of thinking about defensive strategies highlights some of the therapeutic tasks Bowlby (1988) promoted.

While specific attachment-informed treatment strategies are relatively recent and still emerging, attachment theory as a general clinical mindset or guiding force in therapy was expounded upon in the 1980's when John Bowlby delineated five key therapeutic tasks for functioning within an attachment model (Bowlby, 1988). Bowlby's ideas regarding the role of an attachment-guided therapist entail, first and foremost, providing a secure base built on felt security, trust, support, and encouragement. The therapist's responsibilities are envisioned as being parallel to that of a sensitive caregiver for the child, because the therapist needs to establish a safe foundation from which the client can explore painful experiences. A therapist should promote exploration on the ways the client engages in relationships in the present based on faulty IWMs of self and other. Further, it is important to focus on the relationship between the therapist and the client, for this helps make implicit attachment patterns explicit. Therapists need to encourage clients to consider how current perceptions, expectations, and feelings about relationships may be rooted in earlier experiences of relationships in childhood or adolescence. Finally, Bowlby advises the therapist to explore how the client's IWMs may not be helpful or appropriate in the present or future, and, in fact, may never have been entirely valid. These five factors establish a safe context and a means for a client to reappraise, revise, and restructure his or her IWMs in healthier ways for long-lasting change (Diener & Monroe, 2011; Pearlman &

Courtois, 2005). Bowlby predominantly focused on the engagement of these tasks in individual therapy sessions, but he noted that these concepts apply equally well to groups.

Rooted in Bowlby's therapeutic tasks, Schwartz (2015) describes attachment-based clinical work with trauma survivors as proceeding from, and through, a secure-enough base in which the client can feel safe enough to allow the therapist to bear witness to his/her most painful experiences and vulnerable moments to create a healing coherent narrative of his/her traumatic past. A secure base is a co-created phenomenon that continuously evolves through attunement and emotion regulation as well as from repairs of the inevitable, and growth-fostering, ruptures or disconnections in the therapeutic relationship. He eschews diagnoses as much as possible and considers attention to the feelings generated in the therapeutic space as essential fodder for therapy. Knowing a client's attachment history facilitates access into the inner world of the client which is especially useful in complex cases where the client's primary attachment figure as a child was a source of danger.

**Attachment and treatment: Post-Bowlby.** While Bowlby provides therapists with general attachment-based treatment guidelines and the rationale for their worth and necessity, more recent researchers have built upon his overarching recommendations by looking more specifically at the differential needs of an individual based on his or her attachment patterns. To promote enhanced well-being and facilitate movement towards secure attachments, clinicians can benefit from the assessment of a client's attachment style at the outset of treatment in order to more accurately conceptualize the client in terms of such factors as emotional regulation and interpersonal patterns of modulating intimacy (Levy et al., 2011; Marmarosh et al., 2013; Mikulincer, Shaver, & Berant, 2013a; Schwartz, 2015). This information enables the clinician to

more effectively establish a secure base and select appropriate interventions across a wide range of treatment modalities (Brisch, 2014; Fonagy & Bateman, 2006; Goldberg, Muir, & Kerr, 2013; Holtz, 2005; Illing, Tasca, Balfour, & Bissada, 2010; Marmarosh, 2015; Marmarosh et al., 2013; Shorey & Snyder, 2006). Different recommendations have been made in terms of the engagement of clients, pace of sessions, titration of interventions, nature and timing of feedback, and manner of addressing therapeutic roadblocks based on a client's specific attachment organization to enhance treatment efficacy (Brisch, 2014; Illing et al., 2010; Levy et al., 2011; Marmarosh et al., 2013; Mikulincer et al., 2013a; Travis, Bliwise, Binder, & Horne-Moyer, 2001). Attachment can serve not only as a mindset or a treatment goal but can also be employed as a predictive tool to help decipher relational and affective contradictions and counterintuitive coping skills experienced with clients (Levy et al., 2011). People with secure attachment styles consistently exhibit more positive treatment engagement and outcomes than those with insecure attachment styles (Levy et al., 2011; Marmarosh, 2015; Mikulincer et al., 2013a). Dismantling insecure attachment into its two dimensions of attachment anxiety and attachment avoidance or into the four categories, usually with a focus on dismissing and preoccupied styles, yields more variability and discrepancies in the nature of therapeutic processes and outcomes. Nonetheless, some trends have emerged (Marmarosh, 2015). More research is needed, especially for group psychotherapy, to verify these potential trends and understand with more specificity the manner in which attachment can inform group therapy methods and be applied for optimal growth in relational functioning and overall well-being (Marmarosh, 2015; Marmarosh, 2014).

**Attachment and group therapy.** Group therapy may be uniquely suited to promote more adaptive, accurate, and positive perceptions of self and others through a process of

consensual validation in which individuals receive repeated, immediate feedback with a generally consistent message from multiple people who have withstood similar life challenges (Gallagher et al., 2014; Herman, 1997; Knight, 2006; Marmarosh et al., 2013; Muller, Sicoli, & Lemieux, 2000; Yalom, 1995). This consensual validation within a secure relational environment can be a corrective experience that counters old, unhelpful IWMs, allowing for a more accurate or functional reformulation of self and others based on the understanding, trust, and sense of value created within the group (Knight, 2006; Marmarosh et al., 2013). The opportunity, not only to receive validation and support, but also to offer nurturance and insight to receptive others is mutually beneficial and fosters relational growth and empowerment (Harper, 2010; Knight, 2006). Further, group interventions have demonstrated the ability to facilitate growth in attachment security, and when this is able to occur, depression and anxiety decrease, perhaps especially for those with anxious attachment styles (Lawson, Barnes, Madkins, & Francois-Lamonte, 2006; Maxwell et al., 2014; Tasca, Balfour, Ritchie, & Bissada, 2007b).

Despite these well-established opportunities and benefits of the group modality and its popularity, research integrating attachment theory and group therapy is minimal in contrast to the wealth of information on attachment theory as applied to individual and family therapy (Marmarosh, 2014; Tasca, 2014). Attachment-based group therapy research becomes even sparser for women with interpersonal trauma histories, leaving a gap in the therapeutic knowledge base that needs to be filled to adequately support trauma recovery. One of the few, and earliest, studies of an attachment-informed group therapy specifically for female survivors of interpersonal trauma was a case study conducted to explore the nature of attachment style on group processes (Saunders & Edelson, 1999). The group was comprised mainly of women

identified as dismissing and fearful who preferred to not focus their discussions on feelings. When more preoccupied members later joined the group, the dynamic changed such that the preoccupied members promoted deeper discussions and interactions between the group members and made better use of the group in terms of in-the-moment processing of feelings. The researchers accounted for these observations by suggesting that the process-oriented approach of the group with a primary goal of developing healthy interpersonal interactions, combined with the unstructured format, may have been so dysregulating for members who have dismissing styles that positive group experiences were impeded.

The majority of the evolving research on attachment theory and group therapy has been conducted with patients diagnosed with eating disorders with a lesser number of studies of general inpatient or non-clinical participants (Gallagher et al., 2014; Keating et al., 2014; Marmarosh, 2014; Maxwell et al., 2014; Rom & Mikulincer, 2003; Tasca et al., 2013a; Tasca, Taylor, Ritchie, & Balfour, 2004; Tasca et al., 2007b). Given that 30-50% of clients with eating disorders report histories of abuse (Tasca et al., 2013a; Tasca & Balfour, 2014), these attachment-focused group studies can be helpful in informing trauma group work, keeping in mind the limitation of generalizability. This limitation is especially true for studies utilizing task-oriented or non-clinical samples (Rom & Mikulincer, 2003).

**Can group therapy facilitate attachment change in individual attachment orientations?** A primary focus of the early attachment research entailed establishing whether it was possible for treatment to impact attachment patterns. See Table 2 for a summary of relevant studies. These studies focused on attachment change as an outcome goal of treatment.

Interactions in therapy were believed to serve as a source of discontinuity that could facilitate



growth towards more secure attachment styles. A growing research base lends support, albeit with some inconsistencies, to the notion that group therapy can serve to facilitate repairs to attachment ruptures throughout life and ameliorate the effects of early, negative experiences that endure into adulthood (Marmarosh et al., 2013; Taylor et al., 2015). This amelioration represent

<b>Table 2</b> <b>An Adult Attachment Perspective on Group Psychotherapy Outcomes and Processes: A Summary of Relevant Studies</b>					
			<b>Outcome</b>		
<b>Reference</b>	<b>Sample Criteria &amp; Setting</b>	<b>Program Format</b>	<b>Design and Methods</b>	<b>Attachment Measure/ Scoring Conceptualization</b>	<b>Key Findings</b>
Fonagy, Leigh, Steele, Steele, Kennedy, & Mattoon (1996)	<ul style="list-style-type: none"> <li>•N=82; male &amp; female</li> <li>•Urban</li> <li>•Psychiatric hospital for patients with personality disorders</li> <li>•Borderline Personality Disorder (BPD) &amp; other mental health diagnoses</li> </ul>	<ul style="list-style-type: none"> <li>•Inpatient group &amp; individual psychotherapy</li> <li>•Daily</li> <li>•Average duration--9 months</li> <li>•Psychodynamic orientation</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•Outpatient therapy control group</li> <li>•pre-test--post-test</li> </ul>	•AAI; 4 category classification	<ul style="list-style-type: none"> <li>•At post-test 40% of the patients diagnosed with BPD secure vs. 0% at pre-test</li> <li>•Dismissing--more clinical gains in security at post-test than preoccupied or unresolved (fearful)</li> </ul>
Kilmann, Laughlin, Downer, Major, & Parnell (1999)	<ul style="list-style-type: none"> <li>•N=23; female</li> <li>•University setting</li> <li>•Undergraduate students</li> <li>•Insecure attachment patterns</li> </ul>	<ul style="list-style-type: none"> <li>•Group therapy</li> <li>•Three-day weekend</li> <li>•Attachment-Focused (AF)--methods &amp; focus: psychoeducation, CBT, metaphors,</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•Wait list control group</li> <li>•pre-test--post- test</li> </ul>	•RSQ; categorical	•NS effects immediately post-F22interventi on for attachment pattern change

		relationship skill building, attention to family-of-origin, self-awareness, knowledge of relational patterns			<ul style="list-style-type: none"> <li>•Six months follow up-- AF group reported less fearful &amp; more secure attachment orientations</li> <li>•No change in anger &amp; self-esteem</li> <li>•AF group-- more positive relationship expectations than controls</li> </ul>
Smith, Murphy, & Coats (1999)	<ul style="list-style-type: none"> <li>•N=132-231 (three studies): male &amp; female</li> <li>•Midwestern University</li> <li>•Undergraduate psychology class</li> <li>•Study 3-- fraternity &amp; sorority members in psychology class</li> </ul>	<ul style="list-style-type: none"> <li>•Completed questionnaire</li> <li>•Classroom setting</li> <li>•In Study 1, half of the SGAS directions said think about "social groups in general" &amp; other half said to think about "most important social group"</li> <li>•Subsequent studies--most important social group only</li> </ul>	<ul style="list-style-type: none"> <li>•Correlational study</li> <li>•Study 2-- tested at baseline, 9 weeks, &amp; 17 weeks later</li> </ul>	<ul style="list-style-type: none"> <li>•RPAS; dimensional</li> <li>•SGAS; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Evidence of good psychometrics validated SGAS</li> <li>•Higher validity &amp; reliability with specific current group focus</li> <li>•Group attachment-- predictive power above &amp; beyond group identification</li> <li>•Identification &amp; satisfaction with fraternities &amp; sororities-- more related to extent closeness is wanted &amp;</li> </ul>

					<p>valued  (attachment  avoidance)  than extent of  fear of  rejection  (attachment  anxiety)  •Group  anxiety  related to  negative  affect, affect  extremities,  perceptions  of fewer &amp;  less satisfying  social  supports in  group  •Group  avoidance  related to  lower levels  positive  affect,  perceptions  of fewer &amp;  less satisfying  social  supports in  group, &amp;  plans to leave  group</p>
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<p>Tasca, Ritchie, Conrad et al. (2006)</p>	<ul style="list-style-type: none"> <li>•N=135; male &amp; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<ul style="list-style-type: none"> <li>•Outpatient group</li> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•8-10 patients/group</li> <li>•GCBT (cognitive-behavioral) or GPIIP (interpersonal)</li> </ul>	<ul style="list-style-type: none"> <li>•Random assignment to GCBT, GPIIP, or waitlist control group</li> <li>•Pre-test-post-test</li> <li>•6 &amp; 12 month follow ups</li> <li>•No test of treatment equivalence</li> <li>•Within-group comparison &amp; comparison to control</li> </ul>	<ul style="list-style-type: none"> <li>•ASQ; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Attachment anxiety--worse outcomes for binge eating in GCBT &amp; better in GPIIP</li> <li>•Attachment anxiety--benefited from GPIIP's focus on group cohesion, relationships, &amp; emotional regulation rather than the more structured format of GCBT</li> <li>•Attachment avoidance--greater improvement with binge eating in GCBT &amp; less in GPIIP</li> <li>•Improvements maintained at 12 month follow up</li> </ul>
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<p>Kilmann, Urbaniak, &amp; Parnell (2006)</p>	<ul style="list-style-type: none"> <li>•N=48; male &amp; female</li> <li>•Undergraduate psychology class volunteers</li> <li>•Insecure (3 types) attachment style</li> </ul>	<ul style="list-style-type: none"> <li>•Weekend group program</li> <li>•15 total hours; Friday-Sunday</li> <li>•Met two consecutive weekends</li> <li>•7-9 participants/group</li> <li>•Attachment-Focused (AF)-- focus on: dysfunctional relationship beliefs, attachment, relationship strategies; no skill building</li> <li>•Relationship Skills (RS)-- focus on: dysfunctional relationship beliefs, role play/modelling of communication &amp; conflict resolution skills, relationship strategies; no family of origin focus</li> </ul>	<ul style="list-style-type: none"> <li>•Random assignment to AF or RS</li> <li>•No control group initially; no intervention control group one semester later</li> <li>•Pre-test-- post-test three days post-- intervention</li> <li>•15-18 months later follow up questionnaire for all three groups</li> </ul>	<ul style="list-style-type: none"> <li>•RSQ; categorical-- administered only at pre-intervention to determine classification as insecure for inclusion purposes</li> </ul>	<ul style="list-style-type: none"> <li>•Pre-to post-change was not significant between groups</li> <li>•Both groups reported decreased agreement with dysfunctional relationship beliefs</li> <li>•AF--higher self-esteem, decreased angry reactions, &amp; increased control of anger pre-to post-intervention</li> <li>•RS--fewer interpersonal problems reported pre-to post-intervention</li> <li>•No data on the three different styles of insecurity to determine if differential reactions</li> <li>•No statistical evidence of long-term positive changes</li> </ul>
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<p>Lawson, Barnes, Madkins, &amp; Francois-Lamonte (2006)</p>	<ul style="list-style-type: none"> <li>•N=33; male</li> <li>•Probation for partner violence</li> </ul>	<ul style="list-style-type: none"> <li>•Community setting; required group for probation but study voluntary</li> <li>•17 weeks</li> <li>•Integrated cognitive-behavioral, feminist, psychodynamic approach</li> </ul>	<ul style="list-style-type: none"> <li>•Convenience sample</li> <li>•No control group</li> <li>•Pre-test--post-test</li> </ul>	<ul style="list-style-type: none"> <li>•AAS; categorical--four categories collapsed into two</li> </ul>	<ul style="list-style-type: none"> <li>•Significant increase in the number of men classified with a secure attachment from pre-to post-intervention</li> <li>•No significant improvement for anxiety &amp; avoidance</li> <li>• Three years later 16 more participants added to analyses (Lawson &amp; Brossart, 2009)--decline in anxiety &amp; increase in avoidance (inferential statistics unreported)</li> <li>•Secure changed men--increased comfort with closeness &amp; with depending on others</li> <li>•Secure-changed men--lower anxiety &amp; depression than insecure</li> </ul>
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					<ul style="list-style-type: none"> <li>•Insecure &amp; secure-unchanged--increase in avoidance of closeness</li> <li>•Total sample--significant reduction in partner violence</li> </ul>
Marmarosh & Markin (2007)	<ul style="list-style-type: none"> <li>•N=109; male &amp; female</li> <li>•Private university</li> <li>•Undergraduate psychology class</li> </ul>	<ul style="list-style-type: none"> <li>•Completed packet of questionnaires</li> </ul>	<ul style="list-style-type: none"> <li>•Correlational study</li> </ul>	<ul style="list-style-type: none"> <li>•ECR; dimensional (dyad/individual=personal)</li> <li>•SGAS; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Personal &amp; group attachment significantly predicted college adjustment</li> <li>• Personal attachment anxiety &amp; avoidance--accounted for 26% of the variance in college adjustment</li> <li>•Personal attachment anxiety--accounted for the most variance in college adjustment</li> <li>• Group attachment anxiety &amp; avoidance--</li> </ul>

					<p>accounted for 15% of the variance in college adjustment above &amp; beyond personal</p> <ul style="list-style-type: none"> <li>•Predictions of college adjustment: <ul style="list-style-type: none"> <li>•Personal attachment avoidance--approached significance</li> <li>•Group attachment avoidance--highly significant</li> <li>•Personal attachment anxiety--significant</li> <li>•Group attachment anxiety--not significant</li> </ul> </li> </ul>
Tasca, Balfour, Ritchie, & Bissada (2007b)	<ul style="list-style-type: none"> <li>•N=66; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<ul style="list-style-type: none"> <li>•Outpatient group</li> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•8-10 patients/group</li> <li>•GCBT (cognitive-behavioral) or GPIP (interpersonal)</li> </ul>	<ul style="list-style-type: none"> <li>•Random assignment to GCBT or GPIP</li> <li>•No control group</li> <li>•Pre-test--post-test</li> </ul>	•ASQ; dimensional	<ul style="list-style-type: none"> <li>•Significant reduction in attachment insecurity pre--post- test (no differences between groups)</li> <li>•Changes in attachment anxiety were associated with</li> </ul>



					improvement in depression for GPIP only
Muller & Rosenkranz (2009)	<ul style="list-style-type: none"> <li>•N=101; male &amp; female</li> <li>•Ontario</li> <li>•Psychiatric hospital</li> <li>•Interpersonal trauma histories; PTSD</li> </ul>	<ul style="list-style-type: none"> <li>•Inpatient</li> <li>•Daily</li> <li>•Eight-week program</li> <li>•Multimodal set of groups grounded in work of S. Bloom &amp; J. Herman</li> </ul>	<ul style="list-style-type: none"> <li>•Wait list control</li> <li>•Pre-test--post-test</li> <li>•Six month follow up</li> </ul>	<ul style="list-style-type: none"> <li>•RSQ; four categories collapsed into two dimensions</li> <li>•RQ; four categories collapsed into two dimensions</li> </ul>	<ul style="list-style-type: none"> <li>•Attachment security--increased</li> <li>•Fearful attachment style--decreased</li> <li>•Attachment anxiety &amp; avoidance--decreased</li> <li>•Decrease in avoidance was not maintained at 6 month follow up</li> <li>•Positive changes in attachment associated with mental health &amp; trauma symptom reduction</li> <li>•Symptom reduction gains maintained at follow up</li> <li>•Association between attachment &amp; symptom change became stronger by follow up</li> </ul>

<p>Levy, Ellison, Scott, &amp; Bernecker (2011)</p>	<ul style="list-style-type: none"> <li>•N=1,467; male &amp; female</li> <li>•Multiple locations</li> <li>•Mental health diagnoses (depression, anxiety, binge eating disorder, PTSD, borderline personality disorder); interpersonal partner violence</li> </ul>	<ul style="list-style-type: none"> <li>•6-52 weeks duration</li> <li>•Group &amp; individual therapy</li> <li>•Multiple orientations--dynamic, integrative, cognitive-behavior, eclectic</li> </ul>	<ul style="list-style-type: none"> <li>•Meta-analysis of three meta-analyses</li> <li>•14 studies synthesized</li> </ul>	<ul style="list-style-type: none"> <li>•Everything scored dimensionally</li> <li>•AAI; AAPR; AAS; AAQ</li> <li>•ASQ; BARS</li> <li>•ECR/ECR-R</li> <li>•RAQ; RQ; RSQ</li> </ul>	<ul style="list-style-type: none"> <li>•"Outcomes"-depression, anxiety, binge eating, PTSD, trauma symptoms, global functioning, interpersonal problems, conflict tactics</li> <li>•Pretreatment attachment anxiety--worse outcomes after therapy</li> <li>•Pretreatment attachment avoidance--negligible overall impact on outcomes after therapy</li> <li>•Higher pretreatment attachment security predicted more favorable outcomes after therapy</li> <li>•The more female &amp; older the sample, the smaller the relationship between security &amp; outcome</li> </ul>
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<p>Strauss, Mestel, &amp; Kirchmann (2011)</p>	<ul style="list-style-type: none"> <li>•N=40; female</li> <li>•Germany</li> <li>•Psychotherapeutic hospitals</li> <li>•Borderline or avoidant personality disorders</li> </ul>	<ul style="list-style-type: none"> <li>•Inpatient</li> <li>•3X/week; 90 minutes</li> <li>•7-15-week duration</li> <li>•10-12 members/group</li> <li>•Therapy group plus other groups (e.g. problem-solving, creative, sports)</li> <li>•Psychodynamic &amp; person-centered orientations</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•No control group</li> <li>•Pre-test--post-test at seven weeks</li> </ul>	<ul style="list-style-type: none"> <li>•IRA interview; categorical</li> </ul>	<ul style="list-style-type: none"> <li>•No increase in secure attachment post-treatment</li> <li>•Increased number of avoidant type post-treatment</li> <li>•Changes from ambivalent to avoidant were linked to better symptom outcomes for women with BPD</li> </ul>
<p>Kirchmann et al. (2012)</p>	<ul style="list-style-type: none"> <li>•N=525; male &amp; female</li> <li>•Germany</li> <li>•Psychotherapeutic hospitals</li> <li>•Hospitalized psychotherapy patients, general practice patients, &amp; undergraduate psychology &amp; medical students</li> </ul>	<ul style="list-style-type: none"> <li>•Inpatient</li> <li>•Average duration of 9 weeks</li> <li>•Psychodynamically oriented sites &amp; CBT sites</li> </ul>	<ul style="list-style-type: none"> <li>•Naturalistic observation</li> <li>•No randomization</li> <li>•Control group</li> <li>•Pre-test--post-test</li> <li>•One year follow up</li> </ul>	<ul style="list-style-type: none"> <li>•BFPE; categorical</li> <li>•RSQ; dimensional</li> <li>•GAQ; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Attachment security--increased from pre-to post-intervention</li> <li>•Attachment anxiety &amp; avoidance--decreased</li> <li>•Romantic attachment improvements maintained at follow up</li> <li>•Improved attachment was especially pronounced for high depression &amp; anxiety</li> </ul>

Kinley & Reyno (2013)	<ul style="list-style-type: none"> <li>•N=178; male &amp; female</li> <li>•Nova Scotia</li> <li>•Health sciences center</li> <li>•DSM-IV diagnoses</li> </ul>	<ul style="list-style-type: none"> <li>•Partial hospitalization</li> <li>•4X/week</li> <li>•Six-week duration</li> <li>•Average of 16 members per group</li> <li>•Psychodynamic, integrative, &amp; systemic; focus on painful emotions, self-awareness, relationships, coping, &amp; thinking patterns</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•No control group</li> <li>•Pre-test--post-test</li> </ul>	•RSQ; categorical	<ul style="list-style-type: none"> <li>•Secure attachment--increased pre-to post-treatment</li> <li>•Fearful--decreased</li> <li>•Preoccupied--smaller degree of decrease</li> <li>•Dismissive--no change</li> <li>•Changes in secure &amp;/or fearful (but not preoccupied) associated with changes in interpersonal functioning</li> </ul>
Tasca, Ritchie, Demidenko, Balfour, Krysanski, Weekes, Barber, Keating, & Bissada (2013)	<ul style="list-style-type: none"> <li>•N=102; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<ul style="list-style-type: none"> <li>•Outpatient group</li> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•5-10 patients/group</li> <li>•GPIP (interpersonal)</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•No control group</li> <li>•Divided into two homogenous treatment groups of high &amp; low attachment anxiety</li> <li>•Outcomes: pre-test--post-test; 6 &amp; 12 month follow ups</li> </ul>	•ASQ; Dimensional	<ul style="list-style-type: none"> <li>•Significant positive change at post-treatment &amp; at 6 &amp; 12 month follow ups for binge eating &amp; depression</li> <li>•Positive change continued, at a slower rate, from 6-12 month follow up</li> <li>•Group alliance growth was associated</li> </ul>

					with improved binge eating only in the high anxious attachment condition
Marmarosh & Tasca (2013)	<ul style="list-style-type: none"> <li>•N=8</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<ul style="list-style-type: none"> <li>•Outpatient group</li> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•8 patients/group</li> <li>•GPIP (interpersonal)</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•No control group</li> <li>•One group; high attachment anxiety</li> <li>•Outcomes assessed at "pre-test" (Week 4) &amp; post-test</li> </ul>	<ul style="list-style-type: none"> <li>•ECR; dimensional</li> <li>•ASQ; dimensional</li> <li>•SGAS; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Small N so no parametrics</li> <li>•Pre- to post-treatment positive changes: binge eating, depressive symptoms, individual attachment anxiety &amp; avoidance</li> <li>•Medium to large effect sizes for all outcomes except individual attachment anxiety which was small</li> <li>•Pre- to post-treatment positive changes: moderate to large improvements pre- to post-treatment for group attachment anxiety &amp; avoidance</li> </ul>

<p>Keating, Tasca, Gick, Ritchie, Balfour, &amp; Bissada (2014)</p>	<ul style="list-style-type: none"> <li>•N=87; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<ul style="list-style-type: none"> <li>•Outpatient group</li> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•8-10 patients/group</li> <li>•GPIP (interpersonal)</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•No control group</li> <li>•Divided into two homogenous treatment groups of high &amp; low attachment anxiety</li> <li>•Outcomes: pre-test--post- test; 6 &amp; 12 month follow up</li> <li>•Attachment measured at weeks 4,8,12,16 of therapy</li> </ul>	<ul style="list-style-type: none"> <li>•ASQ; dimensional</li> <li>•SGAS; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Group attachment insecurity--decreased</li> <li>•Reductions in group attachment avoidance predicted decreases in individual attachment insecurity one year later</li> <li>•Improvements in group attachment security generalized to individual attachment relationships outside of therapy one year later</li> <li>•Decreases in group attachment anxiety &amp; avoidance did not predict improvement with binge eating or depressive symptoms</li> </ul>
<p>Gallagher, Tasca, Ritchie, Balfour, &amp; Bissada (2014a)</p>	<ul style="list-style-type: none"> <li>•N=102; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<ul style="list-style-type: none"> <li>Outpatient group</li> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•8-10 patients/group</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•Divided into two homogenous treatment groups of high &amp; low</li> </ul>	<ul style="list-style-type: none"> <li>•ASQ; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Significant increase in group cohesion for both high &amp; low anxiety groups</li> <li>•High</li> </ul>

		<ul style="list-style-type: none"> <li>•GPIP (interpersonal)</li> </ul>	<p>attachment anxiety</p> <ul style="list-style-type: none"> <li>•Pre-test--post-test</li> </ul>		<p>attachment anxiety--increase in group cohesion was associated with improved binge eating (not for low anxiety)</p>
<p>Maxwell, Tasca, Ritchie, Balfour, &amp; Bissada (2014)</p>	<ul style="list-style-type: none"> <li>•N=102; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<p>Outpatient group</p> <ul style="list-style-type: none"> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•5-10 patients/group</li> <li>•GPIP (interpersonal)</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•Divided into two homogenous treatment groups of high &amp; low attachment anxiety</li> <li>•Pre-test--post-test</li> <li>•6 &amp; 12 month follow up</li> </ul>	<ul style="list-style-type: none"> <li>•ECR; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Attachment anxiety &amp; avoidance--decreased significantly &amp; maintained 12 months post-treatment</li> <li>•Attachment anxiety--reductions associated with decreased depression &amp; maintained 12 months post-treatment</li> <li>•Attachment anxiety &amp; avoidance--reductions associated with decreases in interpersonal problems &amp; maintained 12 months post-treatment</li> </ul>

Taylor, Rietzschel, Danquah, & Berry (2015)	<ul style="list-style-type: none"> <li>•N=9-188</li> <li>•Multiple geographical locations &amp; settings &amp; diagnoses</li> </ul>	<ul style="list-style-type: none"> <li>•Individual, group, couples, inpatient</li> <li>•Three days--one year durations</li> <li>•Multiple modalities, e.g. CBT, DBT, psychodynamic, integrative, emotionally focused, transference-focused</li> </ul>	<ul style="list-style-type: none"> <li>•Systematic review of 15 studies</li> <li>•Seven RCTs</li> <li>•Eight group therapy studies</li> <li>•Group studies identified &amp; discussed</li> </ul>	<ul style="list-style-type: none"> <li>•Multiple scales--e.g. RSQ, ECR, AAI, AAS, ASQ</li> </ul>	<ul style="list-style-type: none"> <li>•Attachment security--increases following treatment</li> <li>•Attachment anxiety--decreases following therapy</li> <li>•Attachment avoidance--unclear</li> <li>•Improvements reported across different methodologies, patient groups, therapeutic approaches, &amp; therapy settings</li> <li>•Need for further controlled trials</li> </ul>
			<b>Process</b>		
<b>Reference</b>	<b>Sample Criteria &amp; Setting</b>	<b>Program Format</b>	<b>Design and Methods</b>	<b>Attachment Measure/ Scoring Conceptualization</b>	<b>Key Findings</b>
Saunders & Edleson (1999)	<ul style="list-style-type: none"> <li>•N=not provided; female</li> <li>•Urban, facility not described</li> <li>•PTSD</li> </ul>	<ul style="list-style-type: none"> <li>•Outpatient group</li> <li>•Weekly; 90 minutes</li> <li>•Open enrollment</li> <li>•Long-term format up to 7 yrs.</li> <li>•Developmental, relational</li> </ul>	<ul style="list-style-type: none"> <li>•Observational/ case studies</li> </ul>	<ul style="list-style-type: none"> <li>•No measures discussed</li> <li>•Four style categorical classification</li> </ul>	<ul style="list-style-type: none"> <li>•Dismissing &amp; fearful attachment--longer time for cohesion to develop</li> <li>•Preoccupied--deeper discussion &amp;</li> </ul>



		processing orientation			in-the-moment processing of feelings.
Chen & Mallinckrodt (2002)	<ul style="list-style-type: none"> <li>•N=76; male &amp; female</li> <li>•Psychology graduate students</li> <li>•Midwestern &amp; Eastern U.S. universities</li> </ul>	<ul style="list-style-type: none"> <li>•Class setting</li> <li>•90-100 minutes</li> <li>•10-12 sessions</li> <li>•Yalom's interpersonal growth group model --feedback &amp; self-disclosure focus</li> </ul>	<ul style="list-style-type: none"> <li>•Random assignment to intervention groups</li> <li>•No control group</li> <li>•pre-test-post-test</li> </ul>	<ul style="list-style-type: none"> <li>•ECR; dimensional (continuous)</li> </ul>	<ul style="list-style-type: none"> <li>•Attachment anxiety--overestimations of interpersonal problems</li> <li>•Attachment avoidance--disengagement from the group &amp; low levels of group attraction as well as overestimations of group hostility</li> </ul>
Rom & Mikulincer (2003)	<ul style="list-style-type: none"> <li>•N=89-377 (4 studies); male &amp; female</li> <li>•Israel</li> <li>•Undergraduate students or recruits from the Israeli Defense Force</li> </ul>	<ul style="list-style-type: none"> <li>•Two sessions</li> <li>•Questionnaires administered</li> <li>•Three group missions of physical tasks to achieve a goal</li> </ul>	<ul style="list-style-type: none"> <li>•Random assignment to task-oriented groups</li> <li>•6-8 members</li> </ul>	<ul style="list-style-type: none"> <li>•No name provided--Mikulincer, Florian, &amp; Tolmacz's (1990) scale "tapping attachment anxiety &amp; avoidance in close relationships"</li> <li>•ECR; dimensional (dyad/individual="close relationships")</li> <li>•SGAS; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Dyad attachment anxiety--love &amp; security goals; oversensitive to rejection cues; impaired instrumental (task) functioning</li> <li>•Dyad attachment avoidance--distance &amp; self-reliance goals; negative views of other group</li> </ul>

					members; impaired socio- emotional & instrumental functioning •Dyad attachment anxiety-- higher group cohesion reduced activating strategies & increased instrumental performance •Dyad attachment anxiety-- decreased with higher group cohesion •Dyad attachment avoidance-- higher group cohesion increased deactivating strategies & decreased instrumental performance •Dyad & group attachment-- unique contributions to task performance
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<p>Tasca, Taylor, Bissada, Ritchie, Balfour (2004)</p>	<ul style="list-style-type: none"> <li>•N=74; female</li> <li>•Urban</li> <li>•Hospital psychiatry department</li> <li>•Anorexia Nervosa</li> </ul>	<ul style="list-style-type: none"> <li>•Partial hospital group</li> <li>•4X/week, full day</li> <li>•12-week duration</li> <li>•Up to 8 members</li> <li>•Eclectic-- assertiveness, family relationships, interpersonal; art</li> </ul>	<ul style="list-style-type: none"> <li>•Correlational</li> <li>•Pre-test--post-test</li> </ul>	<ul style="list-style-type: none"> <li>•ASQ; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Attachment style predicted completion rates</li> <li>•Higher completion rates for anxiety than avoidance</li> <li>•Avoidance-- less sensitive to positive group processes</li> <li>•Avoidance-- more likely to disengage from facilitator</li> </ul>
<p>Shectman &amp; Rybko (2004)</p>	<ul style="list-style-type: none"> <li>•N=436; female</li> <li>•Israel</li> <li>•College students</li> </ul>	<ul style="list-style-type: none"> <li>• University group counseling classes</li> <li>•Two hours long</li> <li>•12-13 sessions/semester</li> <li>•10-25 members</li> <li>•Varied modalities of processing aimed at personal growth &amp; relationships (e.g., art, psychodrama, verbal)</li> </ul>	<ul style="list-style-type: none"> <li>•Observational study of various first group sessions</li> <li>•Pre-test--post-test</li> </ul>	<ul style="list-style-type: none"> <li>•RSQ; Categorical</li> <li>•Three insecure categories: secure, anxious-ambivalent; avoidant (dismissing &amp; fearful combined)</li> </ul>	<ul style="list-style-type: none"> <li>•Insecure-- less initial self-disclosure</li> <li>•Avoidant-- lower self-disclosure, intimacy, &amp; empathy than secure</li> <li>•Anxious-- less constructive work than secure</li> <li>•Attachment predicted all six group dynamic behaviors (e.g. empathy, productivity) whereas</li> </ul>

					initial self-disclosure only predicted four group behaviors
Holtz, 2005	<ul style="list-style-type: none"> <li>•N=106; male &amp; female</li> <li>•University counseling centers</li> <li>•Undergraduate &amp; graduate students</li> <li>•Sought therapy for personal &amp; emotional problems &amp; agreed to group treatment</li> </ul>	<ul style="list-style-type: none"> <li>•University counseling centers randomly selected from a directory</li> <li>•Mean attendance-12 group sessions</li> <li>•Process &amp; theme groups (grief, women's, trauma, relationship, &amp; family themes)</li> <li>•Completed a questionnaire</li> </ul>	Correlational study	•SGAS; dimensional	<ul style="list-style-type: none"> <li>•Validated SGAS with a clinical population</li> <li>•Group attachment anxiety predicted depression above &amp; beyond group cohesiveness &amp; collective identity</li> <li>•Higher attachment anxiety &amp; avoidance correlated with lower self-esteem</li> </ul>
Shectman & Dvir (2006)	<ul style="list-style-type: none"> <li>•N=77; male &amp; female</li> <li>•Northern Israel</li> <li>•School--5th-7th grade</li> <li>•Socioemotional needs</li> </ul>	<ul style="list-style-type: none"> <li>•School classroom</li> <li>•Weekly, 45 minutes</li> <li>•10-12 sessions</li> <li>•Average of seven members</li> <li>•Expressive-supportive modality</li> </ul>	•Correlational study	<ul style="list-style-type: none"> <li>•Security Scale</li> <li>•Coping Strategy Questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>•Avoidance--lowest rates of self-disclosure; least effective work; most negative to other members</li> </ul>

<p>Tasca, Balfour, Ritchie, Bissada (2006)</p>	<ul style="list-style-type: none"> <li>•N=65; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<ul style="list-style-type: none"> <li>•Outpatient group</li> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•8-10 patients/group</li> <li>•GCBT (group cognitive-behavioral) or GPIIP (psychodynamic interpersonal psychotherapy)</li> </ul>	<ul style="list-style-type: none"> <li>•Random assignment to GCBT or GPIIP</li> <li>•No control group</li> <li>•pre-test--post- test</li> </ul>	<ul style="list-style-type: none"> <li>•ASQ--need for approval subscale only (conflict, engagement, avoidance); dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Higher group climate conflict scores for GPIIP than GCBT</li> <li>•Different courses of growth of group climate for GCBT (gradual &amp; consistent) &amp; GPIIP (increase, plateau, increase)</li> <li>•Both GPIIP &amp; GCBT had a greater reduction in days binged than control</li> <li>•GPIIP &amp; GCBT equally effective in reduction of days binged</li> <li>•In GPIIP, linear increase in engaged group climate group scores partially mediated relationship between high attachment anxiety &amp; reduction in days binged</li> </ul>
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Tasca, Balfour, Ritchie, Bissada (2007a)	<ul style="list-style-type: none"> <li>•N=65; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<ul style="list-style-type: none"> <li>•Outpatient group</li> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•8-10 patients/group</li> <li>•GCBT or GPIIP</li> </ul>	<ul style="list-style-type: none"> <li>•Random assignment to GCBT or GPIIP</li> <li>•No control group</li> <li>•Pre-test--post-test</li> </ul>	<ul style="list-style-type: none"> <li>•ASQ; Dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•For GPIIP, higher attachment anxiety &amp; lower attachment avoidance associated with greater alliance growth</li> <li>•Trend not found for GCBT</li> </ul>
Kirchmann et al. (2009)	<ul style="list-style-type: none"> <li>•N=289; male &amp; female</li> <li>•Germany</li> <li>• Multi-site hospitals</li> <li>•Mental health diagnoses</li> </ul>	<ul style="list-style-type: none"> <li>•Inpatient group</li> <li>•"Slow &amp; open"</li> <li>•10.71-week average duration</li> <li>•7-11 members/group</li> <li>•Psychodynamic orientations; focus on interpersonal conflict</li> </ul>	<ul style="list-style-type: none"> <li>•Correlational study</li> </ul>	<ul style="list-style-type: none"> <li>•Interpersonal Relations Assessment (attachment interview) scored based on AAPR; categorical</li> <li>•BQCE; categorical</li> </ul>	<ul style="list-style-type: none"> <li>•Group climate (cohesion)--important to all patients</li> <li>•Ambivalent--importance of group climate</li> <li>•Secure--importance of interpersonal learning experiences (social learning)</li> <li>•Avoidant--importance of emotional presence &amp; acceptance (helpful therapist)</li> </ul>

Marmarosh, Whipple, Schettler, Pinhas, Wolf, & Sayit (2009)	<ul style="list-style-type: none"> <li>•N=91; male &amp; female</li> <li>•Clinical &amp; nonclinical</li> <li>•University community mental health clinic or undergraduate psychology students</li> </ul>	<ul style="list-style-type: none"> <li>•University clinic or class setting</li> </ul>	<ul style="list-style-type: none"> <li>•Correlational study</li> <li>•One time data collection at clinic intake or end of class to ascertain attitudes of group psychotherapy</li> </ul>	<ul style="list-style-type: none"> <li>•ECR; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Avoidance--significant association with increased fears of being vulnerable in group therapy</li> <li>•Avoidance--fears of shame, exposure, &amp; humiliation</li> <li>•Anxiety--negatively related to negative group myths of group therapy</li> <li>•Anxiety--the greater the fear of rejection &amp; abandonment, the less negative group therapy myths were endorsed</li> <li>•Neither related to ratings of group therapy efficacy</li> </ul>
Illing, Tasca, Balfour, & Bissada (2010)	<ul style="list-style-type: none"> <li>•N=260; female</li> <li>•Urban</li> <li>•General hospital</li> <li>•Anorexia &amp; bulimia; university students &amp;</li> </ul>	<ul style="list-style-type: none"> <li>•Intensive day treatment program</li> <li>•4x/week</li> <li>•12 weeks</li> <li>•8 patients/group</li> <li>•Groups for: assertiveness training, family</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•Treatment &amp; control groups</li> <li>•Pre-test-post-test</li> </ul>	<ul style="list-style-type: none"> <li>ASQ; scored as 5 scales: confidence in relationships, preoccupied, need for approval, discomfort with closeness, relationships as secondary; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Higher pretreatment attachment anxiety (need for approval) --more severe eating disorder symptoms</li> </ul>

	community volunteers	relationships, interpersonal relationships, art therapy, healthy attitudes		for anxiety & avoidance	•High pretreatment attachment anxiety predicted less reduction in eating disorder outcomes post-intervention
Harel, Shechtman, & Cutrona (2011)	N=178; female •Israel •Four academic institutions •University students majoring in school counseling	• University setting; mandatory •13 sessions •8-17 member/group •Supportive-expressive group therapy with a focus on feelings & insight	•Correlational study	ECR; dimensional	•Attachment anxiety--best predictor of group behavior •Anxiety--associated with positive support given and received from group members & therapist •Anxiety--perceived the group climate as more avoidant & more conflictual •Attachment avoidance--lower gains in perceived social support •Avoidance--associated with negative behavior from therapist



<p>Kivlighan, Coco, &amp; Gullo (2012)</p>	<ul style="list-style-type: none"> <li>•N=110; males &amp; females</li> <li>•Italy</li> <li>•University</li> <li>•Graduate students</li> </ul>	<ul style="list-style-type: none"> <li>•Class setting</li> <li>•weekly; 2.5 hours</li> <li>•10-week duration</li> <li>•12-22 members/group</li> <li>•Yalom's interpersonal growth group model focused on individual concerns &amp; new interactions</li> </ul>	<ul style="list-style-type: none"> <li>•Correlational study</li> </ul>	<ul style="list-style-type: none"> <li>•ASQ; dimensional</li> </ul>	<ul style="list-style-type: none"> <li>•Attachment pattern of a group member--unrelated to his/her perceptions of overall group climate</li> <li>•Attachment anxiety of a group member--positively related to other members' perceptions of conflict in the group's climate</li> <li>•Perceptions of anxiety &amp; avoidance--positively related to member's perception of group conflict &amp; negatively to group engagement</li> </ul>
<p>Milonov, Rubin, &amp; Paolini (2013)</p>	<ul style="list-style-type: none"> <li>•N = 122, males &amp; females</li> <li>•Global internet community</li> </ul>	<ul style="list-style-type: none"> <li>•Completed one on-line questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>•Correlational study</li> </ul>	<ul style="list-style-type: none"> <li>•RQ; categorical</li> </ul>	<ul style="list-style-type: none"> <li>•Secure--higher social identification than dismissive</li> <li>•Secure--higher communal identification than dismissive or fearful</li> </ul>

					<ul style="list-style-type: none"> <li>•Secure-- lower interdependent identification than dismissive</li> <li>•Secure less concerned about perceptions of similarity &amp; more likely to engage in close, friendly relationships with other members than dismissive</li> </ul>
Gallagher, Tasca, Ritchie, Balfour, Maxwell, Bissada (2014b)	<ul style="list-style-type: none"> <li>•N=102; female</li> <li>•Urban</li> <li>•Teaching hospital, eating disorder center</li> <li>•Binge Eating Disorder</li> </ul>	<p>Outpatient group</p> <ul style="list-style-type: none"> <li>•Weekly, 90 minutes</li> <li>•16-week duration</li> <li>•8-10 patients/group</li> <li>•GPIP (interpersonal)</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•Divided into two homogenous treatment groups of high &amp; low attachment anxiety</li> <li>•Pre-test--post-test</li> </ul>	•ASQ; Dimensional	<ul style="list-style-type: none"> <li>•Higher attachment anxiety-- lower individual self-ratings of cohesion (how I think the group feels about me) than lower anxiety group</li> <li>•Higher attachment anxiety-- greater discrepancy between rating of group cohesion (how I feels towards</li> </ul>

					<p>members in the group) &amp; individual cohesion than lower anxiety group at post-test</p> <ul style="list-style-type: none"> <li>•Greater convergence at post-test between individual &amp; group cohesion ratings (interpersonal learning) was associated with improved self-esteem (not for lower avoidance)</li> </ul>
Zorzella, Muller, & Claussen (2014)	<ul style="list-style-type: none"> <li>•N=62; female</li> <li>•Ontario</li> <li>•Hospital</li> <li>•History of child abuse &amp; mental health issues</li> </ul>	<ul style="list-style-type: none"> <li>•Day treatment</li> <li>•2-3 groups daily/4.5 days</li> <li>•Eight-week duration</li> <li>•WRAP (Women Recovering From Abuse Program) - interpersonal; multiple modalities with focus on issues related to trauma recovery (e.g. affect regulation, safety, &amp; skill building)</li> </ul>	<ul style="list-style-type: none"> <li>•Quasi-experimental</li> <li>•No control group</li> <li>•Data collected pre-intervention &amp; then weekly</li> <li>•Due to low N, only unresolved &amp; dismissing attachment styles used</li> </ul>	•AAP; categorical	<ul style="list-style-type: none"> <li>•Unresolved--alliance to the therapist increased over time</li> <li>•Unresolved--perceptions of engagement static</li> <li>•Unresolved had a more positive relationship with the therapist &amp; the group than dismissing</li> <li>•Dismissing--more conflict</li> </ul>

AAI: Adult Attachment Interview (Main, George, & Kaplan, 1985)  
 AAP: Adult Attachment Projective Picture System (George & West, 2001)  
 AAPR: Adult Attachment Prototype Rating; (Strauss, Lobo-Drost, & Pilkonis, 1999), cited in Kirschmann et al., (2012)  
 AAS: Adult Attachment Scale (Collins & Read, 1990)  
 ASQ: Attachment Scale Questionnaire (Feeney, Noller, & Hanrahan, 1994)  
 BARS: Bartholomew Attachment Rating Scale: interview-based version of Bartholomew & Horowitz (1991)  
 BFPE: Bielefeld Partnership Expectations Questionnaire (Pollak, Wiegand-Grefe, & Höger, 2008)  
 BQCE: Bielefeld Questionnaire of Client Expectations (Hoges, 1999)  
 CSQ: Coping Strategy Scale (Finnegan, Hodges, & Perry, 1996)  
 ECR: Experiences in Close Relationships (Brennan, Clark, & Shaver, 1998)  
 GAQ: Grau's Attachment Questionnaire (Grau, 1999) cited in Kirschmann et al., (2012)  
 IRA: Interpersonal Relations Assessment (Pilkonis, 1988)  
 RAQ: Reciprocal Attachment Questionnaire (West, Sheldon, & Reiffer, 1987)  
 RPAS: Romantic Partner Attachment Scale; (in Smith et al. (1991) with items from Bartholomew & Horowitz (1991) and Collins & Read (1990)  
 RQ: Relationship Questionnaire (Bartholomew & Horowitz, 1991)  
 RSQ: Relationship Scale Questionnaire (Griffin & Bartholomew, 1994)  
 Security Scale: (Kerns, Klepac, & Cole, 1996)  
 SGAS: Social Group Attachment Scale (Smith, Murphy, & Coats, 1999)

one possible pathway for achieving “earned attachment security,” a term based on Mary Main and her Adult Attachment Inventory (AAI) and commonly used to describe adults who present with secure attachment styles despite painful childhood experiences with primary caregivers (cited in Pearson, Cohn, Cowan, & Cowan, 1994; cited in: Wallin, 2015). Fonagy and colleagues (1995) published perhaps the first study on attachment change following treatment with a sample of patients diagnosed with borderline personality disorder who engaged in long-term in-patient, individual and group psychodynamic therapy. Using the AAI to assess attachment style, they determined that none of the 35 participants could be classified as secure before treatment, but 40% moved into the securely attached category by post-treatment. Numerous subsequent studies have reported significant increases in attachment security and/or decreases in attachment insecurity after participation in group psychotherapy as determined by different scales and conceptualizations of attachment (categorical or dimensional/continuous)

(Kilmann, Urbaniak, & Parnell, 2006; Kilmann et al., 1999; Kinley & Reyno, 2013; Lawson & Brossart, 2009; Lawson et al., 2006; Muller & Rosenkranz, 2009; Tasca et al., 2007b; Taylor et al., 2015).

Group therapy studies measuring attachment along the two dimensions of anxiety and avoidance have reported significant decreases in both attachment anxiety and avoidance (Kirchmann et al., 2012; Maxwell et al., 2014; Muller & Rosenkranz, 2009), but attachment anxiety has been more frequently associated with attachment pattern improvement than attachment avoidance (Marmarosh et al., 2013; Taylor et al., 2015). A recent synthesis of the research on attachment changes associated with individual and group therapy identified enhanced attachment security in eleven of fourteen studies (Taylor et al., 2015). The synthesizers contend that there is more evidence substantiating increased attachment security and decreased attachment anxiety following treatment than for attachment avoidance which does not demonstrate clear or robust trends. The security gains made with attachment anxiety through group therapy may not only occur more frequently but may be more lasting than with avoidance. Muller and Rosenkranz (2009) reported significant decreases in both dimensions of anxious and avoidant attachment over the course of multimodal group treatment with men and women diagnosed with PTSD as compared to the wait list control group. The decrease in avoidance was not maintained at six month follow up, suggesting that attachment avoidance may be more difficult for enduring change. This conclusion cannot be made definitively given contradictory findings from other studies in which attachment reduction in both anxiety and avoidance were maintained one year post-intervention (Kirchmann et al., 2012; Maxwell et al., 2014).

Adopting the four-category approach to attachment measurement, Kinley and Reyno (2013) found that individuals with secure and fearful styles reported significant improvement. Improvement for individuals with preoccupied attachment styles was significant but weaker, and there was no significant change for individuals classified as dismissing. In addition to the dimensional findings, Muller and Rosenkranz (2009) assessed attachment changes categorically, demonstrating similar results to their dimensional findings. Secure, fearful, and preoccupied categories demonstrated significant attachment improvement post-treatment with gains maintained at six month follow up for the securely attached and, to a lesser degree, for fearful and preoccupied. For participants classified as dismissing, no significant changes were found post-treatment or at follow up.

The outcomes from studies ascribing to categorical and dimensional conceptualizations of attachment suggest a trend involving the notion that attachment anxiety may be more to malleable and responsive to change and thereby garner more benefits from therapy than their avoidant counterparts (Fraley & Shaver, 2000; Kinley & Reyno, 2013; McBride et al., 2006; Mikulincer et al., 2013a; Muller & Rosenkranz, 2009; Saunders & Edelson, 1999). For individuals with fearful attachment styles, despite their relational complexity and vulnerability, there is evidence of adaptive change after group therapy (Kilmann et al., 1999; Kinley & Reyno, 2013; Muller & Rosenkranz, 2009). One study found that the increase in attachment security for individuals with fearful tendencies exceeded that of individuals with dismissing/avoidant attachment styles (Zorzella, Muller, & Classen, 2014).

These treatment examples, as well as the research on continuity and discontinuity over the life span, illustrate that attachment style is not an immutable trait but instead can deteriorate

from negative interpersonal events or flourish with healing relational experiences and interventions. Recent advances in neuroscience are lending further support to Bowlby's contention of attachment mutability with studies demonstrating that new relational experiences can change neural pathways, thereby altering IWMs (Prenn, 2011). This neuroplasticity has led researchers to advocate for attachment-informed individual and group therapy approach protocols that include right hemisphere (RH) processing as a powerful medium for sparking neural reorganization that may lead to more secure attachment styles (Farmer, 2008; Fonagy & Bateman, 2006; Lapidés, 2011; Magnavita & Anchin, 2013; Prenn, 2011).

**Attachment-Associated treatment responses for mental health and interpersonal functioning.** Beyond establishing the association between group treatment and increased individual attachment security and/or decreased individual attachment insecurities, studies have further explored the relationship between attachment change and potential improvement in behavioral and emotional functioning. Levy and colleagues (2011) conducted a meta-analysis to evaluate the potential predictive value of attachment for treatment outcomes by assessing the relationship between the degree of pretreatment attachment anxiety and attachment avoidance and outcomes for mental health and interpersonal functioning. Their synthesis of 14 studies, which included both group and individual treatment modalities, reported on a variety of outcome measures such as depression, anxiety, PTSD, and interpersonal functioning. The analysis showed high attachment anxiety predicted worse outcomes after therapy while high attachment security predicted more favorable outcomes. High attachment avoidance, however, had a negligible effect on outcomes following therapy.

The findings also indicated that attachment orientation accounted for almost as much of the variance in therapy outcomes as therapeutic alliance, a highly-substantiated predictor of therapeutic change. The comparable contributions of attachment and alliance to the clinical outcomes is highly relevant in that validation is provided as to the importance of assessing attachment styles at the onset of treatment to accurately conceptualize the client's issues and vulnerabilities along with internal relational resources. With this knowledge, a clinician can prepare for potential pitfalls, recognize opportunities conducive for change more quickly and easily, and benefit from tools or methods to maximize the treatment experience in attuned and responsive ways. A clinician can sensitively modulate his or her relational tendencies so as not to overwhelm clients who are more dismissing or appear detached or indifferent to clients who are more preoccupied (Levy et al., 2011). This titration and calibration of the interpersonal intensity encourages positive change in attachment security, making attachment not just a predictor to guide interactions but a treatment goal that supports beneficial mental health outcomes (Levy et al., 2011).

Other studies have shown that reductions in either attachment anxiety alone or in both dimensions of attachment insecurity and increases in attachment security have been related to reductions in depression, anxiety, binge eating, and trauma symptoms (Lawson et al., 2006; Marmarosh & Tasca, 2013; Maxwell et al., 2014; Muller & Rosenkranz, 2009; Tasca et al., 2007b). Gains in mental health and trauma symptom reductions have not only been found to remain at six month follow up but the association between symptom and attachment change, especially when measured categorically, has been found to become stronger over this time period (Muller & Rosenkranz, 2009). Perhaps either time may allow for more experiences with secure



functioning to assimilate, or the emotional challenges of ending treatment need time to abate for the change to manifest under more moderate stress levels.

Seemingly in contrast to these studies on the link between attachment change and clinical gains, Strauss et al. (2011) reported symptom reduction in the absence of associated increases in attachment security post-treatment for participants with borderline personality disorder (BPD). Reductions in mental health and interpersonal problems were associated with an increase in the number of participants who could be reclassified from ambivalent/preoccupied to avoidant. These treatment gains can be understood within the context of the interpersonal challenges commonly faced by clients with BPD which involves struggles with affect regulation. Many experience tenuous relationships because of highly dysregulated emotional responses that are easily triggered and typified by hyperactivation of the attachment system (Fonagy, Luyten, & Strathearn, 2011; Levy, Beeney, & Temes, 2011). Reflective functioning cannot occur under these circumstances, precluding problem solving or empathy in these moments (Bateman & Fonagy, 2003; Fonagy & Luyten, 2009; Luyten et al., 2012). By adopting more avoidant characteristics over the course of treatment may have allowed them to contain distressing relational feelings to an extent that they are manageable and less of an interference with relationships and mental health functioning (Strauss et al., 2011). This post-treatment shift from a preoccupied attachment style to an avoidant style of behavior may not superficially seem advantageous, but clinical gains were, nonetheless, made without a recategorization of security, possibly because the attachment changes corresponded to the affect regulation needs of these participants with BPD.

Treatment associated changes in interpersonal functioning have been examined as an area of growth that may covary with attachment. An early study, that was later expanded, did not look at attachment style change in group psychotherapy directly but instead assessed specific behaviors and beliefs representative of insecure attachment (Kilmann et al., 2006; Kilmann et al., 1999). They implemented an attachment-focused (AF) group therapy protocol for individuals who scored within any of the three categories comprising the insecure attachment style, focusing on the definitional attachment manifestations of change in view of self and other and emotional regulation. The AF participants in the initial study (Kilmann et al., 1999) demonstrated no change in self-esteem (view of self) or anger (emotion regulation) but did endorse more positive relationship expectations (view of others) post-treatment than the control group. The later study incorporated a relationship skills (RS) comparison group and found that both groups reported less agreement with dysfunctional beliefs, but AF participants demonstrated within-group increase in self-esteem and decrease in anger with greater control of anger from pre-to post-intervention (Kilmann et al., 2006). The RS group endorsed fewer interpersonal problems from pre-to post-intervention. The focus in the AF group on family-of-origin seems to influence present relational thoughts, feelings, and behaviors may have facilitated a restructuring of IWMs, while the RS group's focus on communication and conflict skills which equipped participants to effectively address interpersonal problems.

Other studies have directly measured attachment style and examined links with interpersonal functioning. Decreased fearfulness and increased security have been linked to positive changes in interpersonal functioning (Kinley & Reyno, 2013). Participants with preoccupied attachment reported less attachment growth than participants with fearful or secure

styles, and attachment change was not associated with alterations in interpersonal functioning (Kinley & Reyno, 2013). Maxwell et al. (2014) noted that reductions in attachment anxiety and avoidance were associated with decreases in interpersonal problems, and improvement persisted one year later. Increases towards greater attachment security have been associated with greater comfort with closeness and depending on others in a sample of men with histories of intimate partner violence (Lawson et al., 2006). As highlighted by the Levy et al. (2011) meta-analysis, levels of insecurity at pretreatment can affect the strength and direction of therapeutic outcomes of attachment changes creating incongruences in outcomes, including interpersonal functioning.

**Attachment and attrition from group therapy.** Individuals with avoidant relational patterns are more hesitant to engage and remain in treatment, resulting in smaller clinical gains and higher rates of attrition, as compared to other group members with anxious attachment tendencies (Marmarosh et al., 2013; Mikulincer et al., 2013a; Tasca et al., 2004). Dropping out protects the participants with more avoidant patterns because defensive interpersonal strategies cannot be eroded by group processes and demands. The preservation of defensive strategies blocks the unleashing of a tumult of unwanted emotions and feared discomfort. A member whose attachment style is dismissing-avoidant might seem impervious to the emotional demands and vulnerability of individual or group therapy, but it is an extremely effortful process to maintain his or her typically staunch demeanor in the face of interpersonal demands. These demands threaten a sense of relational safety by interfering inclinations to avoid and disengage from attachment-related situations (Marmarosh et al., 2013; Muller, 2009; Zorzella et al., 2014).

The research not only indicates less or fleeting beneficial engagement and attachment change for members with high attachment avoidance, but avoidant attachment tendencies may

intensify for inpatient women diagnosed as having either borderline or avoidant personality disorders (Strauss et al., 2011). Despite these findings, individuals with high avoidant patterns are not impervious to attachment improvement. Reductions in avoidant attachment patterns after participation in group therapy are associated with reductions in problematic interpersonal functioning (Kirchmann et al., 2012). These attachment gains among individuals with high avoidance were maintained one year post-treatment (Maxwell et al., 2014). Hence, despite challenges, gains can be made with individuals who have high attachment avoidant tendencies.

**Attachment and group functioning according to group format.** A comparative analysis of group formats with differing conceptual frameworks may offer clarity to some of these trends as well as inconsistencies related to differential group efficacy for individuals with greater anxious and/or avoidant patterns. To facilitate and sustain positive change for group members who have dismissing-avoidant orientations, a structured trauma group format, over an interpersonal processing format, may need to be adopted (Marmarosh et al., 2013; Muller & Rosenkranz, 2009; Saunders & Edelson, 1999; Taylor et al., 2015). Interpersonal formats seem to hinder therapeutic tolerability and openness among participants with high avoidance, for these less structured, processing formats may activate the defensive strategies of these participants to a greater degree than cognitive behavioral approaches (Tasca, Balfour, Ritchie, & Bissada, 2007a). If participants with high attachment avoidance join processing groups, they will likely need safe levels of gradually heightened activation of their attachment systems through a titration of emotional depth and relational closeness to be amenable to clinical change (Marmarosh et al., 2013; Muller, 2009). Even with titration, individuals with more avoidant patterns seem to be able to manage their relational unease and progress towards goal attainment to a greater extent in

cognitive-behavioral groups than in a processing groups (Tasca et al., 2007a; Tasca et al., 2006). Cognitive-behavioral groups may be preferred because they typically entail didactic formats with educational and skills-based aims and incorporate few relational or affective elements (Marmarosh et al., 2013; Tasca et al., 2007a; Tasca et al., 2007c). These types of protocols may diminish the fears of vulnerability, shame, exposure, and humiliation often associated with group therapy by individuals with more avoidant tendencies (Marmarosh et al., 2009). However, Tasca et al. (2007b) report a discrepancy in this trend in that no relationship was found between change in attachment avoidance and symptom improvement for either the CBT or interpersonal-psychodynamic group formats.

Individuals with more anxious relational tendencies may benefit from group therapy protocols that can address and quell their fears of rejection and abandonment (Marmarosh et al., 2009) such as those in interpersonal/psychodynamic approaches. Supporting this assertion, participants who are more anxiously attached typically attain greater treatment gains with interpersonal/psychodynamic therapeutic formats which usually involve affective expression, self-reflection, and interpersonal exploration (Marmarosh et al., 2013; Tasca et al., 2006).

Individuals with more anxious attachment patterns may struggle to engage positively with a group and experience beneficial outcomes. In Levy et al.'s (2011) systematic review of group and individual therapy, evidence showed members who were classified as preoccupied were no more adherent or successful in treatment than their counterparts classified as dismissing. Additionally, two systematic reviews found attachment anxiety to be associated with worse outcomes post-therapy than attachment avoidance (Levy et al., 2011; Mikulincer et al., 2013a). In these instances the investigators hypothesized that individuals with anxious attachment

orientations may need a direct and explicit focus on their relational patterns as well as more time in treatment to more adequately address various psychopathologies (Illing et al., 2010; Marmarosh et al., 2013; Tasca et al., 2007b). Individuals with predominantly high levels of attachment anxiety may require therapeutic interventions designed to lower activation of their attachment systems in order to engage productively in such outcome enhancing processes as self-reflection, feedback, and emotion containment and regulation (Illing et al., 2010; Marmarosh et al., 2013). Group cohesion and alliance moderate anxious interpersonal tendencies by fostering a sense of connection and acceptance that individuals with high attachment anxiety need to maintain low activation of their attachment systems (Rom & Mikulincer, 2003; Tasca et al., 2013a). To enhance treatment outcomes with individuals with high attachment anxiety, group connection may need to be closely monitored, promoted, and nurtured during treatment.

The degree of attachment anxiety and avoidance may indicate when in the group process an individual could experience the most discomfort. Group members with preoccupied attachment styles will often thrive in the beginning of treatment, perhaps trying to establish themselves as valuable and likeable group members, but as the group progresses, they will typically struggle with emotion regulation and the demands for self-understanding (Gallagher et al., 2014; Marmarosh et al., 2013). Members with anxious attachment patterns have the best chances of thriving in groups in which they feel an early, continued, and growing sense of therapeutic alliance and group cohesion (Tasca & Balfour, 2014). Avoidant members are at high risk for dropping out at two junctures—initially, to assert their self-reliance and self-perceived superiority and when the dependency demands of the group increase which activates a desire to withdraw for self-protection (Gallagher et al., 2014; Marmarosh et al., 2013). Members with

avoidant attachment patterns need the group demands for self-disclosure, bonding, and emotional expressiveness to be paced and not thrust upon them as a pressuring demand if they are to withstand discomfort and move forward with the group towards greater healing outcomes (Tasca & Balfour, 2014).

These findings represent the predictive potential of attachment knowledge for facilitating clinician attunement, sensitivity, and responsiveness to the differing needs at differing phases of treatment of each group member. These studies also reflect some of the inconsistencies and contradictions that warrant disentanglement before more definitive assertions can be made regarding the nature of the link between treatment outcomes and attachment style. Inclusion of a group format variable in future studies may provide direction in this endeavor of learning the most effective ways to support different individuals in their group therapy experience.

**Attachment and group therapy dynamics: Re-conceptualizing Yalom.** Group therapy outcomes may be better understood with a more fine-tuned analysis of underlying processes. The hypotheses being explored by many of the aforementioned studies are guided by the seminal work of Irvin Yalom (Yalom & Leszcz, 2005; Yalom, 1995) and further augmented and enriched with the inclusion of Bowlby's (and subsequent attachment theorists') attachment insights (Bowlby, 1988; Marmarosh et al., 2013). Yalom's (1995) interpersonal process theory of group treatment is one of the most widely accepted conceptualizations about how and why the group milieu is effective in facilitating therapeutic change. He identified eleven therapeutic factors that may account for the curative nature of group therapy (Yalom & Leszcz, 2005). Several of these factors overlap with attachment ideologies and have been re-assessed in light of attachment theory with the goal of garnering a more nuanced appreciation of individual differences in group

functioning and outcomes (Harel, Shechtman, & Cutrona, 2011; Kirchmann et al., 2009; Kivlighan, Lo Coco, & Gullo, 2012; Tasca, 2014). The synchronicity between these two theories emanates from a common belief that the current relational challenges brought by clients and enacted in therapy may be traced back to childhood experiences (Marmarosh et al., 2013). Yalom, however, predominantly remains focused on current dynamics in the group, whereas attachment theorists focus on linking the past and the present, thereby offering an underlying explanatory framework for Yalom's accounts of group behavior such that Yalom's curative and related factors can be considered to be rooted in attachment theory (Chen & Mallinckrodt, 2002; Rom & Mikulincer, 2003; Smith et al., 1999; Tasca, 2014). Reconceptualizing Yalom's work through the lens of attachment theory potentially expands clinical insight into the factors that could moderate, mediate, explain, or predict an individual's functioning in group therapy and outcomes based on group therapy involvement (Gallagher et al., 2014; Gallagher et al., 2014; Paquin et al., 2013; Rom & Mikulincer, 2003; Strauss et al., 2011; Tasca et al., 2013a). In other words, attachment theory bolsters Yalom's interpersonal process theory by equipping group leaders at or before the onset of a group with a deeper understanding of potential challenges that each group member and the group as a whole may face as well as potential personal challenges they will need to manage to facilitate an effective group experience. See Table 2 for a summary of relevant studies related to attachment and group processes.

***Group cohesion.*** Of Yalom's (2005) eleven therapeutic factors, he identified group cohesion, or a sense of "we-ness," as a prerequisite for growth in a therapy group. This therapeutic ingredient embodies a sense of belonging and acceptance based on a valued emotional bond between group members and with the leaders. In attachment language, this



emotional bond that constitutes group cohesion is a form of attachment that provides a secure base for venturing into new emotional territory and considering novel ways of thinking about oneself and others, while trying out more adaptive relational behavior (Chen & Mallinckrodt, 2002; Tasca, 2014). An abundance of evidence is available demonstrating the potency of group cohesion in accounting for success in group outcomes (Chen & Mallinckrodt, 2002; Flores, 2010; Gallagher et al., 2014; Rom & Mikulincer, 2003; Smith et al., 1999). For example, a greater sense of group cohesion has been correlated with increased self-esteem. Individuals with eating disorders and high attachment anxiety have been found to struggle with developing a sense of cohesion in groups, limiting self-esteem building benefits of group involvement for these individuals (Gallagher et al., 2014). If co-leaders are able to facilitate the development of group cohesion for members with high anxious attachment tendencies, the benefits of group therapy may become accessible. Rom and Mikulincer (2003) found that high levels of group cohesion diminished the negative impact of anxious attachment in close relationships on instrumental group functioning such that anxious members were better able to complete group tasks. However, high levels of group cohesion intensified the negative impact of attachment avoidance on task completion. This moderating effect of group cohesion was demonstrated in a group of women with binge eating disorders (Gallagher et al., 2014), for swifter rates of growth in group cohesion were associated with decreases in frequency of binge eating for those with high attachment anxiety as manifested by high needs for approval. Facilitators can support the development of group cohesion for members with high attachment anxiety by using their attachment knowledge to elicit individualized constructive feedback from various group members as a means of reducing attachment anxiety regarding anxiety-driven assumptions or

misperceptions of being disliked or abandoned (Gallagher et al., 2014). Therefore, conjoining Yalom's concept of group cohesion with attachment theory suppositions on the differential needs and reactions of anxious and avoidant group members in managing emotional proximity allows for a more nuanced and individualized approach to understanding and helping clients.

This dual theoretical mindset suggests that a sense of high group cohesion satisfies the intense craving for closeness and acceptance experienced by those with high attachment anxiety in interpersonal settings, creating a buffer of security that deflates the need to engage in hyperactivating strategies that are often problematic for group functioning (Marmarosh et al., 2013; Rom & Mikulincer, 2003). In contrast, high group cohesion may trigger deactivating strategies for those with high attachment avoidance tendencies as they feel pressure for increased intimacy with the growing closeness in the group dynamics. It should not be assumed that growth in group cohesion is universally beneficial in facilitating positive outcomes for all members (Tasca et al., 2013b). These differential reactions to group cohesion parallel and affirm the findings discussed earlier regarding the interplay of attachment style and interpersonal versus cognitive-behavioral group treatment modalities in that most interpersonal groups focus more on cohesion than cognitive-behavioral ones, in part, explaining the success of anxious members in interpersonal groups and avoidant members' preference for more structured cognitive-behavioral ones. The conclusions drawn from these studies reflect the deeper, valuable insights that can be garnered from the addition of attachment-based knowledge into explorations of group cohesion to reveal and clarify the intricacies involved in enhancing this critical group-level dynamic in service of individual growth for different people (Marmarosh, 2014).

***Interpersonal learning.*** Along with group cohesion, parallels are evident between Yalom's group factors of "interpersonal learning" and "corrective recapitulation of the primary family group" and the therapeutic tasks outlined by Bowlby involving attachment notions of the secure base, IWMs of self and other as well as relational ruptures and repairs (Allen, 2013; Bowlby, 1988; Tasca, 2014; Yalom & Leszcz, 2005). The crux of both theories resides in the view of group therapy functioning as a reflection of members' natural worlds (termed, a social microcosm by Yalom) such that current relational patterns outside of group play out in their interactions within-group. Thus, group therapy provides a context for working through relational struggles and confusion, typically grounded in early familial experiences, within a safe space. Group therapy offers opportunities to share thoughts and feelings, receive acceptance, gain new insights and alternatives from group feedback and subsequently practice more adaptive relational responses that are transportable to other settings (Bowlby, 1988; Marmarosh et al., 2013; Tasca, 2014; Yalom & Leszcz, 2005). In the process of awakening and emotionally re-experiencing old wounds in novel and healing ways, the individual can reevaluate and revise patterned ways of thinking, feeling, and behaving in relationships that are likely dysfunctional because of being rooted in unhelpful, distorted, or inaccurate views of self and others. Hence, interpersonal learning in the social microcosm is an avenue for modifying negative internal models of self and others (Chen & Mallinckrodt, 2002). Group environments conducive for interpersonal learning differ depending on whether a person is more attachment anxious or avoidant (Gallagher et al., 2014; Marmarosh et al., 2013; Marmarosh, 2014). According to Gallagher, et. al (2014) and Zorzella et al. (2014) group members with high attachment anxiety benefit more than avoidant ones from group interventions geared explicitly towards interpersonal learning and relationships

which, as with group cohesion, may overwhelm a members with dismissive tendencies. As with group cohesion, research integrating these concepts from attachment and interpersonal group processes theories is limited but warrants further investigation to potentially advance findings that attachment theory can provide an informative theoretical framework for understanding individual differences in the experience of group dynamics (Chen & Mallinckrodt, 2002).

***Helpful In-group behaviors.*** Attachment style has been shown to predict who is able to engage in more helpful in-group behaviors that may further group goals, such as empathy, intimacy, affective and cognitive exploration, insight, and self-disclosure (Shechtman & Rybko, 2004; Shechtman & Dvir, 2006). According to Yalom, self-disclosure underlies and advances all eleven of the therapeutic factors delineated in his model (Yalom and Leszcz, 2005), making it a fundamental element of group change. Schectman and Rybko (2004), however, found that attachment style functioned as a more powerful predictor of the level of productive in-group behavior in an interpersonal growth group than initial self-disclosure. Consequently, awareness of attachment style can provide clinicians with a valuable piece of information relevant to making determinations of group suitability and composition. As groups commence and progress, attachment style knowledge can potentially contribute to reductions in absences or attrition related to self-disclosure. Paquin, Miles, and Kivlighan (2010) found that a group outlier, operationalized as being excessively quiet or active especially in regard to being open and vulnerable during a group session, was associated with missing the following week. While an attachment-informed leader would not want to exclusively rely on attachment presumptions over knowing each participant as an individual, he or she would have more information and preliminary theories for tentatively providing guidance tailored to a member's likely comfort

level with self-disclosure as well as be more attuned and appropriately supportive to members who are outliers during a session.

These findings on Yalom's core concepts of group cohesion, interpersonal learning, and helpful in-group behaviors highlight the complexity of the initial and changing dynamics within group therapy that therapists must decipher and utilize if they are to serve as successful guides for productive group experiences. An attachment lens supports therapists in this process by offering valuable knowledge and direction that the core concepts alone may not, thereby alleviating some of the unpredictability and incomprehensibility of group dynamics.

**Group attachment style.** The newest trend in this process of gaining a deeper understanding of the individual experience in a group context involves a focus on each member's attachment to the group as a whole (Marmarosh et al., 2013; Marmarosh, 2014; Tasca, 2014). Smith et al. (1999) developed the theory and measurement of group attachment style and contend that a group attachment style encompasses an individual's internal representations of self as a group member and representations of groups as sources of identification and support. These representations reflect internal working models of group connections based on early experiences with families and other social/cultural groups that guide future expectations of new groups and are manifested in adult thoughts, feelings and behaviors (Smith et al., 1999). Seeking out connections to groups for closeness, security, and belonging may be just as innate a function as a child seeking out a primary caregiver for protection (Markin & Marmarosh, 2010). The viability of a theory of group attachment emanates from early work (cited in Smith et al., 1999; Holtz, 2005) on the multiplicity attachment styles as a function of the relationship and the context. Internal working models of groups as a whole are an expression of these representations.

Group attachment style is measured by the Social Group Attachment Scale (SGAS) with empirical support for a dimensional approach to scoring the two underlying factors of attachment anxiety and avoidance (Smith et al., 1999). Broadly, group attachment anxiety depicts the extent a member perceives being valued by the group, while group attachment avoidance describes the degree of value the member places on the group (Holtz, 2005). The manifestations of an individual with high group attachment anxiety entail a sense of unworthiness as a group member, concerns about fitting in and being accepted, hypervigilance for rejection, people pleasing behavior, high accolades for the group despite few satisfying connections, and high sensitivity to their own and others' emotional reactions (Holtz, 2005; Markin & Marmarosh, 2010). The indices of high group attachment avoidance in an individual involve a dismissing attitude towards closeness and inclusion in a group, aloofness and self-reliance, and a lack of identification with the group (Holtz, 2005; Markin & Marmarosh, 2010). The developers strongly support adherence to these two underlying dimensions and suggest that a secure group attachment corresponds to low group attachment anxiety and avoidance.

Group attachment style is not interchangeable with group collective identity or group cohesiveness, nor is it equivalent to individual attachment style. Group attachment style correlates with collective identity and cohesion but can predict individual differences and account for group participation outcomes above and beyond measures of group cohesiveness and collective identity (Holtz, 2005; Smith et al., 1999). For example, group attachment anxiety predicts depression above and beyond group identity and cohesion. Individual and group attachment styles are moderately correlated, thereby demonstrating that these two concepts are related but represent distinct belief systems about self and others (Holtz, 2005; Keating, 2012;

Rom & Mikulincer, 2003; Smith et al., 1999). Further highlighting this distinction is the notion that different combinations of individual and group attachment styles create different client needs and contributions within a group (Markin & Marmarosh, 2010; Marmarosh & Markin, 2007).

For example, a group member with insecure individual-secure group attachment styles may struggle to connect with the group leader and not want to befriend individual members outside of the group but nonetheless keep the group on task and offer insightful and compassionate feedback during group interactions. A scenario such as this may emerge from early childhood experiences with an overly critical primary caregiver as well as contrary experiences within a church youth group that provided a sense of unconditional acceptance and belonging. In this hypothetical example, individual and group attachment experiences are functioning independently, or in a parallel manner, but Weiss and Shilkret (2010), based on their study of children raised on a kibbutz, suggest that individual and group attachment experiences may, under certain circumstances, interact in the determination of adult attachment styles. Their results revealed that nurturing peer group care in childhood seemed to mitigate the impact of low quality parental care, because, as adults, they demonstrated less fearful individual attachment styles than those raised in conditions with both poor peer group and parental care.

Considering dual attachment styles may be especially relevant for understanding trauma survivors, for these individuals often have both fearful individual and group attachment styles which can greatly derail the achievement of therapeutic gains, especially in the group milieu (Marmarosh et al., 2013). These dually fearful group members have no buffer of support against feared re-victimization in a group, for they do not feel safe relying on the group, any specific member, or the leader when discussions feel emotionally unsafe or overwhelming (Markin &

Marmarosh, 2010). Marmarosh and colleagues (2013) suggest that these clients may be the most vulnerable in groups and are especially in need of a secure base grounded in empathy to regulate their emotions and “integrate their contradictory impulses to merge and withdraw” (p. 167) within the group context. Intense moments will inevitably arise between members as they engage in hyperactivating and deactivating behaviors to maintain within themselves an emotional homeostasis in the group’s relationally charged environment (Bowlby, 1982b; Shaver & Mikulincer, 2007). A therapist with awareness of both a client’s individual and group attachment styles will be primed to accurately interpret and sensitively address complicated group dynamics. Therapists can use this dual attachment style knowledge to maximize the windows of opportunity for building socially supportive connections and facilitating corrective interpersonal experiences that open up during these in-the-moment instances when feelings are strong and the attachment system has been activated (Marmarosh et al., 2013).

A recent study of groups for individuals diagnosed with eating disorders highlights the value of obtaining and capitalizing on both group and individual attachment information to foster the development of healthier attachments. The study found that a decrease in group attachment avoidance predicted increases in elements of secure individual attachments (Keating et al., 2014). These results may reflect true underlying change in IWMs given that attachment gains generalized to their natural world intimate relationships and were maintained one year later (Keating et al., 2014). Interestingly, this study, in contrast to prior research, showed that group members with attachment avoidance can fare well in the group milieu. However, building more secure attachments did not correlate with reduced depression, a contrast with other research that warrants further investigation.



**Attachment-Informed treatment strategies.** These studies represent just a few illustrations of the relevance of attachment theory for understanding and preparing to intervene based on individual differences in group functioning. Empirically validated attachment-based interventions, specifically designed to account for both individual and group relational patterns in group therapy, are newly emerging, but some recommendations have been made as to strategies for building more secure attachments through the group milieu (Marmarosh et al., 2013; Marmarosh, 2014). Experiential and cognitive strategies that make implicit IWMs explicit so that they are open for discussion have been advised along with identifying core affects triggered during group and linking them to early attachment experiences (Bowlby, 1988; Marmarosh et al., 2013). Awareness of right hemisphere processes, such as nonverbal behaviors, is recommended since the attachment system is believed to be housed in the right hemisphere (Farmer, 2008; Flores, 2010; Lapidés, 2014). Integrating the emotional right hemisphere with the analytical and rational left hemisphere is also considered to be a critical element of effective treatment (Field, 2014; Lapidés, 2014; Magnavita & Anchin, 2013; Marmarosh, 2015; Marmarosh et al., 2013).

Left hemisphere approaches include strategies that link the past and present to understand current relational behavior; provide relational skill building through role plays, modelling, and fables; explore relational beliefs; and, help clients put feelings into words. Right hemisphere approaches entail: recognizing and promoting awareness of current bodily sensations; attending to facial expressions, tone, and body language as indicators of internal experiences in the present moment; engaging in art, music, or movement (Kilmann et al., 2006; Kilmann et al., 1999; Marmarosh et al., 2013; Marmarosh & Corazzini, 1997; Marmarosh & Tasca, 2013; Marmarosh,

2014; Tasca, Ritchie, & Balfour, 2011; van der Kolk et al., 2014; Wallin, 2015). These strategies can be applied to discussions about relational experiences in their world outside of therapy and, perhaps more powerfully, to in-the-moment interactions between members whose attachment systems have been activated by the group interactions and are primed for potential change.

**Mentalization enhancement in attachment-informed groups.** Some of the goals and strategies echo insights and recommendations from therapists guided by a mentalization mindset. A mentalization-based approach to therapy expands and deepens a client's abilities for purposeful, reflective thinking about his or her experiences, including interpersonal interactions, by working in the current moment of the therapeutic encounter with feelings, thoughts, and bodily sensations that arise within the client or therapist as they interact (Allen, 2013; Fonagy, Bateman, & Bateman, 2011; Jurist et al., 2008; Wallin, 2015). This exploration can be augmented by insights of the impact of early attachment relationships on present functioning (Marmarosh et al., 2013; Wallin, 2015). The security built within the therapeutic relationship and the secure base of a therapy group serves as a safe practice-ground for building trust and forming healthy relationships through reflection on underlying factors in one's own, other clients' and therapists' behavior. Mentalization enrichment strategies are not bound by any particular theoretical orientation, but, like attachment theory, can be infused in any treatment model (Allen, 2013). Increased mentalization has a valuable impact on well-being as evidenced by its association with enhanced emotion regulation; empathy; self-agency skills related to choice and responsibility; the integration of dissociated feelings that may be undermining effective functioning and fueling unhealthy reenactments of past trauma; and the construction of

more adaptive life narratives (Wallin, 2015). Group therapy models are considered highly conducive to mentalization skill-building, and mentalization has become a recommended element of attachment-informed group therapy approaches for trauma survivors because of the expanded opportunities, through the multiple relationships in a safe context, for promoting insight and awareness of underlying mental states (Allen, 2013; Allen, 2014; Marmarosh et al., 2013).

### **Hypothesis**

TREM encouraged mentalization about relationships with discussion questions provided in the curriculum as it was relevant to the theme of the session. These questions focused on relationships in their natural settings and not on the relational dynamics between the members that were occurring in-the-moment during each session. TREM also provided exercises to further the learning themes, but these activities were not designed to explicitly deepen relational experiences and strengthen connections in the group based on attachment perspectives and strategies. The development of ATREM, however, was guided by dyad and group attachment perspectives and incorporated attachment-based treatment strategies and mentalization practice. The attachment perspective and activities were interwoven into each session so that the members had on-going opportunities to build secure attachments as they naturally arose regardless of the theme of the session. The aim of these modifications was to enhance the effectiveness of TREM. Based on these modifications, it was hypothesized that: ATREM will be more effective than TREM in increasing secure attachment styles, perceived social support, and emotion regulation capacities and in decreasing substance use, depression, anxiety, and PTSD symptoms.

## CHAPTER II

### Methodology

#### Research Design and Methods

**Brief overview.** A quasi-experimental, effectiveness study was conducted comparing a 16-week version of TREM and an attachment-informed adaptation of TREM (ATREM). Outcomes for depression, anxiety, PTSD, substance use, perceived social support, emotional regulation, and attachment style (individual and group) were assessed with pre- and post-treatment self-report questionnaires to determine if ATREM was associated with greater clinical gains than TREM.

**Design.** The design for this study was quasi-experimental since random assignments to groups was not feasible. Constraints related to room and therapist availability, as well as recruiting enough participants to comprise a full group, necessitated that ATREM and TREM be held on different days with staggered recruitment and start dates. Hence, each participant's personal schedule and date of referral dictated which day and which group was feasible for her to attend, precluding the researcher's ability for random assignment. Attempts were made to assess selection bias by collecting demographic data identified in prior TREM studies as possible extraneous variables (discussed in the variables section) for purposes of comparing the two groups at baseline.

**Settings.** Three agencies were utilized as study sites one of which was the present investigator's place of employment. All three study sites are non-profit agencies located in predominantly Caucasian areas within the upper, middle, and lower regions of the same county

with suburban or a mix of suburban and rural features. The initial host site (Agency A) is a community behavioral health facility founded in the Mennonite tradition, offering both secular therapy and Christian counselling. Agency programs include: outpatient mental health therapy on-site and in the community, inpatient and outpatient addiction treatment, a residential program serving people with co-occurring disorders, case management, and psychiatric rehabilitation. The second agency (Agency B) offers gender-specific residential care for women in addiction recovery. They provide comprehensive, trauma-focused programs addressing drug and alcohol addiction and other behavioral health disorders while adhering to 12-step philosophies. The third agency (Agency C) specializes in outpatient counseling, community education, and advocacy services for victims of sexual assaults and other interpersonal crimes. All three agencies provided letters stating their approval for the TREM study to be conducted at their agencies (Appendices A1, A2, A3). These agencies also gave their permission to be identified by name.

**Recruitment procedures and sample.** This study recruited a convenience sample of participants since recruitment only occurred at the three agencies that served as research sites. Each agency engaged potential study participants using their typical recruitment procedures for group therapy involvement with their clients, including all-staff emails, announcements in department meetings, and word-of-mouth. The present investigator provided the agencies with flyers for distribution in agency waiting rooms and other locations visible to clients and staff. The present investigator and a group co-facilitator also reached out personally by phone and in-person to various clinical staff members across departments in all three agencies to heighten awareness of the nature and purpose of TREM, answer questions, and remind them of the referral protocol and availability for up-coming TREM groups. Individual therapists discussed

TREM group involvement with their clients as an optional adjunct to their treatment and then referred women who expressed an interest in joining this group by contacting the TREM group facilitator who was the designated referral coordinator at each respective agency. Clients also referred themselves by reaching out on their own to the referral coordinator. Two of the three agencies had already been implementing a version of TREM as part of their routine service offerings. The present investigator was the referral coordinator for Agency A, while Agency B and C each had their own coordinator who was designated as an ATREM/TREM co-facilitator. Once a referral was made, the co-facilitator contacted each potential group member to discuss enrollment in the group. Upon agreement to join an upcoming TREM group, an option to participate in a research study was offered and presented as a fully voluntary, non-required activity. For those who expressed an interest in participating, the study was described in detail and informed consent (Appendix B) was acquired in accordance with the guidelines approved by the Institutional Review Board of the University of Pennsylvania. All the women who joined an ATREM/TREM group agreed to participate in the study and signed an informed consent form.

Nine to sixteen participants per group were accepted into the study before recruitment for that particular group closed. Recruitment for the next TREM group resumed as soon as each agency thought it was feasible to garner the required number of new members to make the group viable. This occurred at various junctures from two weeks after a prior group commenced to several weeks after a prior group completed depending on agency norms.

For a group member to be considered eligible for the present study the following conditions were established:

***Inclusion criteria:***

- Female
- Adults--18 years or older
- A history of childhood or adulthood interpersonal abuse self-reported verbally to their therapists or the referral coordinator and then later reiterated by completion of a trauma checklist adapted from the version used by the Women's Co-occurring Disorders and Violence Study (WCDVS), a consortium of researchers who extensively studied the effectiveness of integrated trauma services, such as TREM (Cocozza et al., 2005; McHugo et al., 2005a; Moses et al., 2003).
- A current DSM-V mental health or substance use diagnosis or a co-occurring mental health and substance use disorder at the time of the study. If the potential group member was involved with an agency that does not provide diagnoses for clients, then, being connected with the service agency for counseling services at the time of the referral or within one year of the referral to the group was required.
- Substance use disorder needed to have been in at least early remission, as defined by DSM-V
- Willing to complete a pre- and post-intervention questionnaire
- Willing to sign an informed consent form for participation in the study
- An intention to commit to the 16-week group duration
- An attendance rate of at least 60% of the sessions
- Beginning the group therapy no later than the third session

***Exclusion criteria:***

- Clients with back balances on their fees and no plan to pay off their debt would have been excluded (this is only relevant to Agency A). Per Agency A policy, clients had to be able to make their co-payments weekly or set up and maintain a payment plan schedule to access services. No exclusions needed to be made for this reason.
- Individuals with active psychosis would have been excluded from the group only if the symptoms were severe enough to interfere with understanding and participating in the group. There was no need to institute this guideline.
- If any participants had tried to attend the group under the influence of drugs or alcohol, they would not have been allowed to attend that session. If this would have happened a second time, it would have necessitated discontinuation from the study

(this criterion applies regardless of study status, because any client in the group, participant or not, would not have been appropriate under these circumstances). There was never a need in any of the groups for this exclusion criterion to be implemented.

Based on the discussed recruitment procedures, group assignment, and inclusion criteria, the following sample was created:

**Baseline composition and characteristics of the sample.** Demographic descriptions of the sample and comparability of the group conditions focused on the selected characteristics of age, race/ethnicity, education, employment, relationship status, and extent of different exposures to trauma (see Table 3). The study participants had a mean age of 42.41 (SD=12.154) and were predominantly Caucasian (92.8%). Most of the participants had at least a high school diploma/GED (89.9%), were not working (78.3%), mainly due to disability (49.3%), and were not presently in a relationship (63.8%). In addition, each participant's trauma history in terms of lifetime exposure to traumatic events based on the LSC-R (Life Stressor Checklist-Revised) was assessed at baseline. On average, the participants were exposed to 7.33 (SD =3.266) of 15 traumatic events.

Similarities were also observed between the participants in the experimental and comparison groups (ATREM, TREM) on the clinical variables at baseline. There were no statistically significant differences between ATREM and TREM on any of the clinical measures administered at baseline (Table 4). Therefore, despite the barriers precluding the use of random



assignment to the group conditions, the experimental and comparison groups were comparable on all measured variables at the onset of the study.

**TABLE 3**  
**Descriptive Demographics at Baseline**

Characteristic	Study Completers	ATREM	TREM Group
	(n=69)	Group (n=37)	(n=32)
	M (SD)	M (SD)	M (SD)
<b>Age</b>	42.41 (12.15)	43.11 (11.13)	41.59 (13.38)
<b>Life Stressor Checklist<sup>a</sup></b>	7.33 (3.27)	6.84 (2.76)	7.81 (3.69)
	n (%)	n (%)	n (%)
<b>Race/Ethnicity<sup>b</sup></b>			
<i>White</i>	64 (92.8)	35 (94.6)	29 (90.6)
<i>Non-White</i>	5 (7.2)	2 (5.4)	3 (9.4)
<b>Education<sup>c</sup></b>			
<i>HS Grad or Less</i>	38 (55.1)	17 (45.9)	21 (65.6)
<i>Higher Than HS Grad</i>	31 (44.9)	20 (54.1)	11 (34.4)
<b>Employment<sup>d</sup></b>			
<i>Working</i>	15 (21.7)	8 (21.6)	7 (21.9)
<i>Not Working</i>	54 (78.3)	29 (78.4)	25 (78.1)
<b>Relationship<sup>e</sup></b>			
<i>Married/Significant Other</i>	25 (36.2)	15 (40.5)	10 (31.3)
<i>Not in a Relationship</i>	44 (63.8)	22 (59.5)	22 (68.8)

No significant differences between ATREM and TREM were detected.

<sup>a</sup>Yes/No count of exposure to 15 various stressors/trauma exposure

<sup>b</sup>African-American, Hispanic, Other

<sup>c</sup>Post HS/Training, Some College, College Graduate, Graduate Level

<sup>d</sup>Not Working, Caregiver, Not Working Due to Disability

<sup>e</sup>Divorced/Separated, Single (Never Married), Widowed

The two study conditions were comprised of data gathered from multiple groups held at each of the three agencies. Agency A conducted four ATREM groups and two TREM groups;

**TABLE 4**  
**Clinical Characteristics of the Study Sample at Baseline**

Scale	ATREM	TREM
	M (SD)	M (SD)
<b><u>ATTACHMENT</u></b>		
<b>RSQ Total</b>	3.28 (0.56)	3.37 (0.63)
<i>Anxiety</i>	3.38 (1.09)	3.38 (1.09)
<i>Avoidance</i>	3.23 (0.61)	3.34 (0.60)
<b>SGAS Total</b>	4.12 (1.12)	4.44 (1.13)
<i>Anxiety</i>	4.35 (1.20)	4.53 (1.22)
<i>Avoidance</i>	3.88 (1.25)	4.34 (1.33)
<b><u>SOCIAL SUPPORT</u></b>		
<b>SPS Total</b>	72.56 (11.39)	67.86 (14.08)
<b><u>EMOTIONAL REGULATION</u></b>		
<b>DERS Total</b>	117.49 (22.97)	116.72 (28.46)
<b><u>MENTAL HEALTH/SUBSTANCE USE</u></b>		
<b>BSI Total</b>	2.19 (0.84)	2.16 (0.94)
<i>Depression</i>	2.22 (0.95)	2.08 (1.09)
<i>Anxiety</i>	2.19 (1.00)	2.23 (1.04)
<b>PSS Total</b>	31.63 (10.89)	31.55 (11.53)
<b>ASI</b>		
<i>Recent</i>	0.01 (0.03)	0.01 (0.03)

No significant differences between ATREM and TREM were detected for any of the clinical characteristics at baseline.

Agency B conducted two TREM groups and, for logistical reasons, did not conduct any ATREM groups; while, Agency C carried out one ATREM and one TREM group. As with some previous TREM studies (Amaro et al., 2007b; Fallot et al., 2011), participants from different agencies

(Agency A, B, C) and/or treatment modalities (residential and outpatients) were combined to create two group conditions. For the present study, this entailed ATREM data garnered from each of the two agencies being combined to make one ATREM group condition, and the TREM data from each of the three agencies was united in a similar manner. This conjoining was advantageous for statistical power but was also feasible because of a fair amount of congruence in the data from the three agencies with no statistically significant differences between the agencies for race/ethnicity, education, and trauma exposure (Table 5). For age and employment status, however, the groups were significantly different. A statistically significant difference also emerged between agencies for relationship status with a higher proportion of participants who were married or with a significant other at Agency A compared to both Agencies B and C. When the three agencies were assigned to either ATREM or TREM, no significant differences existed between the group conditions. Data were collected from May 2015 to April 2016.

**Retention, participant payments, tracking procedures.** The study began with 129 participants who signed informed consent forms and completed the pre-intervention questionnaire. The study ended with 69 participants which reflects total completion rate of 53.49%. A recent doctoral dissertation demonstrated a similar retention rate of 55% with 20 participants at baseline and 11 at post-intervention (Cihlar, 2014). Previous TREM studies reported retention rates at post-test and/or follow up of 35-85% (Amaro et al., 2005; Amaro, Chernoff, Brown, Arévalo, & Gatz, 2007; Amaro et al., 2007b; Cihlar, 2014; Fallot et al., 2011; McHugo et al., 2005b; Toussaint et al., 2007), making the present retention rate within the range of other TREM studies. Anecdotally, at a TREM workshop, the trainer, a member of the original

**TABLE 5**  
**Demographic Comparisons at Baseline of Study Completers (Per Agency)**

Characteristic	Agency A (n = 49)	Agency B (n = 9)	Agency C (n = 11)
	M (SD)	M (SD)	M (SD)
<b>Age</b>	44.69 (11.35)	35.78 (12.14)	37.64 (13.34)*
<b>Life Stessor Checklist</b>	7.07 (3.38)	8.78 (2.82)	7.20 (0.96)
	n (%)	n (%)	n (%)
<b>Race/Ethnicity</b>			
<i>White</i>	45 (91.8)	8 (88.9)	11 (100)
<i>Non-White</i>	4 (8.2)	1 (11.1)	0 (0.0)
<b>Education</b>			
<i>HS Grad/GED or Less</i>	26 (53.1)	7 (77.8)	5 (45.5)
<i>Higher Than HS Grad</i>	23 (46.9)	2 (22.2)	6 (54.5)
<b>Employment Status</b>			
<i>Currently Working</i>	7 (14.3)	1 (11.1)	7 (63.6)**
<i>Currently Not Working</i>	42 (85.7)	8 (88.9)	4 (36.4)
<b>Relationship Status<sup>a</sup></b>			
<i>Married/Significant Other</i>	22 (44.9)	0 (0)	3 (27.3)*
<i>Not in a Relationship</i>	27 (55.1)	9 (100)	8 (72.7)

\* p<0.05; \*\* p<0.01

<sup>a</sup>Relationship Status becomes NS (p=0.220) when original (non-collapsed) categories are used (Married, Divorced/Separated, Sig. Other, Single (Never Married), Widowed)

steering committee for TREM, offered the following advice based on her experience with attrition: Recruit about 16 women; expect 12 to attend the first session; and figure on about 8-10 completing the group (TREM trainer, personal communication, 3/30-3/31, 2015).

A comparison of participants who completed the study (n=69) to those who did not complete the study (n=60) yielded non-significant differences on all the baseline demographic variables (Table 6). Completion or non-completion dynamics were delved into further by assessing within-group condition attrition. The completion rates for ATREM and TREM respectively were 57.8% and 49.2%. ATREM retained more participants than TREM, but the difference was not statistically significant ( $z = 0.97$ ;  $p = 0.33$ ); however, the 8.5 percentage points in greater retention in ATREM may have clinical significance. There were no significant differences on any of the demographic variables for ATREM participants who completed the study as compared to ATREM participants who did not complete the study, and this same non-significant trend also applies to TREM participants who did and did not complete the study. Therefore, the measured characteristics were not associated with completion or non-completion for the sample as a whole or within each group condition. There were no participant payments or incentives offered, but attempts were made to minimize attrition rates by encouraging all group leaders to have phone contact with group members (or, connect in person to those women in a residential setting) for outreach purposes after two absences, as seemed clinically appropriate. Routine reminder phone calls for each week's up-coming group also served as an outreach effort to sustain engagement. There was also no compensation for the facilitators from this study. Co-facilitators tracked the number of group members per session but it was a simple tally with no names attached to the numbers.

**Data for participants who did not participate/not complete the study.** No potential study participant declined joining the study. For those participants who exited the group/study before its conclusion, the group facilitators reached out by phone two times to these individuals

TABLE 6  
Demographic Characteristics at Baseline For Study Completers and Non-Completers

Characteristic	Whole Sample		ATREM		TREM	
	M (SD) n (%) or M (SD) n (%)	M (SD) n (%) or M (SD) n (%)	M (SD) n (%) or M (SD) n (%)	M (SD) n (%) or M (SD) n (%)	M (SD) n (%) or M (SD) n (%)	M (SD) n (%) or M (SD) n (%)
<b>Age</b>	42.41 (12.15)	38.70 (12.93)	43.11 (11.13)	40.47 (13.57)	41.59 (13.38)	37.03 (12.34)
<b>Life Stressor Checklist</b>	7.33 (3.22)	8.42 (3.11)	6.84 (2.76)	8.27 (3.35)	7.81 (3.69)	8.55 (2.95)
<b>Race/Ethnicity</b>	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
<i>White</i>	64 (92.8)	52 (86.7)	35 (94.6)	23 (85.2)	29 (90.6)	29 (87.9)
<i>Non-White</i>	5 (7.2)	8 (13.3)	2 (5.4)	4 (14.8)	3 (9.4)	4 (12.1)
<b>Education</b>						
<i>HS Grad/GED or Less</i>	38 (55.1)	33 (55)	17 (45.9)	14 (51.9)	21 (65.6)	10 (57.6)
<i>Higher Than HS Grad</i>	31 (44.9)	27 (45)	20 (50.4)	13 (48.1)	11 (34.4)	14 (42.4)
<b>Employment Status</b>						
<i>Currently Working</i>	15 (21.7)	16 (26.7)	8 (21.6)	10 (37.0)	7 (21.9)	6 (18.2)
<i>Currently Not Working</i>	54 (78.3)	44 (73.3)	29 (78.4)	17 (63.0)	25 (78.1)	27 (81.8)
<b>Relationship Status</b>						
<i>Married/Significant Other</i>	25 (36.2)	22 (36.7)	15 (40.5)	13 (48.1)	10 (31.3)	9 (27.3)
<i>Not in a Relationship</i>	44 (63.8)	38 (63.3)	22 (59.5)	14 (51.9)	22 (68.8)	24 (72.7)

No significant differences were detected for any of the measured demographics between completers and non-completers within the whole sample, within ATREM, or within TREM.

inquiring about filling out the post-group questionnaire to evaluate any changes that might have occurred up to the point of their exit from the intervention. Only two individuals agreed to do so, so these data were not used given the extremely small response rate.

**Interventions—TREM and ATREM.** Previous research has shown that TREM can be successfully modified in a variety of ways, including a shortened duration of treatment, guided by the notion that this change might increase retention rates (Cihlar, 2014; Toussaint et al., 2007). With this in mind, the present investigator implemented a 16-week protocol for TREM and ATREM, standardizing the newly modified curricula by creating binders for each facilitator based on the relevant weekly session guides selected from the TREM manual. TREM group condition only received the information in the TREM manual while the ATREM group condition included the same weekly session guide information from the TREM manual but also had attachment theory and strategies integrated into the traditional model material.

It should be noted that co-facilitators, regardless of the group condition, were not restricted to using grounding or mindfulness strategies only at the junctures manualized in the curriculum, for if a client was triggered into dysregulation and/or crisis, they used their clinical judgment to decide the best way to support this group member to reestablish stabilization. A list of common grounding techniques assembled by the present investigator and her co-facilitator was provided to all study facilitators, ATREM and ATREM, to heighten continuity.

**TREM.** TREM is a 24-33 week, fully manualized, group therapy curriculum for women trauma survivors who also struggle with mental health and/or substance abuse disorders (Harris & Anglin, 1998). For the present study a 16-week version was created out of the 24 week and 33 week models by combining topics with comparable or overlapping themes (such as “abuse and relationships” and “relationships” or “trauma and addictive or compulsive behaviors” and “self-destructive behaviors”) or by reducing redundancy by deleting topics that already seemed infused throughout the curriculum and did not need a specifically highlighted week (such as “truths and myths about abuse” or “physical safety”) (see Appendix C for an outline of topics). As designed, the group is comprised of approximately eight to ten women and two to three group leaders with weekly meetings for 75 minutes long (Trauma recovery and empowerment model (TREM), 2014; Fallot & Harris, 2002; Phoenix, 2007). The present study abided by agency norms and designated a time frame of 90 minutes in length each week with two co-facilitators.

The model is comprised of three phases: empowerment, trauma recovery, and advanced trauma recovery issues. Each week entails a designated topic, specific goals, guiding questions, and at least one skills oriented-exercise. TREM is rooted in feminist and relational theories with a focus on the on-going impingement of past trauma on daily functioning. It is considered a contained exposure model in that sharing detailed descriptions of trauma stories is dissuaded in favor of briefly expressing aspects of their experiences within the context of the topic of the week. The primary focus always remains or returns to the enhancement of trauma recovery skills in the present. More specifically, skill building encompasses 11 areas of need, including self-awareness, self-protection, self-soothing, emotional modulation, relational mutuality, accurate labeling of self and others, sense of agency and initiative-taking, consistent problem-



solving, reliable parenting, a sense of purpose and meaning, and judgment and decision-making. In addition to contained exposure and skill building, TREM utilizes three other techniques to facilitate recovery and symptom management, including cognitive restructuring of distorted beliefs; psycho-education regarding linkages between trauma, mental health and substance abuse; and peer support to counter the often pervasive feelings of shame and alienation pervasive to this population (Fallot & Harris, 2005; Fallot & Harris, 2002).

**ATREM.** The ATREM curriculum included the same manualized topics and guides as the modified TREM curriculum but included other materials as well (see Appendix D for an outline of topics). The distinction between the experimental and comparison groups entailed the inclusion in ATREM of three new attachment-informed weeks of material with accompanying activities; processing relational experiences in group; and use of attachment language to frame past and present interpersonal patterns (more specific descriptions provided below). It has been suggested that adopting a dual focus on symptom reduction and attachment functioning can improve outcomes (Tasca et al., 2011). The inclusion of three attachment topics was achieved without lengthening the group beyond the 16-week timeframe by bundling certain topics into pairs presented in the same week instead of separate weeks as was done for TREM (for example, “emotional boundaries” with “physical boundaries” and “Decision-Making” with “Blame, Acceptance, and Forgiveness”). The decision for the selected pairings was based on the present investigator’s clinical experience with facilitating TREM groups which led to the recognition of typical excesses or shortages of time on certain weeks as well as patterns of key elements that seemed necessary for inclusion within a particular topic for adequate depth, albeit with a potential for less breadth, of understanding to be achieved. Hence, no topics were completely cut

out to create ATREM. These changes created three open weeks for ATREM to add in new attachment-informed information and activities without altering the 16-week long timeframe that both groups followed.

In addition to these designated attachment-informed weeks other, attachment-informed changes were made to construct ATREM involving language, processing, depth of focus, and activities. These elements were infused into the curriculum without any other structural changes to the basic framework. For example, the TREM curriculum already contained some mindfulness/grounding exercises but several additional mindfulness/grounding activities were added into ATREM to further address one of the core legacies of insecure attachment--emotional dysregulation.

Another example of ATREM striving to take concepts accounted for by TREM but incorporate them more deeply into the modified curriculum involves the interpretation of challenges with interpersonal skills and emotion regulation through an attachment lens. TREM's integrative approach definitely honors the participants' emotional and relational struggles and connects them back to traumatic experiences to make sense out of them, but more explicit information and implicit activities within ATREM were designed to provide additional opportunities for greater insight and practice in these areas that have been deemed quite crucial to healing among trauma survivors (Kilmann et al., 2006; Stevens et al., 2013). Hence, the ideologies of TREM are preserved as well as the psychoeducational foundation but with more attention and practice to attachment repairs in areas specifically recognized as burdensome legacies of earlier attachment ruptures.

More specifically, the attachment-informed changes that comprise ATREM included:

- Within the first two weeks of ATREM starting, the facilitators were given two graphs per group member based on the first two sections of the pre-intervention questionnaire. The graphs were constructed by the present investigator and depicted each member's individual and group attachment styles. The facilitators were trained on interpretation of the graphs during their initial training which included psychoeducation on attachment theory. The graphs contained the intersection point of the member's level of attachment avoidance and attachment anxiety. They were reminded to review the results in order to be primed and sensitive for attunement to potential attachment-related issues. They were instructed to review the graphs again prior to Week 6 to prepare for their use with the group members. TREM facilitators were not given any graphs nor did they have access to the information from the pre-intervention questionnaire on attachment style responses.
  
- **Week 2—Psycho-education on Attachment Theory** (Appendix E)
  - Appendix E includes detailed information on attachment theory, a guide to use during the session, examples on how to implement attachment processing, and a description of the activity for that week.
  - Activity: Family-of-Origin drawing from MacNair-Semands's Group Therapy Questionnaire (GTQ) (Marmarosh et al., 2013)
  
- **Infusing Attachment**
  - After Week 2, attachment-informed language was utilized in subsequent sessions, as relevant to the discussion, to add depth of understanding to pre-existing TREM topics that touched implicitly on attachment themes, including: self-esteem, boundaries, emotion regulation, intimacy and trust, interpersonal patterns, relationship maintenance, and family-of-origin issues. Attachment-informed language, though, was not restricted to these topics but infused into the discussion whenever relevant for relational processing. See Appendix E for examples.
  - As attachment related-themes arose naturally in any discussions over the course of the remainder of the TREM program, co-facilitators explicitly asked members about what they were feeling, especially as related to individual or group dynamics; assisted in naming feelings; and asked members their reactions to the relational comments made by others. More specifically, mentalization was encouraged and promoted throughout the group sessions by processing in-the-moment interpersonal encounters and comments to make them explicit so that they could be explored and reflected upon. It has been suggested that having clients with eating disorders, many of whom have a history of interpersonal abuse, reflect on current group experiences in terms of their internal reactions, as they are happening, can be effective in improving skills needed for relational enhancement (Tasca et al., 2011). An example of mentalizing involved a co-facilitator

expressing curiosity about what may be happening within a particular member and then inviting that member to share her feelings and thoughts (if she wished). This was followed up by asking another group member her reaction to what was just said. Reflective thinking was also accomplished by suggesting one group member directly ask the group member who had just spoken what she meant, her intentions, or feelings underlying the comment that she just voiced to the group. The selection of which member to make this overture for clarification was often based on a facial expression or some other body language that was evident in the moment and assumed to be a signal of some internal reaction to the words just spoken. By focusing on nonverbal cues, the co-facilitators were working from a more psychodynamic stance with unconscious processes and helping make them conscious for explicit self-evaluation. If the speaker was unsure about what she was internally experiencing, other members were invited to jump in with hypotheses to be checked out with the source for validity. Members were also asked to tune inward to try to notice where any feelings resided in their bodies in reaction to something that was just said or to something they themselves had said. Two examples of common prompts made by a co-facilitator were: “Judy (pseudonym) you seemed to tense up and back away slightly from the table when Sarah (pseudonym) talked about how much she hates herself. What is going on inside for you right now?” or “Sally (pseudonym), what do you think (or feel) about what Josie (pseudonym) just said to you?” See Appendix E (Psycho-education on Attachment from Week 2) for additional examples of working with in-the-moment relational moments to foster mentalization and attachment awareness and processing.

- **Week 6**—Modified version of Debbie Cook’s “**Brochure About Me**” (Cook, 2014) (Appendix F) activity regarding internal working models and the “**Putting the Group in Your Pocket**” (Marmarosh & Corazzini, 1997) (Appendix F) activity to build attachment to the group as a whole
  - We engaged members in mindful breathing before and after the brochure activity to help members feel calm, centered, and grounded which can support mentalization skills.
  - See Appendix F for a full description of how this activity was modified specifically for the purposes of this group. Before members read the responses in the brochures we handed out two graphs to each member depicting their own individual and group attachment patterns in terms of levels of relational anxiety and avoidance determined from the first two sections of the pre-intervention questionnaire. We then reviewed some basics of attachment theory to help explain and discuss their personal relational tendencies. The explanation was presented in the context of typical IWMs (view of

- self and other) for each attachment style to shed light on why receiving and introjecting positive feedback has typically been a struggle for traumatized women.
- The “Group in a Pocket” activity entailed taking index cards and writing the first name of each member on it. We explained what to do with the card between sessions and what purpose the card could serve for building safe attachments and emotion regulation.
  - At least two follow-ups occurred after Week 6 with a brief inquiry of who used “Group in Your Pocket” and how it felt to use it.
  - If time permitted this week (or Week 10 if not), a brief psycho-educational explanation of the effects of trauma on the brain was provided to further their awareness and understanding of factors connected to/underlying their struggles as well as to offer hope for healing with the knowledge that brain change (new neural pathways) can occur at virtually any point in their lives with corrective relational experiences. A selection from Linda Curran’s (Curran, 2009, p. 13-20) manual on trauma competency was suggested and referred to as a resource for further information, if needed, for co-facilitators’ own background knowledge.
- **Week 7— “Compassion Meditation”** (Banks & Hirschman, 2015, p. 206-207)
  - **Week 8—Container Imagery Script** by Linda Curran (2011)
  - **Week 9—Emotional Freedom Technique** (Appendix G)--based on Craig (2017)
    - Other resources: (Curran, 2009; Spencer, 2008)
  - **Week 13—Fables** (Appendix H) use of attachment-themed fables from Maxine Harris and Edwin Friedman (stories were provided for co-facilitators)
    - Divided into dyads to read different fables and then discuss with their partners and the group as a whole; switched partners and do for one or two other stories, as time permitted
      - “Better Safe Than Sorry” from *The Twenty-Four Carat Buddha and Other Fables: Stories of Self-Discovery* (Harris, 2003)
      - “Attachment” and “Jean and Jane,” from Friedman’s *Fables* (Friedman, 1990)
    - Engaged the group around any relational problem-solving from their personal experiences that emerged from the discussion on the fables
  - **Week 16 —Final Week**, repeated “Brochure About Me”—discussed and compared to previous brochure done in an earlier session
    - The closing rituals contained in the TREM manuals were also provided if time permitted.
    - Post-group questionnaire testing was completed.

**Group assignment.** Recruitment for Agency A and C alternated on a staggered basis between TREM and ATREM, so whichever group condition was in line to go next, timing of recruitment, and clients' schedules determined assignment to each group. Agency B ran two TREM groups in a row, i.e. no alternating between conditions, to remain consistent with established agency protocol of the same therapist partners facilitating two groups over the course of one year before transferring co-facilitation responsibilities to two new therapists.

**Training of intervention personnel.** The primary investigator met with the co-facilitators for each group condition once for approximately 1½ -3 hours to train the therapists on this study's versions of TREM or ATREM. The primary investigator trained the therapists and served as a co-facilitator for ATREM at Agency A. For ATREM, the training lasted closer to three hours to sufficiently achieve the dual purpose of understanding attachment theory and attachment therapeutic strategies along with learning the TREM manual. The fidelity checklist was also reviewed at this time. Questions were answered and the primary investigator was available in person or by email and phone for any questions that arose. The co-facilitators were also engaged in a role play which created a mock session of a selected week in the curriculum.

For the comparison group (TREM), the primary investigator also met with the co-facilitators to train them on the implementation of the 16-week modified version of TREM. Questions were answered and the fidelity checklist was also introduced at this time. For Agency A and C, a role play was also utilized to further their learning. Agency B had familiarity with facilitating TREM groups as it was an existing part of their treatment package, so the focus entailed learning and pointing out specific differences between what they were accustomed to

doing and the specific requirements for the present study. Role playing was still used at this agency but in a less comprehensive manner. Additionally, at Agency B only one of the two co-facilitators could attend the training due to unforeseen circumstances that arose for the second therapist, so the co-facilitator that attended conveyed the information to her partner. They felt this was a more than adequate plan given their comfort and familiarity with TREM and the modified version presented minimal differences. The same on-going availability was offered to these group leaders to answer any questions.

Additionally, a list of commonly used grounding techniques was assembled by the present investigator and her co-facilitator and given to both ATREM and TREM co-facilitators. The list was reviewed and unfamiliar techniques were modeled instead of just described. As noted earlier, co-facilitators used their clinical judgment of when and how to best help a client to stabilize affect. Moments such as these, along with specific clinical styles and strategies, cannot be manualized and, by necessity, remained at the discretion of the co-facilitators, but the grounding techniques list created more opportunities for continuity between the group conditions during times of dysregulation by providing strategy options to use with a group member during this time of need.

**Qualifications of interventionists.** All group facilitators had at least one clinician with either a master's degree in social work or counselling, was licensed, and had over 5 years of clinical experience. Most groups had two clinicians that met this criterion, but some groups were facilitated with graduate interns in partnership with a seasoned clinician.

**Fidelity assessment.** A fidelity measure was used to gather information in the form of a checklist (see Appendix I for a sample) tailored to the required tasks for each particular topic of

the week. To reduce any possible therapist-introduced contamination between-group conditions, ATREM and TREM were conducted by different therapists who were trained in the specific group curriculum they utilized. Also, the two group conditions ran on different days with staggered starting dates at Agency A which potentially minimized opportunities for participant-introduced compromises in fidelity by minimizing the opportunities for contact and conversation between participants from different groups. In Agencies B and C no group ran concurrently with another; consecutive groups were paced such that a new group was not started until the previous one ended.

The fidelity checklist verified that both ATREM and TREM followed their curriculums closely (95.15%; 93.64% respectively) with no statistically significant differences between the treatment groups ( $z = 1.01$ ;  $p = 0.13$ ) for completion of each week's material.

**Measures.** Most the available studies on TREM were conducted through the Women, Co-Occurring Disorders, and Violence Study (WCDVS) with a federal grant from SAMHSA. The mission of the WCDVS entailed evaluating the effectiveness of comprehensive, integrated, trauma-informed services for women with histories of interpersonal violence as well as current mental health and/or substance use disorder diagnoses in order to contribute to the knowledge base of what works with women who deal with these often co-occurring issues (Cocozza et al., 2005; McHugo et al., 2005a; Moses et al., 2003). In keeping consistent with their testing protocol for any comparison discussions, the present study adopted the same measures when assessing outcomes of mutual interest which included: mental health symptoms, trauma histories, substance use, and posttraumatic symptoms. In contrast, only one of the eleven skills identified by the TREM developers as important to trauma recovery was considered relevant and feasible



to the scope of the present study. The skill of emotional regulation was specifically chosen because of its integral connection to attachment conceptualizations of behavior. It was assessed with a different measure that was exclusively designed for this construct and provided more depth of knowledge on the nuances of emotion regulation (Stevens et al., 2013). Finally, two scales to measure attachment style and one for perceived social support were administered to address the added relational focus of the present study.

All the chosen scales were grouped together into one self-administered paper and pencil questionnaire (Appendix J) that took approximately 25-35 minutes to complete. This timeframe was estimated in advance of testing by using other TREM studies as a gauge (Amaro et al., 2007). Administration of the questionnaire was arranged to accommodate participants' convenience and the agencies' preferences or protocols. This investigator met with the participants in both group conditions at all three agencies in person to administer the pre-testing questionnaire. Questionnaire completion occurred approximately two to three weeks prior to the first group session. At Agency A, this process was predominantly done on an individual basis in this investigator's office, but protocol allowed for another private space if needed to accommodate the participant's needs. At Agencies B and C, per agency agreement, this investigator met with the participants as one group or small groups of 2-3 people in a private room for the completion of the pre-test questionnaire unless a participant's needs resulted in an accommodation based on a need for clinician familiarity, location, or time. The post-test questionnaire contained the same items (See Appendix J) as the pre-test, with the exclusion of the demographics and trauma history, and was filled out during the last group session, unless a participant's needs resulted in an accommodation of a private space individually after the last

group. The vast majority of questionnaires were completed at this final session. More specifically, the scales contained within the questionnaire were as follows:

*Relationship Scale Questionnaire (RSQ)*. The RSQ measures individual attachments in close relationships which encompasses friendships or romantic relationships (Griffin & Bartholomew, 1994a). Participants rate 30 items on a 5-point Likert scale which assesses attachment-related feelings, expectations, and motivations towards general relationships (Kirchmann et al., 2012). A higher score reflects greater attachment insecurity. Scores were originally determined based on the older categorical model of attachment theory, but the results can also be recalculated to derive the more currently accepted conceptualization of two orthogonal dimensions of attachment anxiety and avoidance. Using this newer dimensional approach, Scharfe and Cole (2006) report both high convergent validity and high stability scores.

Alphas based on the older categorical approach were found to range from .41-.70 (Griffin & Bartholomew, 1994b), but adopting the dimensional approach has yielded a Cronbach's alpha of .83-.86 for attachment anxiety and .77-.82 for avoidance (Fraley et al., 2013; Kirchmann et al., 2012; Kurdek, 2002). Bartholomew, one of the developers of the RSQ, strongly recommends (Bartholomew, n.d.) adhering to a dimensional approach for scoring the RSQ and to do so according to the factor analysis conducted by Kurdek (2002). Based on Kurdek's recommended analysis, this study adopted the 13 prompts that loaded most adequately onto the subscales, resulting in five items for attachment anxiety and eight for attachment avoidance. The present study demonstrated predominantly acceptable internal consistency reliability results as shown by Cronbach alphas for RSQ Avoidance at pre-testing of 0.619 and at post-testing of 0.738 and

RSQ full scale alphas of 0.716 (pre) and 0.699 (post) along with alphas in the good range for RSQ Anxiety of 0.822 at pre-testing 0.822 and 0.847 at post-testing.

*Social Group Attachment Scale (SGAS)*. The SGAS measures group attachment style (Smith et al., 1999) . It is comprised of 25 items with response options on a 7 point Likert scale from 1 (strongly disagree) to 7 (strongly agree) with higher scores indicating greater attachment insecurity. In accordance with other studies (Keating et al., 2014; Rom & Mikulincer, 2003; Smith et al., 1999), 19 of 25 items shown to load adequately on either the anxiety subscale (ten prompts) or the avoidance subscale (nine prompts) were utilized. The SGAS anxiety and avoidance subscales were validated with factor analyses with clinical and non-clinical samples (Holtz, 2005; Smith et al., 1999). Convergent validity was demonstrated through significant correlations in expected directions with theoretically meaningful constructs, such as group attachment anxiety being negatively correlated with perceived self-worth as a group member and positively correlated with negative affect, while group attachment avoidance was negatively correlated with perceptions of group membership as integral to one's identity and positively correlated with plans to leave the group (Holtz, 2005; Smith et al., 1999). Additionally, both subscales were positively related to perceptions of fewer and less satisfying social supports within the group (Smith et al., 1999). The use of a trait self-esteem scale to assess criterion validity further demonstrated solid psychometrics of the SGAS (Holtz, 2005).

In terms of reliability, Smith et al. (1999) report test-retest reliability ranging from .80-.90 for group attachment anxiety and .73-.87 for group attachment avoidance. Keating et al. (2014) found Cronbach's alphas were .80 and .78 respectively for group attachment anxiety and avoidance. For the present study, Cronbach's alphas were as follows: SGAS Anxiety: 0.783

(pre-testing) and 0.828 (post-testing); SGAS Avoidance: 0.845 (pre) and 0.732 (post); and, SGAS Full Scale 0.873 (pre) and 0.868 (post), indicating acceptable to good internal consistency reliability.

***Social Provisions Scale (SPS)***. The SPS measures perceived social support (Cutrona & Russell, 1987). The SPS includes 24 items tapping six types of relational provisions available from a person's general support network as delineated by the theoretical formulations of Weiss (Gottlieb & Bergen, 2010). These six types are: reliable alliance (tangible help), guidance (information and advice), attachment (emotional support, caring), social integration (belonging to a group of similar peers), reassurance of worth (esteem support, positive evaluation), and opportunity to provide nurturance (providing support) (Cutrona, 1989). Each provision is assessed by four prompts in which the respondent indicates the degree of perceived support her social relationships are currently providing. This is done on a 4-point Likert scale ranging from completely true to not at all true. A higher score indicates greater perceived social support. Gottlieb and Bergen (2010) assert that the SPS has been well-documented as psychometrically sound and useful when a comprehensive assessment of perceived social support is desired without needing to identify specific people. Convergent and divergent validities have been supported through correlations between SPS scores and measures of social desirability, psychological distress, personality factors, and social skills which were lower than correlations with other substantiated social support measures such as satisfaction and attitude with support and number of helping behaviors (Gottlieb & Bergen, 2010). They report a Cronbach's alpha of .92 for the full scale and between 0.65 and 0.76 for the subscales. Similarly, the present study yielded Cronbach alpha results of 0.873 (pre) and 0.761 (post) which represent good and

acceptable internal consistency. For the subscales, the range was 0.507 to 0.82. The SPS in the present study was not separated into its subscales for any analyses, minimizing the impact of the low subscale score.

***Difficulties in Emotional Regulation Scale (DERS).*** The DERS measures emotion regulation capacities (Gratz & Roemer, 2004). The DERS is a 36 item self-report scale that focuses on difficulties regulating emotions during times of distress across six dimensions which include: non-acceptance of emotional responses (six items), difficulty engaging in goal-directed behavior (five items), lack of emotional awareness (six items), lack of emotional clarity (five items), difficulties controlling impulsive behaviors (six items), limited access to effective emotion regulation strategies (eight items). Each item is rated on a five point Likert scale based on how often participants believe each statement applies to them with responses ranging from one (almost never) to five (almost always), resulting in higher scores reflecting greater emotional dysregulation. Neumann et al. (2010) report that the scale has been deemed understandable for anyone who can read at a fifth-grade reading level, and these researchers further assert that solid psychometric qualities of the DERS has been confirmed. While one study promotes a five factor model over the typical six factor model, most studies validate the use of the six domains as all representing the same higher order emotion regulation construct (Bardeen, Fergus, & Orcutt, 2012; Fowler et al., 2014; Perez, Venta, Garnaat, & Sharp, 2012). The DERS strategies subscale displayed moderate predictive validity in detecting non-suicidal self-injury amongst adolescent inpatients (Perez et al., 2012). Support for the measure's construct validity was demonstrated by expected correlations in a positive direction with a different well-used measure of emotion regulation and with a measure of experiential avoidance as well as a negative correlation with

emotional expressivity (Gratz & Roemer, 2004). Outcomes from a study with participants diagnosed with borderline personality disorder have offered some additional support for the measure's construct validity (Gratz, Rosenthal, Tull, Lejuez, & Gunderson, 2006).

The DERS demonstrated high internal consistency for the measure as a whole with Cronbach's alpha scores of .93 in non-clinical samples (Gratz & Roemer, 2004) and .88 and .95 in clinical samples (Fowler et al., 2014; Fox, Axelrod, Paliwal, Sleeper, & Sinha, 2007) as well as subscale scores ranging from .72-.92, with most subscales being at least .80 (Fox et al., 2007; Gratz & Roemer, 2004; Perez et al., 2012). Good test-retest reliability was found over four and eight week periods (Gratz & Roemer, 2004). In the present study Cronbach alpha scores for pre-test and post-test were 0.847 and 0.852, respectively. The subscales had alphas of 0.787 to 0.893. These scores demonstrate good internal consistency.

***Brief Symptom Inventory-18 (BSI-18).*** The BSI-18 measures psychological distress across three domains: depression, anxiety, and somatization (Derogatis, 2001). Each domain is comprised of a list of six symptoms for a total of 18 items. Respondents are asked to rate how much they have been bothered by each symptom in the past week on a Likert scale of "0" (not at all) to "4" (extremely), resulting in higher scores equating with greater mental health distress. The present study was only interested in the subscales for depression and anxiety to test the hypothesis of group effectiveness.

The BSI-18 is an abbreviated version of the full 53-item Brief Symptom Inventory and was developed by selecting 18 items from the three pertinent domains verbatim from the parent instrument. The full BSI measures nine symptom domains, generating a score for each of these

subscales along with an overall distress score known as the Global Severity Index (GSI) (Derogatis, 1993). The BSI-18 also reports a GSI total score which is based only on the three domains, resulting in raw scores ranging from 0-72. Based on community norms, results at or above a T score of 63 are considered an indicator of statistically significant distress (Petkus et al., 2010). The BSI-18 has displayed a sensitivity to detect change during treatment for clients with affective disorders (Prinz et al., 2013). The BSI-18 and BSI are highly correlated (Meijer, de Vries, & van Bruggen, 2011), and the BSI-18 is actually considered an improvement on the BSI given its brevity combined with the enhanced structural validity that has been demonstrated through factor analyses (Derogatis, 2001; Galdón et al., 2008; Meijer et al., 2011; Petkus et al., 2010; Wang et al., 2010). Convergent validity for the BSI-18 was shown by adequate correlations to other measures of depression and anxiety while concurrent validity was demonstrated through its ability to discriminate those with and without diagnoses of anxiety and depression (Galdón et al., 2008; Petkus et al., 2010).

Additionally, the BSI-18 has shown favorable reliability with fairly high test-retest scores ranging from .68-.89 and satisfactory internal consistency with Cronbach's alpha scores for the subscales and the GSI total ranging from .79-.90 across a variety of populations (Galdón et al., 2008; Petkus et al., 2010; Prinz et al., 2013; Wang et al., 2010). In the current study, the full psychological distress scale showed good to excellent reliability with alpha scores of 0.878 (pre) and 0.972 (post) as did both the depression and anxiety subscales with alphas of 0.87 (pre)/0.971 (post) and 0.881 (pre)/0.972 (post), respectively.

***PTSD Symptom Scale (PSS).*** The PSS assesses posttraumatic reactions across three symptom clusters: re-experiencing, avoidance, and increased arousal which combine to provide a

PTSD diagnosis as well as a PTSD severity rating (Foa, Riggs, Dancu, & Rothbaum, 1993). The PSS is a self-report measure containing 17 items with five questions each for the subscales of re-experiencing and increased arousal as well as seven questions for the subscale of avoidance. Initially, the respondent must select from a list of traumatic events which one/ones he or she has ever experienced or witnessed in his or her lifetime and, then, specify which one of the selected items has disturbed him or her the most in the past two weeks. Next, the respondent is directed to briefly describe in writing the chosen event and use it as a reference point for answering the 17 symptom questions. Responses are in the form of a Likert scale rating from 0 (not at all) to 3 (five or more times per week/almost always) with higher scores illustrating greater symptom severity (Foa, Cashman, Jaycox, & Perry, 1997). The PSS has been utilized with a variety of populations, including female sexual assault victims (Valentiner, Foa, Riggs, & Gershuny, 1996) and individuals with alcohol dependence (Powers, Gillihan, Rosenfield, Jerud, & Foa, 2012).

The WCDVS oversaw the execution of a host of TREM studies and their protocol for utilizing the PSS was followed in the present study such that the trauma checklist portion of the PSS was omitted in favor of the LSC-R (described below). With this change implemented, the respondents only had to rate how often each of the 17 symptoms bothered them in the past month instead of two weeks. Additionally, the PSS was only utilized as a measure of symptom severity and not as a diagnostic tool. The present study abided by this altered format along with the method of reporting results as sums (Amaro et al., 2007a; Cocozza et al., 2005; Fallot et al., 2011; Morrissey et al., 2005a). The PSS has been found to have solid psychometrics including convergent validity of an 82% agreement rate between the PSS and a widely used standardized diagnostic interview for PTSD diagnoses. Concurrent validity of PTSD symptom severity was



demonstrated by expected associations with other scales for depression, anxiety, and intrusion and avoidance symptoms (Foa et al., 1997; Powers et al., 2012).

Solid reliability has been established with such findings as test-retest reliability scores for the subscales and the total scale ranging from .77-.85 and also internal consistency coefficient alphas of .78-.92 (Foa et al., 1997). Specifically, for TREM studies, satisfactory reliability has been reported with a one week test-retest reliability of .79 based on the intraclass correlation coefficient (Fallot et al., 2011) and with internal consistency reliability with Cronbach's alpha of .90 (Amaro et al., 2007b). In the present study, the full-scale Cronbach alphas were 0.893 (pre) and 0.972 (post) signifying good to excellent internal consistency. The three subscales had alphas ranging from acceptable (0.764) to excellent (0.959).

***Addiction Severity Index (ASI)***. The ASI, as originally designed, elicits information on respondents in seven functional domains which include drug and alcohol use along with other areas of life often affected by and/or have contributed to substance use disorders (McLellan, Luborsky, Woody, & O'Brien, 1980). It is a widely used measure, in various forms, in clinical practice and research settings, likely due to the abundance of psychometric testing and acceptable substantiation of reliability and validity (Cacciola, Alterman, McLellan, Lin, & Lynch, 2007; McLellan, Cacciola, Alterman, Rikoon, & Carise, 2006; Toussaint et al., 2007).

Like the approach of the WCDVS, only the items used to assess alcohol and drug use were used for the present study. The participants had 13 written prompts each representing a different drug or alcohol type, and they indicated the number of days of use in the past 30 days and number of years of use in their lifetime. A prior TREM study has reported good and

adequate internal consistency reliability for the alcohol severity subscale with a Cronbach's alpha of .86 and for drug severity of .70 (Amaro et al., 2007b). One week test-retest reliabilities for the alcohol and drug subscales have been reported by the WCDVS as .82 and .86 respectively (Fallot et al., 2011). For the present study, only the pre- and post-intervention responses for substance use in the prior 30 days were analyzed as these were relevant to the hypothesis under study. Following these past TREM studies, ASI scores were converted to a 0-1 scale with higher numbers signifying greater severity of substance use.

***Sociodemographic Information.*** Selection bias was assessed by measuring how similar the two groups were to each other at baseline. Prior TREM studies (Fallot et al., 2011; McHugo et al., 2005a; Toussaint et al., 2007) were used as a guide for the selection of relevant individual characteristics to focus on. Based on these studies the following characteristics were assessed: age, race, trauma history, education, employment status, and relationship status information on age, employment status, education level, relationship status, and race/ethnicity. This demographic data was garnered by adding questions with category prompts at the beginning of the questionnaire and a trauma checklist for the trauma history.

Information regarding trauma history was collected by the following measure:

***Trauma History: Life Stressor Checklist-Revised (LSC-R).*** The LSC-R assesses an individual's lifetime experience of highly stressful and/or traumatic events and was explicitly designed for women (Wolfe, Kimerling, Wilson, & Keane, 1997). The WCDVS created a modified version of the LSC-R to be more suitable and sensitive to their specific study population (McHugo et al., 2005a). The WCDVS-version of the LSC-R contains 30 specific items and one open-ended item for the women to provide any other trauma experience not listed

in the prior 30 questions. Each item asks about a different, specific stressful event in their lifetimes to which the respondents indicate yes or no. For the first 17 items, if the response is yes, there is a follow up question about current exposure. The subsequent 14 items encompass questions about interpersonal abuse with additional prompts for frequency and age at onset. The WCDVS chose to leave out prompts from the original LSC-R regarding distress level and feared outcomes during the traumatic event as well as current effects in order to be less intrusive and to reduce the chance of triggering emotional dysregulation in respondents (McHugo et al., 2005a).

Results are reported as sums (Amaro et al., 2007; Falloot et al., 2011; Toussaint et al., 2007). Test-retest reliability over a one week time interval demonstrated intraclass correlation coefficients ranging from .77 and .88 (McHugo et al., 2005a) for the scale as a whole and the five subscales, including lifetime frequency of interpersonal abuse and current exposure to interpersonal abuse. They, then, separated the interpersonal abuse items by sexual and physical abuse during childhood and adulthood. These delineated subcategories demonstrated moderate to high test-retest reliability (McHugo et al., 2005a). For the purposes of the present study, only the 15 items focusing on interpersonal abuse were extracted for use in the form of a simple “yes” or “no” prompt with no follow up questions. This approach was selected for the present study to keep the inquiry concretely based with minimal risk of triggering an adverse reaction.

**Training of data collectors.** The data from the BSI-18, DERS, SPS, RSQ, SGAS, LSC-R, ASI, and PSS scales were gathered through participant self-administration of a paper and pencil questionnaire, predominantly in the presence of this investigator. These measures are straight-forward and self-explanatory, making familiarity with the questions by the investigator important, but training, per se, not necessary to answer any questions that might have arisen from

respondents. In fact, few questions were posed by the participants. Familiarity with the scales also seemed sufficient in lieu of specific training given that these measures were selected for prior TREM studies, in part, due to their appropriateness in terms of being understandable, easy to complete, and non-pathologizing (McHugo et al., 2005a; Mchugo et al., 2005b). The questionnaire directions and format were reviewed with at least one of the co-facilitators for the cases in which the agency and/or participant preferred an alternative approach. This investigator inquired about questions or concerns regarding data collection. None were reported. This researcher inputted all the collected data into SPSS for analysis.

**Data analysis.** Given the potential for selection bias with a quasi-experimental study design, assessing for differences between the experimental group (ATREM) and the comparison group (TREM) at the pre-intervention baseline on a variety of demographic characteristics and clinical outcome measures was the primary task initially undertaken for data analysis. Descriptive information and attrition rates were gathered for the sample as a whole, for the two group conditions, and for the participants who did and did not complete the study to evaluate for any possible differential characteristics that could serve as competing hypotheses for the study outcomes. A participant completed the study if the following criteria were met: signed a consent form, completed both the pre- and post-intervention questionnaires as well as remained in the TREM group from onset to closure while attending at least 62.5% (or, 10 of 16) of the sessions. Previous research on TREM has weekly reported attendance rates of 40%-65% (Amaro et al., 2007b; Cihlar, 2014; Fallot et al., 2011; Toussaint et al., 2007), making the standard for the present study in accordance with the higher end of this range. All the participants' who did not withdraw from the group prior to completion met this attendance criterion based on co-facilitator

reports. For those participants who dropped out of the group therapy, and hence the study, an intent-to-treat analysis was attempted but was unable to be accomplished because data could not be gathered from the participants who did not complete the study except in two cases, and there was more than 20% missing data, making such an approach invalid (Armijo-Olivo, Warren, & Magee, 2009).

The demographic assessments of group condition (ATREM; TREM) comparability were executed using t-tests for the continuous variables and Chi-Square or Fisher's Exact Test for categorical variables. The Fisher's Exact Test was used in place of Chi-Square for categorical data when the expected frequency of participants was less than five per cell. Prior to comingling the data from the three agencies according to ATREM or TREM membership, ANOVAs for the continuous variables and Chi-Square or Fisher's Exact Test for the categorical variables were used to assess for demographic differences based on agency affiliation. Once distinctions between the three agencies were no longer being considered in favor categorization based solely on ATREM or TREM memberships, ANOVAs were no longer applicable and only t-tests were utilized from that point forward on any of the continuous variables. Cross-agency comingling of data occurred for statistical purposes only to strengthen the statistical power in which to detect possible changes by increasing the number of participants in the two groups which was necessary due to the small sample size. Henceforth, the term "study sample" or just "sample" will be used to denote study participants based solely on their group condition with no distinction being made between agencies, unless otherwise specified. Additionally, each demographic category was collapsed into only two subcategories due to the low occurrence of specific descriptors within each characteristic. Results from the LSC-R were grouped with the

demographics because, after its initial purpose of verifying the inclusion criterion of history of interpersonal violence, the information served as an additional descriptor of the sample in terms of level of severity of trauma exposure. The trauma findings reflect historical data and, as such, are unchangeable, thereby warranting no further data collection after taking the pre-test.

The hypothesis was tested using independent t-tests and linear regressions with group condition (ATREM or TREM) as the independent variable and individual and group attachments, emotion regulation, PTSD symptoms, depression, anxiety, substance use, and social support perceptions as the dependent variables. These methods of analysis were chosen because of their consistency with prior TREM studies (Fallot et al., 2011; Morrissey et al., 2005a; Morrissey et al., 2005b; Toussaint et al., 2007). For the dependent variables, the area of focus was on the full-scale scores except for measures of attachment and psychological distress which examined full and subscale outcomes. Attachment has been conceptualized in terms of its two dimensions, making their distinct contributions necessary to consider, and for psychological distress, anxiety and depression are symptomatically different enough to warrant separate attention as well. Given that there were no statistically significant differences between ATREM and TREM at pre-intervention testing on the demographics or the clinical outcome variables as well as both methods of analyzation producing comparable finding of non-significance between the groups at post-testing, only t-test results have been presented and discussed to reduce redundancy. In addition to evaluating whether ATREM was more effective than TREM, an assessment of change over time within each group condition was also conducted using paired t-tests to determine if being in ATREM or TREM resulted in improvement from pre-to post-testing.

In terms of the management of missing data, a participant's data were excluded for any scale/subscale in which she did not respond to one or more questions within that scale/subscale, be it on the pre- or the post-test. A participant's data were not excluded from the study as a whole, for her responses continued to be included for any other scale/subscale in which she completed all the questions. In total, 14 of the 26 scales/subscales had 5% or less participant data exclusion with a range of 0%-5.4%. The distribution was seven for each group condition, and they were the same scales/subscales. The scales/subscales in this category were: SGAS anxiety, avoidance, and total; DERS total; and, BSI depression, anxiety, and total. The remaining 12 scales/subscales had 6.3-15.6% of participant data excluded. Again, ATREM and TREM not only had the same number of scales/subscales with missing data but they were the same scales. These included: RSQ anxiety, avoidance, total; SPS total; PSS total; and the ASI. At the high end of the range (15.6%) were TREM's RSQ total and SPS total. As the exclusion rate increases, additional caution in data interpretation should be taken because of the potentially greater impact on the outcomes as the sample size becomes smaller for that particular scale or subscale.

**Human subjects: Risk reduction and benefits.** The Institutional Review Board of the University of Pennsylvania determined that this study adequately protected participants against undue risks. Upon making this determination, they officially stamped their approval on the informed consent (See Appendix B). Referred clients for TREM group participation were contacted by this investigator with a phone call to familiarize the clients with the format of TREM and to describe the three main content theme areas. Once an understanding of TREM had been established, they were asked if they wanted to participate in a study on TREM that was

being conducted for learning about trauma group effectiveness. They were told that there were two versions of TREM that address the same topics, but one focuses on relationships in some different ways than the other in terms of activities and discussions. Potential risks, protections, and benefits were discussed and referred to in the consent form. It was clearly stated that participation in the study was not required to join the group nor would there be any consequences to not participating in terms of their receipt of eligible services from the agencies.

Elements built into TREM, agency procedures, and the research design of the present study all contributed to the minimization of risk and enhancement of protection of participant well-being. The present study adhered to the foundational aspects of TREM that were chosen by the developers to promote safety, such as maintaining a contained exposure philosophy of dissuading graphic details in favor of briefly sharing aspects of one's experiences within the context of the topic of the week (Fallot & Harris, 2002) as well as putting the topics in a sequential order that is meant to ease the members into a more direct and intense focus on trauma after empowerment and skill-building have been strengthened. Additionally, the requirement of the model to be implemented by two facilitators allowed one of the co-facilitators to attend to a distressed member with one-to-one support, if needed, while the other facilitator sustained the group focus and involvement in the topic. If participant distress arose later, the participant was reminded to access her agency's crisis services which had been a message from the point of obtaining informed consent. Minimization of risk was also factored into the choice of the trauma reporting scale. The present study continued the use of TREM's inclusion of the LSC-R to gather a trauma history because of its sensitivity which had been validated by the developers before officially using the instrument through feedback from TREM members that was then used



to modify the scale. With respect to the potential distress specific to ATREM due to the additional relational processing, ATREM was designed to balance processing with the psycho-educational elements, low-threat activities, and the ability of the co-facilitators to potentially be especially attuned to their relational needs by knowing their attachment styles.

The study also promoted participant protection by functioning in accordance with agency practices of preserving confidentiality per HIPPA standards. The present study preserved confidentiality by storing data in a locked space with assigned numbers instead of names on the questionnaires. The master list was stored in a separate locked drawer. The data was inputted into SPSS which was password protected.

The benefits of participating in this study included not only the potential gains they could achieve solely from being in group therapy but also a sense of higher purpose by contributing to the knowledge base of ways to help female survivors of trauma.

## CHAPTER III

### Results

#### Clinical Intervention Outcomes

A comparative effectiveness assessment of ATREM and TREM was conducted to examine within- and between-group changes from pre- to post-intervention for individual and group attachment security, perceptions of social support, emotion regulation capabilities, substance use, psychological distress (depression and anxiety), and post-traumatic stress severity.

#### ATREM: Within-group Change Over Time

**Attachment.** Within ATREM, there were statistically significant decreases from pre- to post-testing on all of the RSQ and SGAS measurements of attachment such that overall attachment insecurity (RSQ:  $t(31) = -2.79$ ,  $p = 0.005$ ; SGAS:  $t(34) = -3.27$ ,  $p = 0.001$ ), attachment anxiety (RSQ:  $t(33) = -2.34$ ,  $p = 0.013$ ; SGAS:  $t(34) = -3.42$ ,  $p = 0.003$ ), and attachment avoidance (RSQ:  $t(33) = -2.65$ ,  $p = 0.006$ ; SGAS:  $t(35) = -2.34$ ,  $p = 0.013$ ) significantly improved from the pre- to the post-testing for both the individual and group attachment dimensions (see Table 7).

**Social support.** Statistically significant improvement from pre- to post-testing was found for perceived social support on the SPS scale ( $t(33) = 2.14$ ,  $p = 0.02$ ) (Table 7).

**Emotion Regulation.** ATREM participants reported statistically significant reductions in difficulties with managing emotion from pre- to post-testing as reflected in their DERS scores ( $t(36) = -4.60$ ,  $p = 0.000$ ) (Table 7).

**Mental health/substance use.** Pre- to post-testing outcomes on the BSI indicated that ATREM participants experienced statistically significant decreases in psychological distress ( $t(33) = -3.79, p = 0.001$ ), depression ( $t(35) = -3.23; p = 0.002$ ), and anxiety ( $t(35) = -2.90, p = 0.003$ ) over the course of the treatment. For PTSD, statistically significant reductions in PSS scores occurred from pre- to post-testing ( $t(32) = -2.35, p = 0.013$ ). Based on ASI, the number of days of drug and alcohol usage in the 30 days prior to treatment starting and the 30 days prior to treatment ending was not statistically significant ( $t(27) = 0.623, p = 0.731$ ). See Table 7 for all mental health/substance use results.

#### **TREM: Within-group Change Over Time**

**Attachment.** Participation in TREM resulted in statistically significant decreases from pre- to post-testing for most measurements of individual and group attachment dimensions on the RSQ (Full Scale:  $t(26) = -2.03, p = 0.027$ ; Anxiety:  $t(28) = -2.06, p = 0.025$ ) and SGAS (Full Scale:  $t(30) = -3.35, p = 0.01$ ; Anxiety:  $t(30) = -2.96, p = 0.003$ ; Avoidance:  $t(30) = -3.31, p = 0.001$ ) with the only exception being for individual attachment avoidance ( $t(28) = -1.63, p = 0.057$ ) which decreased but did not reach a level of statistical significance (Table 7).

**Social support.** Statistically significant improvement was found for perceived social support from pre- to post-testing on the PSS scale ( $t(26) = 2.12, p = 0.022$ ) (Table 7).

**Emotion Regulation.** TREM participants displayed statistically significant improvement in their DERS scores from pre- to post-testing ( $t(31) = -4.03, p < 0.001$ ) (Table 7).

**Mental health/substance use.** There were statistically significant decreases from pre- to post-testing on TREM's BSI scores for overall psychological distress ( $t(30) = -3.19$ ,  $p = 0.002$ ); depression ( $t(30) = -2.58$ ,  $p = 0.008$ ); and anxiety ( $t(31) = -3.45$ ,  $p = 0.001$ ). TREM also

**Table 7**

**Mean Differences For Within Group Pre- to Post-Test Changes**

Scale	ATREM <sup>a</sup>	TREM <sup>a</sup>
	Post-Pre	Post-Pre
	$M_{diff}$ (SD)	$M_{diff}$ (SD)
<b><u>ATTACHMENT</u></b>		
<b>RSQ Total</b>	-0.30 (0.60)**	-0.29 (0.75)*
<i>Anxiety</i>	-0.34 (0.85)*	-0.36 (0.94)*
<i>Avoidance</i>	-0.29 (0.65)**	-0.26 (0.87)
<b>SGAS Total</b>	-0.63 (1.14)**	-0.89 (1.45)**
<i>Anxiety</i>	-0.75 (1.30)**	-0.91 (1.71)**
<i>Avoidance</i>	-0.48 (1.22)*	-0.86 (1.45)**
<b><u>SOCIAL SUPPORT</u></b>		
<b>SPS Total</b>	3.29 (8.99)*	5.48 (13.42)*
<b><u>EMOTIONAL REGULATION</u></b>		
<b>DERS Total</b>	-17.97 (23.75)**	-18.81 (26.40)**
<b><u>MENTAL HEALTH/SUBSTANCE USE</u></b>		
<b>BSI Total</b>	-0.42 (0.64)**	-0.58 (1.01)**
<i>Depression</i>	-0.43 (0.79)**	-0.58 (1.25)**
<i>Anxiety</i>	-0.41 (0.84)**	-0.58 (0.95)**
<b>PSS Total</b>	-4.67 (11.40)*	-6.82 (15.01)*
<b>ASI</b>		
<i>Recent</i>	0.01 (0.05)	-0.01 (0.03)

\* $p < .05$ , \*\*  $p < .01$

demonstrated statistically significant reductions in PTSD symptom severity from pre- to post-testing as measured by the PSS scale ( $t(27) = -2.41, p = 0.012$ ). There were no statistically significant changes for days of substance use ( $t(29) = -1.56, p = 0.065$ ). See Table 7 for all mental health/substance use outcomes.

### **Comparison of ATREM vs. TREM from Pre- to Post-Intervention Testing**

The data gathered on between-group changes was used to test the hypothesis that ATREM would be more effective than TREM in increasing individual and group attachment security, perceptions of social support, and emotion regulation capabilities as well as decrease substance use, psychological distress (depression and anxiety), and post-traumatic stress severity.

**Attachment.** The hypothesis that ATREM participants would develop greater attachment security from pre- to post-testing, as measured by decreases in attachment anxiety and/or attachment avoidance, was not supported for either the individual or group attachment dimensions as measured by the RSQ and SGAS (see Table 8). There were no statistically significant differences between ATREM and TREM for individual attachment anxiety ( $t(61) = 0.077, p = 0.531$ ), attachment avoidance ( $t(61) = -0.163, p = 0.436$ ), or for overall attachment insecurity ( $t(57) = -0.01, p = 0.495$ ). Similarly, a comparison of ATREM and TREM for group attachment security level was not statistically significant for either of the subscales (anxiety:  $t(64) = 0.42, p = 0.664$ ; avoidance:  $t(65) = 1.19, p = 0.881$ ; or, the full scale:  $t(64) = 0.79, p = -0.784$ ).

**Social support.** A comparison of ATREM and TREM on perceived social support, as measured by SPS (Table 8), showed no statistically significant differences between the group conditions ( $t(43.47) = -0.727, p = 0.764$ ). Hence, the hypothesis was not supported.

**TABLE 8**  
**Mean Differences Between ATREM and TREM in Pre- to Post-Test Changes**

Scale	$ATREM_{diff} - TREM_{diff}$ $M_{diff}$ (SE)
<b><u>ATTACHMENT</u></b>	
<b>RSQ Total</b>	-0.002 (0.18)
<i>Anxiety</i>	0.02 (0.23)
<i>Avoidance</i>	-0.03 (0.19)
<b>SGAS Total</b>	0.26 (0.32)
<i>Anxiety</i>	0.16 (0.37)
<i>Avoidance</i>	0.39 (0.33)
<b><u>SOCIAL SUPPORT</u></b>	
<b>SPS</b>	-2.19 (3.01)
<b><u>EMOTIONAL REGULATION</u></b>	
<b>DERS</b>	0.84 (6.04)
<b><u>MENTAL HEALTH/SUBSTANCE USE</u></b>	
<b>BSI Total</b>	0.16 (0.21)
<i>Depression</i>	0.16 (0.26)
<i>Anxiety</i>	0.17 (0.22)
<b>PSS</b>	2.16 (3.39)
<b>ASI Recent</b>	0.02 (0.01)

No significant differences between ATREM and TREM on any of the scales.

**Emotion regulation.** An assessment of difficulties in emotion regulation based on the DERS scale (Table 8) found no statistically significant differences between ATREM and TREM ( $t(67) = 0.14$ ,  $p = 0.555$ ). Given these findings, the hypothesis of ATREM's effectiveness over TREM's for emotion regulation was not supported.

**Mental health/substance use.** No statistically significant differences between ATREM and TREM were apparent for the mental health symptoms subscales of depression and anxiety, or for the full-scale measure of psychological distress, represented by the combined total score of both subscales on the BSI (Depression:  $t(49.12) = 0.59$ ,  $p = 0.722$ ; Anxiety:  $t(66) = 0.79$ ,  $p = 0.783$ ; Total score:  $t(50.15) = 0.90$ ,  $p = 0.815$ ) (Table 8). There were also no statistically significant differences between ATREM and TREM ( $t(59) = 0.64$ ,  $p = 0.737$ ) on the PSS's assessment of PTSD severity. In terms of the number of days of substance use, the group condition differences were statistically nonsignificant ( $t(60) = 1.48$ ,  $p = 0.928$ ). These findings for symptomatology did not support the hypothesis (Table 8).

## CHAPTER IV

### Discussion and Implications

#### Viability and Potential Benefits of ATREM

This study developed and analyzed a novel adaptation of TREM to determine if healing and recovery across a variety of domains could be enhanced beyond the outcomes that have been found with the existing TREM model. To this researcher's knowledge it is the first study to integrate attachment-based concepts and strategies with this evidenced-based women's trauma group protocol in a purposeful and systematic way using a modified curriculum (ATREM). ATREM was associated with positive change in the domains of individual and group attachment styles, perceived social support, emotion regulation capacities, and the mental health issues of depression, anxiety, and PTSD. These results were similarly found in TREM, but only ATREM demonstrated an additional gain involving a statistically significant decrease in individual attachment avoidance from pre- to post-testing. Given that individual avoidance attachment is often considered challenging to modify (Marmarosh et al., 2013), this finding for ATREM is especially noteworthy and promising. While these gains are important, the hypothesis that ATREM would be associated with significantly greater improvement than TREM in individual and group attachment securities, perceived social support, emotion regulation, depression, anxiety, PTSD, and substance use was not supported. No statistically significant differences emerged between ATREM and TREM on any of the clinical outcomes, with both groups demonstrating enhanced functioning on all domains except substance use. Neither group condition demonstrated statistically significant change from pre- to post-testing on frequency of



substance use, possibly attributable to some participants living in a residential recovery facility and others not meeting diagnostic criteria for substance use disorder. Though not statistically significant and not initially anticipated in the hypothesis, there was a greater rate of completion of ATREM than TREM. With the high rates of attrition associated with TREM (Amaro et al., 2007), it is encouraging that more women in ATREM were able to participate in the full group therapy experience and potentially have a sense of accomplishment for “graduating” from a program. The comparable findings of ATREM and TREM for between- and within-group change, along with the additional gains for ATREM with individual attachment avoidance and group completion, suggest that ATREM may be a viable treatment alternative to the well-established, evidence-based TREM protocol and offers a unique contribution to trauma recovery of women.

The findings in the present study support the notion that statistically significant change from pre- to post-intervention testing can occur within a relatively short-term, 16-week therapy group containing psychodynamic, cognitive-behavioral, and psychoeducational elements. TREM predominantly adheres to cognitive-behavioral and psychoeducational approaches while the ATREM modifications entail an integration of CBT and psychodynamic treatment elements along with psychoeducation. This integration enables group facilitators to more fully and flexibly respond to the differential relational needs of group members such that more participants, regardless of the degree of anxiety and avoidance they experience, can potentially tolerate and make progress within the same group. The modifications chosen to create ATREM were guided by recent advances in neuroscience that assert the importance of engaging and integrating right hemisphere (RH) and left hemisphere (LH) functioning for maximum treatment

effectiveness (Field, 2014). The dual hemisphere engagement may contribute to the statistically significant improvement for individual attachment avoidance in ATREM. The outcomes of this study provide preliminary, but encouraging, insights into the knowledge base on attachment-informed group therapy, a practice orientation that despite its promise for fostering growth and healing, has been minimally investigated in comparison to the substantial amount of attachment-informed research related to individual, couples, and family therapy (Marmarosh, 2014).

The current study went beyond the more often researched concept of individual attachment style to explore the potential for growth in group attachment security through group therapy. Group attachment research is in its infancy (Marmarosh, 2015), and, in fact, it was only as recently as 2014 that the first study was published validating that changes in attachment to a group are possible through group therapy and that the growth in security transferred to intimate relationships outside of the group (Keating et al., 2014). In line with Keating and colleagues' (2014) findings, the women in ATREM (as well as TREM) progressed towards more secure individual and group attachment styles. Hence, the present study contributes needed preliminary evidence in an emerging field of research confirming that attachment security, not just with group but also with individual relationships, along with well-being, can be enhanced in conjunction with building stronger group connections.

### **Between-Group Findings: Threshold for Detecting Change**

The dual perspective of individual and group attachment style, along with the synthesis of CBT and psychodynamic theories, equips therapists with insights and strategies individualized to each member. Despite this valuable information, ATREM was not associated with greater

improvement than TREM. The statistically nonsignificant differences between treatment group conditions in the present study are consistent with previous investigations of attachment change. Findings from eating disorder studies, a population with a high rate of interpersonal abuse histories (Tasca et al., 2013a; Tasca & Balfour, 2014), exhibit trends parallel to the present study in that two treatment groups were compared and both were associated with statistically significant within-group attachment growth and other clinical gains over the course of treatment, but not between the two group conditions (Tasca et al., 2006; Tasca et al., 2007b). The eating disorder group research shares some design and conceptual similarities with the present study, because both studies adhered to a treatment duration of 16 weeks and included cognitive-behavioral and/or psychodynamic treatment elements. Detecting between-group change in attachment style and other clinical domains appears to be a shared challenge among similarly designed comparative effectiveness studies.

The statistically non-significant differences in effectiveness between ATREM and TREM need to be considered in light of the high standard that was set in this study for detecting a treatment effect. Typically designs for intervention studies on attachment or TREM lack a control/comparison group or involve a wait list/treatment-as-usual control group rather than including a comparison to another treatment group (Amaro et al., 2007b; Bowland, Edmond, & Fallot, 2012; Cihlar, 2014; Fallot et al., 2011; Fonagy, 1996; Kilmann et al., 1999; Kinley & Reyno, 2013; Kirchmann et al., 2012; Lawson et al., 2006; Maxwell et al., 2014; Muller & Rosenkranz, 2009; Murphy et al., 2016; Toussaint et al., 2007; Travis et al., 2001). A comparison between a treatment group and a control group provides a more attainable threshold to detect change than comparing two treatment groups. This is especially likely when one

treatment is evidence-based and the other is an adaptation that retains the same essential conceptual and structural framework. Despite ATREM being a novel, untested adaptation of TREM, the higher standard of a comparative effectiveness design was chosen, because a treatment-to-treatment comparison offers more applicable and relevant insights for clinical practice. Two of the three agencies already conducted TREM groups, so a TREM-ATREM comparison provided specific, usable findings for the agencies, not a contrived scenario that delayed treatment and did not represent standard practices. The inclusion of a control group for comparing TREM, ATREM, and no treatment would have been more comprehensive but feasibility, in terms of adequate client recruitment and treatment access, did not allow for it. Inclusion of a control group would have risked a significant portion of clients no longer being available or accessible due to completion or withdrawal from other services, changes in life circumstances, or lost momentum from internal dialogues allowing fear to surpass interest.

The relational nature of both ATREM and TREM may also contribute to the challenge of detecting a differential treatment effect. ATREM and TREM are similar in that both conditions consider relationships fundamental to the healing process, but they differ in the way relationships are approached and addressed within the group setting. A key distinction involves ATREM explicitly and systematically focusing on in-group attachment relationship dynamics as they naturally occur over the course of each session. This distinction of ATREM was not associated with greater clinical gains than TREM. However, ATREM demonstrated a statistically significant within-group reduction in individual attachment avoidance and a non-significantly higher completion rate than TREM which suggests that ATREM could potentially demonstrate clinical gains that surpass TREM if enhancements are made to the current study. To enhance

future studies the following design, implementation, or conceptual issues will be elaborated on: increased sample size and retention; lengthening of treatment duration by two to four weeks; use of experimental design; improved control of dilution and potential contamination; assessment of change over time/follow up; improved fidelity check; assessment of attachment style interactions between participants and facilitators; and, inclusion of moderators and mediators of change.

### **Sample Size and Retention**

A small sample size may be a factor that can account for a lack of statistically significant change between groups. Cihlar (2014) had an extremely small sample size of 11 TREM participants, and so there was not enough statistical power to detect differences with a treatment-as-usual group. While the present study had a larger sample size of 69, it was still small in statistical terms and may have been vulnerable to similar statistical power issues which could be rectified in future studies by recruiting a large sample of participants. In conjunction with a larger recruitment, concerted efforts to support group completion is especially critical to strengthening the findings of future studies, because attrition is common with this intervention (Amaro et al., 2007; Cihlar, 2014).

Outpatient settings are often highly vulnerable to attrition (Amaro et al., 2005). Attrition is also a factor for residential and intensive outpatient services, but these settings may be more conducive to interventions that require more extensive investments of time and emotional energy (Amaro et al., 2005). From a clinical perspective, the high non-completion rates across settings are unsurprising and accurately reflect the struggles women with trauma histories face daily, for their life demands cannot be put on hold for trauma healing. They are often pulled in so many

different directions with children, jobs, significant others, doctor appointments, and worries about financial matters that attending to their own personal needs and practicing self-care becomes a low priority. Self-care is impeded by feeling undeserving, denying its necessity, or failing to recognize it as an issue. Group therapy, from an attachment perspective, is designed to be a corrective emotional experience in which habitually unhelpful schemas about self and others are explored from new perspectives (Bowlby, 1988). Often women enter group treatment with low expectations of being able to complete something they start, and attrition reinforces their sense of hopelessness and failure. Treatment completion can be used to challenge old notions of inadequacy and hopelessness with concrete evidence of their abilities to attain a goal. Future research could investigate whether attachment elements augment group completion rates, as may be suggested by the present nonsignificant finding of ATREM having 8.5% more members than TREM complete the group. Perhaps the attunement and responsiveness in ATREM enhanced a feeling of being understood and supported, or maybe the in-the-moment interpersonal processing facilitated a deep feeling of connection and relational competence. In addition to exploring these attachment-guided possibilities, basic relational strategies such as co-facilitators making personal reminder calls each week and enlisting the support of case managers and individual therapists have been recommended and employed to help reduce attrition (Amaro et al., 2005; Fallot et al., 2011). The ATREM/TREM participants in the present study at Agency A expressed appreciation for the personal touch but also identified child care and transportation services as essential components to attending and completing the full group experience (Anonymous study participants, personal communications, 12/2015; 4/2016).

## Treatment Duration

With attrition in mind, studies (Cihlar, 2014; Toussaint et al., 2007), including the present one, designed protocols with a shorter duration than traditional TREM to create a more attainable standard for group completion. Cihlar (2014) proposed that significance may not have been achieved in her study on a variety of well-being measures due to the implementation of a shorter version of TREM. The full 33 topics, rather than the modified version of 25 topics, may have been necessary to achieve statistically significant change. With respect to attachment outcomes, this issue of treatment duration was echoed by one of the developers of TREM in the context of expressing his belief in the value and relevance of attachment for traumatized women but also suggesting that it would be important to ensure the measure of attachment was sensitive enough to detect change over the relatively short time period of TREM's duration (R. Fallot, personal communication<sup>1</sup>, September 3, 2014) seemingly speaking to the challenge of identifying attachment style change. Strauss et al. (2011) also suggest that detection of attachment change can be challenging. While not using a TREM protocol, Strauss et al. (2011) did explore attachment change with parameters similar to ATREM in that they used a time-limited, psychodynamic, person-centered group therapy approach with women diagnosed with borderline personality disorder, a population who frequently report histories of abuse (Courtois & Ford, 2012). Based on their findings, Strauss et al. (2011) concluded that attachment styles may not change to a large degree in this type of therapy with this population of women but propose that further research with a longer treatment duration might reveal attachment changes. Knight

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<sup>1</sup> Name used with permission.

(2006) asserts that psychodynamic group treatments likely require more time to achieve treatment gains. Even though ATREM participants demonstrated statistically significant improvement in attachment security and various measures of well-being from pre- to post-intervention with a 16-week protocol, perhaps these outcomes could be enhanced to a significantly higher level than TREM if the program's duration was extended by several sessions or up to the full 33-week timeframe. A longer treatment curriculum, providing additional opportunities for explicit attachment exercises and processing as well as implicit interactions of affective attunement, might significantly enhance ATREM's efficacy as compared to TREM. Nonetheless, clinicians expressed to the present researcher, as was her personal experience with co-facilitating ATREM, that 16 weeks felt manageable and productive with less redundancy. Thus, the agencies either were continuing with the shortened version that was piloted or the addition of only two-four additional sessions (L. Miller; S. Carpenter; L. Reed, personal communications<sup>2</sup>, 8/2015-4/2016). A TREM peer supervision group with the present researcher has been weighing the clinical costs and benefits of extending the duration of ATREM/TREM. One suggestion from these discussions entailed a brief extension of two to four weeks for both group conditions through the inclusion of TREM chapters previously cut from the curriculum involving trust, decision-making, and acceptance with ATREM continuing to modify the information delivery through attachment infusion. Numerous participants from both ATREM and TREM expressed wishes for at least a few more sessions (Anonymous study participants, personal communications, 5/2015-5/2016), but the degree of commitment versus sentimentality

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<sup>2</sup> Names used with permission.



is unclear. Future research comparing effectiveness of 16, 18, and 20 week groups could offer clarity to the issue of balancing treatment length and feasibility for optimal clinical gains.

### **Experimental Design**

Detecting differential change for ATREM and TREM and then accurately interpreting possible causalities and meanings was hindered by the need to employ a quasi-experimental design. It was also necessary for the present researcher to serve in a dual role as investigator and co-facilitator for all ATREM groups except for one at Agency C. Both factors limit experimental rigor. By not using a randomized controlled trial (RCT), extraneous variables that were unknown or not measured could serve as alternative explanations for the findings instead of treatment effects accounting for the changes. Future studies would be enhanced by utilizing RCTs for better control to detect changes in outcomes that could be more confidently attributed to one treatment condition over the other. Furthermore, such investigations would benefit from facilitators and researchers remaining solely in their respective roles so that any potential bias would be excluded. While dual roles are not typically considered advantageous, it did serve a useful function in the present pilot study by granting the researcher, as protocol developer, a firsthand experience of how the experimental treatment was delivered and received. Experiencing the group dynamics and directly feeling the challenges and joys of trauma group work creates a greater depth of understanding and enriches insights into appropriate modifications for future research.

## **Dilution and Potential Contamination**

The failure to detect statistically significant differences between ATREM and TREM could possibly be attributed to some shared theoretical philosophies such as adaptive coping, past-present links, the power of relationships, and inaccurate labelling of self and other. While the conceptual congruence facilitates fluid integration of attachment elements into TREM, it may have clouded the distinctions between the two treatment conditions, making it more challenging to detect differences. Some dilution of distinctiveness was inevitable, because it is a virtually universal stance for therapists, regardless of their theoretical orientations, to strive to provide the safe haven and secure base that anchors Bowlby's theory (Bowlby, 1988). Despite these connected ideologies, meaningful divergences give each group condition its distinctive essence. ATREM uses in-the-moment, live-action exchanges between group members (or between facilitator and group members) as they unfold as fodder for processing affective and relational themes, whereas TREM does not use relational processing as a primary mechanism of change. The attachment-based distinction lies in creating more processing, regardless of content, of what members are thinking, feeling, and sensing about themselves, each other, the facilitators, and the group-as-a-whole in the moments they are experienced. It is at these times that the attachment system is activated making IWMs amenable to revision (Bowlby, 1973; Bowlby, 1982a; Bowlby, 1988; Brisch, 2014; Mikulincer & Shaver, 2010).

Supplementing the ATREM curriculum with mentalization-enhancing activities may potentially reduce some of the congruence between the group conditions by permitting one of the key distinctive elements of ATREM to be actualized in more potent and measurable ways.

Given the developmental interplay between the formation of mentalization capacities and attachment patterns, to such an extent that mentalization has been referred to as the “psychological glue” of secure attachment relationships, it plays a fundamental role in attachment therapies (Allen, 2013; Lapidés, 2014; Marmarosh et al., 2013). It is possible that ATREM did not attain statistical significance over TREM on the attachment measures because more concentration and practice with active mentalization was needed to increase the potency of the relational interactions enough to distinguish ATREM from the relationally-oriented aspects of TREM. Encouraging in-the-moment processing of group dynamics is not emphasized by TREM, so augmenting this fundamental element of ATREM may expand the distinction between the two conditions and decrease dilution. Mentalization enhancement could involve more opportunities and guidance for engaging in reflective functioning along with more specific psychoeducation, physical and emotional self-awareness, and role plays. These changes facilitate participants being able to more fully address the forgotten, buried, or misconstrued attachment experiences that underlie insecure attachment tendencies so that they can be recognized, named, clarified, and modified into more secure schemas of attachment (Bowlby, 1988; Mikulincer et al., 2013a).

If mentalization had been adequately developed, it would likely have impacted other areas of functioning given that healthy mentalization has been connected with reductions in psychological distress, emotional dysregulation, and PTSD symptoms (Allen, 2013; Allen et al., 2003; Fischer-Kern et al., 2013; Wallin, 2015). The statistically significant improvement demonstrated by ATREM in these domains did not exceed TREM, further highlighting the potential need to explore the impact of a higher “dose.” Future research with these modifications

is worthwhile to pursue because the mentalization strategies may have already started to have a favorable impact given that only ATREM demonstrated a statistically significant decline in individual attachment avoidance from pre- to post-testing. The mentalizing connections encouraged and guided by ATREM co-facilitators may have provided corrective emotional experiences for the members such that healthier and more accurate internal working models (IWMs) began to form regarding safety in one-to-one relationships. This finding for ATREM is especially promising given that the attachment avoidance dimension is often considered challenging to modify (Taylor et al., 2015; Zorzella et al., 2014). Further research is warranted to understand the association between mentalization and attachment change and to determine if greater benefits emerge by bolstering the degree of its inclusion in the ATREM curriculum.

Another source of dilution could have been introduced by ATREM and TREM members talking to each other about their present or past group experiences, potentially contaminating distinctions. The small-town setting with numerous family and community ties would have made this possible, especially at the agency that contributed the most participants. While most participants learned about the group from the flyers or their therapists, “word-of-mouth” was also a somewhat common source of referrals, indicating that, for these women, some degree of connection and discussion about trauma group therapy had happened. This potential contamination effect, along with the conceptual congruence, highlights the complexity in teasing apart differences between ATREM and TREM that assessment instruments would need to be able to capture. If a disengagement of the overlapping qualities does not occur, establishing the significance of one’s effectiveness over the other would likely be compromised. Future studies could be strengthened by adding more attachment-based activities to create more distinction

between the group conditions, possibly extending the group duration briefly to allow for more exposure and absorption of the content and process, and making requests to abstain from detailed descriptions of group activities. Also, conducting the groups consecutively with all TREM groups beginning and ending before the start of ATREM would ensure that no TREM members would be exposed to any aspects of ATREM. This implementation strategy, though, would sacrifice an RCT design. Finally, the co-facilitators from the two group conditions could be encouraged to not discuss details of their respective group processes.

### **Delayed Response Potential/Follow Up**

It is also possible that the attachment-based changes measured at the end of the group treatment did not represent the full extent of the growth that could occur for ATREM participants, but rather a foundation was set for change to come to fruition in the future as new insights are absorbed and practiced. As time passes, the impact of attachment might be manifested to a degree that it can be felt, expressed, and measured. Future research with 6 and/or 12-month follow-up testing may be able to determine if significance between ATREM and TREM emerges over time as has been found with other attachment interventions (Kilmann et al., 1999).

### **Fidelity**

Many of the affective and relational strategies or guidelines that the ATREM co-facilitators were trained to implement involve psychodynamic, right hemisphere (RH) processing, as RH processing is believed to activate and deeply engage the attachment system

which is housed in this part of the brain (Lapides, 2014; Magnavita & Anchin, 2013; Montgomery, 2013; Wallin, 2015). As more thoroughly described in the Methods section, ATREM co-facilitators directed their attention to nonverbal cues from the participants, such as tone, posture, and prosody, and used these signals to engage with the member about thoughts and feelings either with a facilitator, a specific group member, or the group as a whole. This type of approach is challenging to manualize because it is “more abstract and unstructured” (Field, 2014, p.21) than cognitive behavioral approaches. Vagueness could be reduced by more training and on-going videotaping of group sessions (Marmarosh, 2015) to ensure fidelity by providing clarity and specificity to how therapists actualize the treatment approach. The fidelity checklist used in the current study was a practical and feasible way to monitor the delivery of the psycho-educational content across and within-group conditions, but this method did not capture the essence of RH processing. Therefore, despite the high fidelity scores for covering the required psycho-educational material, it is possible that by the nature of a TREM co-facilitator’s training or personality she inadvertently engaged in some attachment-based methods unconsciously as part of her routine, natural approach to treatment, thus creating a therapist-introduced contamination effect. Manuals can direct content but cannot completely regulate process to ensure conformity. Non-specific factors in therapeutic change may have clouded the distinction between ATREM and TREM, because these factors, such as therapeutic alliance, are shared by most treatment approaches regardless of protocol or approach (Luborsky, Singer, & Luborsky, 1975). While manuals cannot eliminate the impact of a clinician’s nature or the effect of treatment elements shared by most psychotherapies, they can diminish differences in the delivery of protocol-specific elements so that participants can experience its distinctive features (Tasca,

Balfour, Ritchie, & Bissada, 2006). It is a strength of the current study that a detailed ATREM manual was created that was comparable to TREM in basic structure, organization, and trauma information but with the added inclusion of attachment-specific content and detailed examples. In future research, screening therapists for their predominant adherence to a psychodynamic versus a CBT orientation, and then assigning them to the treatment condition that best fits their expertise and style of practice could possibly further minimize therapist-introduced contamination and facilitate fidelity in service delivery by better preserving the distinction between the group conditions (Tasca et al., 2006).

### **Facilitator and Group Member Attachment Style Interactions**

In addition to a therapist's theoretical orientation, a therapist's own attachment style and the interaction between therapist and client attachment styles may impact treatment alliance and outcomes (Bucci, Seymour-Hyde, Harris, & Berry, 2015). Numerous studies have demonstrated the influence of the therapist's attachment style on treatment processes involving the nature of his or her perceptions, interpretations, and interventions, but the evidence regarding the interactional nature of therapist and client attachment styles is not as consistent or plentiful as to the nature or degree, if any, of influence on treatment efficacy (Marmarosh et al., 2006; Marmarosh et al., 2015; Marmarosh, 2015; Mikulincer, Shaver, & Berant, 2013b). Exploration of this interactional phenomenon is viewed as an essential aspect of future attachment research so that therapists can be sensitive to how their relational histories and IWMs are manifested in therapy (Degnan, Seymour-Hyde, Harris, & Berry, 2014; Marmarosh, 2015; Mikulincer et al., 2013a). One primary focus entails the issue of complementarity as to whether a match or a

mismatch between therapist and client attachment styles is more advantageous for facilitating growth and healing (Bucci et al., 2015; Degnan et al., 2014; Mikulincer et al., 2013a). No clear recommendations have been established due to the current contradictions in the research. The impact of the therapist's attachment style on the therapeutic alliance may be most influential with clients who are complex with high symptom severity (Bucci et al., 2015; Degnan et al., 2014) which suggests that this information has the potential to be especially critical for trauma survivors in ATREM/TREM. Perhaps the ATREM outcomes in the present study were limited by not accounting for the co-facilitator attachment style and its impact on group dynamics. It is possible, for example, that one group condition had more secure therapists whose relational strengths implicitly facilitated more insightful and skilled interactions with clients. Or, perhaps, the interface of the therapist's attachment style with her co-facilitator or the group members created a synergy that the other group condition did not experience.

It is not necessary, feasible, or preferable, for an agency to specifically tailor treatment to match (or mismatch) the attachment styles of co-facilitators with each other or co-facilitators with the predominant attachment style of the group. It is valuable for co-facilitators to have awareness of their own individual and group attachment styles, and this information is easily accessible with the same attachment scales used with clients. This information allows for deeper self-awareness into a co-facilitator's reactions to particular clients, co-facilitators, and the group as a whole and can be used to identify dynamics that may impede or enhance treatment delivery. Bowlby (1988) emphatically expressed the fundamental value of this knowledge for dealing compassionately and effectively with the complexities of treatment when he stated that "...the therapist must strive to always be aware of the nature of his own contribution to the relationship



which, amongst other influences, is likely to reflect in one way or another what he experienced himself during his own childhood” (p. 141). In future research, the co-facilitators could complete individual and group attachment style assessments prior to the onset of ATREM and then process the results with their co-facilitator, intervention trainer, researcher, or clinical supervisor, possibly making them better equipped, cognitively and emotionally, to help clients engage effectively in therapeutic tasks necessary for positive outcomes.

### **Potential Moderators of Change**

Demographic factors, such as age, race/ethnicity, education level, and relationship and employment status represent another area of consideration when trying to ascertain the degree of efficacy of ATREM and TREM in terms of who may respond better to which treatment and under what conditions. This demographic information was gathered in the present study but only to assess for pre-intervention comparability of the treatment conditions. Due to the small sample size, it was not possible to assess for differential responses to treatment based on particular demographic characteristics. It would be valuable for future research with large sample sizes and greater diversity, especially for race/ethnicity, to examine the interplay of treatment condition with these client characteristics. Trends of more statistically significant improvement in ATREM or TREM may emerge depending on, for example, the stage of life of a participant. These findings could be used to help guide clinical decisions about group placement. Hence, age may moderate treatment efficacy as a function of the changing attachment needs and opportunities for interpersonal engagement as a person gets older. Shifts with age in attachment tendencies have been detected by the heightened importance placed on connections with adult

children, deceased loved ones, and God as sources of attachment need satisfaction (Cicirelli, 2010; Van Assche et al., 2013). Attachment style categorization may not change significantly with age but, dimensionally, movement towards more dismissing/avoidant tendencies has been detected with aging (Cicirelli, 2010). An older woman may be more (or less) interested as well as more (or less) comfortable in exploring attachment history along with in-the-moment attachment patterns between her and group members as opposed to more concrete, skills-based approaches. As a person ages, he or she prioritizes emotional goals over instrumental ones in close relationships (Van Assche et al., 2013), so it could be hypothesized that with this change in relational emphasis, ATREM may be more suitable and satisfying than TREM. Given the added importance of symbolic attachments, like God, a spiritual addition to ATREM/TREM may interest and comfort older women. A spiritual version of TREM designated for women age 55 and older was created and has demonstrated treatment gains with depression, anxiety, and PTS symptoms (Bowland et al., 2012). This information on age could inform practice decisions, because demographic variables may moderate the strength and/or direction of influence ATREM or TREM has on treatment outcomes.

### **Potential Mediators of Change**

Numerous studies have established mediators between attachment style and psychological distress and between histories of interpersonal trauma and psychological distress (Cloitre et al., 2008; Maheux & Price, 2016; Sandberg et al., 2010; Stevens et al., 2013; Ullman, Peter-Hagene, & Relyea, 2014; Vogel & Wei, 2005; Winham et al., 2015). Various configurations of mediating connections between histories of trauma, attachment style,

psychological distress, social support, and emotional regulation have been found, but the mediation between therapy, especially group therapy, and clinical outcomes has only been minimally explored. Potential mediators of change that could clarify the links between growth in secure attachment patterns and clinical outcomes in group therapy are scarce but could be valuable in understanding and enhancing the group process (Maxwell et al., 2014; Woodhouse et al., 2015). The premise of the current study was guided by a conceptual framework that involves the implementation of group therapy to promote growth in perceptions of social support and attachment security which was presumed would lead to improvements in increased well-being in the form of reduced depression, anxiety, PTSD, and substance use. Hence, various measures of well-being represent a distal outcome that was not directly targeted but was expected to improve through the mediating influences of the proximal outcomes of enhanced social support and attachment tendencies.

An examination of mediating variables may have been useful in understanding the findings for substance use. In prior studies TREM has been associated with reductions in substance use (Amaro et al., 2007b; Fallot et al., 2011), but in the present study substance use was the only variable not associated with statistically significant improvement from pre- to post-testing within both group conditions. Stevens and colleagues (2013) explored the interaction between trauma group therapy and the two mediator variables of emotional regulation and interpersonal skills to understand the impact on treatment outcomes related to PTSD. Similarly, future research could explore if these mediators are relevant for substance use as well. The small sample size of the current study did not provide enough statistical power to effectively conduct analyses to identify any mediation effects on the outcomes. Future studies with larger sample

sizes would enable mediators to be tested, allowing for a more nuanced understanding of factors that may intervene between trauma group therapy and treatment outcomes. These factors could be considered when designing or modifying trauma treatment approaches. Stevens et al. (2013) highlight this point by emphasizing that trauma symptoms can arise from a multitude of sources, and they, therefore, recommend an integration of treatments for individuals with trauma histories, informed by mediating factors, to adequately address the struggles of clients who have histories of trauma.

### **Strengths/Limitations**

Throughout the discussion sections strengths and limitations of the present study were identified as well as rectifying measures for enhancing future studies. Strengths that have already been highlighted include: comparing two treatment groups; adding to the small evidence bases of attachment change with short-term psychodynamic group therapy and of group attachment styles; offering clinicians flexibility in response choices based on clients' differential needs with the CBT and psychodynamic integration; and, standardizing a new protocol with a treatment manual. Additionally, ATREM co-facilitators reported that the attachment activities were powerful and engaging which deepened the group experience (S. Carpenter; C. Mackey, 8/2016; 5/2016 personal communication<sup>3</sup>). Limitations included: small sample size and retention issues; lack of experimental design; possible dilution and potential contamination; lack

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<sup>3</sup> Names used with permission.

of follow up; limited fidelity assessment; lack of assessment of attachment style interactions; and, no inclusion of moderators and mediators of change.

Other elements of the study may be considered strengths and/or limitations. Treatment duration was a strength in the sense that significant within-group change occurred on multiple measures of well-being in only 16 weeks, making successful completion more attainable for participants than groups following the traditional time span of 24-33 weeks. ATREM was not associated with significantly better outcomes than TREM, though, which may have required additional weeks to manifest. The study has limited generalizability as a function of the small sample size and lack of racial/ethnic diversity in the rural/suburban setting of the study. Most TREM studies have been carried out in urban settings, so the rural/suburban setting of the current study provides new information about a less studied population. The dual role of researcher/clinician also has positive and negative aspects in that potential bias may have been introduced, but directly experiencing the new protocol provided direct, meaningful information that could not be fully grasped secondhand.

The majority of the research referenced in the present study utilized self-report data which is the typical method of data collection in most attachment studies because of efficiency and feasibility, so the usage of a self-report questionnaire in the present study represents a strength to the extent that it facilitates comparisons with other attachment studies. Limitations of self-report attachment data involve being subject to bias and only reflecting conscious relational information, whereas data gathered from observation or interview methods can garner deeper, unconscious information reflected in participant behavior and narrative-telling style. Other limitations related to the data involve unanswered items and the number of items on the

questionnaire. The scales/subscales with percentages of missing data higher than 5% (as identified in the data analysis section) should be interpreted with caution given that the sample size is reduced, possibly affecting outcomes. The questionnaire was also long and consequently testing fatigue may have been a factor affecting responses. A strength that may have offset any potential fatigue involved the present researcher sitting with each participant (unless the participant or the agency requested otherwise) in a quiet and comfortable space readily available for any questions or concerns.

### **Clinical Implications**

*“An individual’s terror of abandonment or disgust with intimacy is something he or she brings to therapy, regardless of what theory or modality is being applied to facilitate change.*

*Understanding the role of attachment will only help us develop treatment interventions aimed at meeting the needs of different patients and training interventions aimed at meeting the needs of different therapists.” (Marmarosh, 2015, p.14)*

This quote embodies the importance of attachment-informed methods in clinical practice in social work and other related fields. Attachment histories and manifestations enter the therapeutic space whether they are acknowledged or ignored, and this study represents one example of the benefits of using an attachment lens to more deeply understand clients in a group setting by explicitly acknowledging and incorporating attachment-based strategies. The current study has provided some preliminary evidence that an existing protocol that has been modified with attachment-based strategies and ideology can be at least as effective as the evidenced-

supported version now in use. Further, a 16-week version of TREM, be it TREM or ATREM, can be an effective treatment for facilitating healing from interpersonal trauma through increased attachment security, perceived social support, and emotional well-being. As highlighted earlier, committing and sustaining participation in a four-month treatment is likely more tenable than a group that is six months long. Anecdotally, participants have shared feeling overwhelmed by the thought of a six-month commitment of time and emotional energy when task completion of any sort, but especially for their own personal needs, is an immense challenge in their everyday lives. There is reluctance to join a longer group that might reinforce their expectations of failure and confirm, in their minds, a pervasive sense of inadequacy at not being able to complete what they started, as often occurs for them with their numerous responsibilities and minimal supports or resources to manage all the demands of their lives. Having a group that is feasible for their lives in terms of duration may start to counter a sense of inadequacy by serving as a new “emotionally corrective experience” (Bowlby, 1988) to build upon for healing. The accomplishment of completing the full ATREM/TREM program has motivated some women to request participating in TREM a second time or enroll in a different group to address other needs. Given the repeated requests and frequent interest in more trauma group therapy after ATREM/TREM, Agency A has been working on modifying the advanced TREM curriculum (Harris, 2008) with attachment infusions to develop a group therapy curriculum for graduates that will address their needs in more depth. The TREM developers seem to recognize the need for enhanced interpersonal skills, for the advanced TREM curriculum is devoted to relationships (Harris, 2008).

The comparable outcomes found for ATREM and TREM is, in some sense, a clinical benefit in that a clinician has a choice between two comparably effective treatments. A clinician

would not be limited to implementing one treatment option that may not best suit her theoretical orientation, interests, expertise, or comfort level. Protocol fidelity, motivation, and enthusiasm may be enhanced when a clinician has chosen a model that matches her belief system and her clinical abilities. Having options for enhancing the client-treatment fit is also beneficial, for as attachment research progresses, recommendations can be suggested as to which group may facilitate growth most effectively for particular clients based on that client's individual needs, characteristics, and skill set.

Given the flexibility and array of cognitive-behavioral and psychodynamic strategy options of ATREM's integrated theoretical approach, future research may find that ATREM may be associated with greater clinical gains than TREM. Attachment theory provides a comprehensive framework for understanding and treating the complexities of trauma sequelae. These complexities increase and intensify in a group therapy context, especially related to relational behavior as interactions between various configurations of participants and co-facilitators occur (Marmarosh, 2015). Attachment perspectives and strategies, alone or in conjunction with other approaches, better equip clinicians to work confidentially with and through complicated relational dynamics by using these interactions as fodder for treatment. Both the content and the process of group therapy are viewed as viable avenues for fostering growth from an attachment-guided, integrated treatment stance. Trauma group therapy clinicians value the complicated relational dynamics as teachable moments with experiential potency that is felt rather than merely discussed. The relational discomfort or joy activates the attachment system, and by explicitly or implicitly addressing in-the-moment behavioral reactions, change on a neuronal level is fostered. Further, an awareness of both individual and group attachment style



creates an additional in-road for trauma change and healing. Attachment-guided clinicians may facilitate the development of each participant's sense of a secure base in the group through differential engagement during whole-group and dyad activities depending on each participant's interpersonal strengths and needs.

Functioning from a dual attachment perspective and focusing on in-the-moment interpersonal interactions may also impact the co-facilitation relationship. Co-facilitators may find that an attachment perspective heightens their awareness and responsiveness not only to the needs of the participants but also to each other, and this support and sense of connection may help sustain clear thinking, emotional investment, and wise response choices during challenging moments that might otherwise be avoided or feared. My experience as an attachment-guided group facilitator anecdotally supports the notion of an enhanced partnership which is energizing and comforting during moments of high intensity and contributes to corrective emotional experiences by serving as a model for participants of healthy give-and-take relational processes. Hence, mutual attachment awareness may help co-facilitators move beyond managing to thriving in group work.

Knowing participants' attachment styles before the first group session can be beneficial for the clinician and empowering for the members. The attachment information serves as a signal for potential feelings a participant may experience and provides a context for interpreting her responses. The likelihood of accurate and timely attunement and responsiveness is increased by advanced attachment knowledge, because clinicians are primed to recognized relational needs (Marmarosh et al., 2013). Given the tendency for individuals who are highly avoidant or fearful to discontinue group involvement during the initial sessions, accuracy and timeliness may be

essential for supporting participants in group completion. Using the assessed attachment information for enhanced attunement and responsiveness may help to account for the higher completion rate for ATREM as well as the statistically significant decrease in individual attachment avoidance. The attachment insights can be reflected on prior to each session to be prepared for possible relational reactions sparked by the specific topic of the week. In his extensive writings on the therapeutic skills needed to help clients, Shulman (2011) recommends prior attunement for enhancing initial and on-going encounters. He terms this process “preparatory empathy” and considers the tuning-in process vital to being a sensitive listener who can recognize and appropriately respond to direct and indirect expressions of need (Shulman, 2011).

It has become a consistent recommendation for mental health agencies to develop a policy for attachment-informed care, beginning with an awareness and understanding of a client’s attachment style from the onset of treatment (Bucci, Roberts, Danquah, & Berry, 2015). A suggested standard practice entails conducting an attachment assessment in the initial encounter and proceeding to use this information to inform insights of the conceptualization of the client and for guidance of intervention processes (Bucci et al., 2015). By integrating attachment-informed care into our daily practice we are able to help clients grow and heal in ways that are being supported by recent advances in neuroscience (Field, 2014; Flores, 2010; Lapides, 2014) which adds credibility to the social work profession by validating the importance and effectiveness of social work’s commitment to the therapeutic relationship.

Clinical social workers may be able to contribute to the advancement of effective trauma care on mezzo- and macro-levels by advocating within agencies and with federal and state level officials and managed care entities for the advancement of attachment-informed integrated care for women with histories of interpersonal abuse, mental health, and substance use issues. Over a decade has passed since the majority of studies examining the effectiveness of TREM were conducted through the federally funded Women’s Co-Occurring, Domestic Violence Study, and given the on-going implementation of TREM, reassessing the present state of group therapy would highlight gains and identify areas of on-going need. To continue the mission of developing and implementing effective integrated care for women with multiple and complex needs, advocacy for further research, dissemination of information, and training and support with implementation are needed. The integration of attachment perspectives and strategies into existing protocols may be a new area of focus to enhance treatment effectiveness. A focus on attachment infusions aligns with clinical social work by embracing “the importance of human relationships,” (National Association of Social Workers, 2008) a core value underlying our professional mission.

### **Future Research**

The statistically significant within-group change associated with ATREM suggests that this new protocol is promising and warrants further exploration as a viable protocol for trauma healing. Making the suggested modifications to the present study may result in findings of statistically significant improvement in well-being for ATREM as compared to TREM. The concept of group attachment style also shows promise as a source of clinical information for

enhancing attunement and responsiveness to clients beyond what can be known from focusing on dyadic attachment style alone. Group attachment concepts and strategies may offer an additional intervention resource for enhancing individual and relational well-being (Marmarosh, 2015). Given the pervasive use of CBT in Western cultures, research on ATREM fits with recent recommendations for more attachment-oriented studies focusing on continued assessment of the efficacy of integrated attachment-CBT approaches (Taylor et al., 2015).

## **Conclusion**

This study extends prior findings on TREM by demonstrating that ATREM, a newly developed attachment informed modification of TREM, may well facilitate positive change in the domains of individual and group attachment styles, perceived social support, emotion regulation capacities, and mental health issues related to depression, anxiety, and PTSD. To this researcher's knowledge, it is the first study to infuse attachment-based concepts and strategies into a shortened version of this evidenced-supported women's trauma group protocol. The inclusion of group attachment style is another innovation that contributes a unique perspective in understanding individual behavior in the group context as well as offering another avenue for facilitating growth outside of therapy. While these results were similarly seen in TREM, only ATREM demonstrated an additional gain involving a statistically significant decrease in individual attachment avoidance from pre- to post-testing. It also had a higher, though not statistically significant, rate of completion. However, this study hypothesized that ATREM would be more effective than TREM in facilitating improvement across all the clinical outcomes which was not supported by the findings. Given ATREM's promising results in this pilot study,

future research is warranted to determine if healing and recovery across a variety of clinical domains could be enhanced beyond the outcomes that have been found with TREM. ATREM's integrated design with cognitive-behavioral and psychodynamic elements equips therapists with a wide array of treatment strategies and greater depth of relational knowledge for attuned and responsive interactions with survivors of interpersonal trauma. ATREM offers both clients and therapists a protocol that may prepare them for more productive and meaningful group experiences which facilitate critical interpersonal repairs of severed core connections considered essential for trauma recovery (Fallot & Harris, 2002; Herman, 1997).

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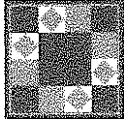


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Appendix A1



**PENN FOUNDATION**  
BEHAVIORAL HEALTH SERVICES

January 31, 2015

Ms. Melanie Masin-Moyer

**RE: Title of the Research Study:** A Comparative Effectiveness Study of the Trauma Recovery Empowerment Model (TREM) and an Attachment-Informed Variation of TREM

**Principal investigator:** Melanie Masin-Moyer, LCSW, 215 804-6714, melanielcsw@yahoo.com

Dear Melanie:

I am writing on behalf of Penn Foundation Behavioral Health Services to express our enthusiastic support for your research study.

We are pleased that you have decided to focus on enhancing an evidenced based trauma informed care model, and welcome the opportunity to help further reduce the negative symptoms experienced by abused women who seek care through Penn Foundation.

Penn Foundation will provide access to subjects for informed consent and the necessary facilities to conduct the groups as well as access to data to be reported for outcomes. We would be pleased to have you present your findings at the conclusion of your research to our Quality Council.

Sincerely,

A stylized signature of Marianne Gilson, appearing as "M. Gilson".

A handwritten signature of Marianne Gilson in cursive script.

Marianne Gilson, MCAT, Senior Vice-President and COO

## Appendix A2



April 9, 2015

Libertae Halfway House and Family House  
5245 Bensalem Blvd, Bensalem, PA 19020

Dear Ms. Masin-Moyer,

This letter is to confirm that Libertae is willing to host your doctoral study entitled "A Comparative Effectiveness Study of the Trauma Recovery Empowerment Model (TREM) and an Attachment-Informed Variation of TREM. We will provide the space and therapists necessary to run the TREM group and look forward to a presentation of what you learn after the study is over. Once you receive IRB approval through the University of Pennsylvania we can set a date to begin shortly thereafter.

A handwritten signature in black ink, appearing to be "Christina M. Masin-Moyer". The signature is fluid and cursive, with a large, sweeping flourish at the end.

## Appendix A3



2370 York Road • Suite B1 • Jamison, PA 18929  
(215) 343-6543 • TTY (215) 343-6299 • FAX: (215) 343-6260  
[www.novabucks.org](http://www.novabucks.org) • 24-Hour Hotline 1-800-675-6900

May 13, 2015

Ms. Melanie Masin-Moyer

RE: Title of the Research Study: A Comparative Effectiveness Study of the Trauma Recovery Empowerment Model (TREM) and an Attachment-Informed Variation of TREM

Principal investigator: Melanie Masin-Moyer, LCSW, 215 804-6714, [melanielcsw@yahoo.com](mailto:melanielcsw@yahoo.com)

Dear Melanie:

I am writing on behalf of Network of Victim Assistance (NOVA) to express our support for your research study.

We are pleased that you have decided to focus on enhancing an evidenced based trauma informed care model, and welcome the opportunity to help further reduce trauma symptoms experienced by women who seek counseling at NOVA.

NOVA will provide access to subjects for informed consent and the necessary facilities to conduct the groups as well as access to data to be reported for outcomes. We look forward to working with you on this project.

Sincerely,

A handwritten signature in black ink that reads "Kathy Bennett".

Kathy Bennett, MSW/LSW  
Associate Director

## Appendix B

### Informed Consent

#### **Title of the Research Study: A Comparative Effectiveness Study of the Trauma Recovery Empowerment Model (TREM) and an Attachment-Informed Variation of TREM**

Protocol Number: Principal Investigator: Dr. Phyllis Solomon (215) 898-5533, solomonp@sp2.upenn.edu Co-investigator: Melanie Masin-Moyer, LCSW, 215 804-6714 or 267 404-5799, melanielcsw@yahoo.com Emergency Contact: Dr. Phyllis Solomon (215) 898-5533, solomonp@sp2.upenn.edu or Melanie Masin-Moyer, LCSW, 215 804-6714 or 267 404-5799, melanielcsw@yahoo.com

You are being asked to take part in a research study. This is a form of therapy. It is not supposed to detect a disease or find something wrong. Your participation is voluntary which means you can choose whether or not to participate. If you decide to participate or not to participate there will be no loss of benefits to which you are otherwise entitled. Before you make a decision, you will need to know the purpose of the study, the possible risks and benefits of being in the study and what you will have to do if decide to participate. The researcher is going to talk with you about the study and give you this consent document to read. You do not have to make a decision now; you can take the consent document home and share it with friends, family doctor and family.

If you do not understand what you are reading, do not sign it. Please ask the researcher to explain anything you do not understand, including any language contained in this form. If you decide to participate, you will be asked to sign this form and a copy will be given to you. Keep this form, in it you will find contact information and answers to questions about the study. You may ask to have this form read to you.

**What is the purpose of the study?** The purpose of this study is to learn more about what helps women who have been abused reduce their symptoms of depression, anxiety, PTSD, and maintain remission from a substance use disorder (if applicable) as well as to have more satisfying relationships. Two groups will be compared to see if one group helps women more than the other. One group is called TREM (Trauma Recovery Empowerment Model) and the other group is called attachment-informed TREM which is TREM with some modifications.

Both groups cover the same topics but the modified TREM group (attachment-informed TREM) uses some additional strategies to work more on relationships. The word attachment is being used to mean how you function in relationships. TREM has been shown in previous studies to be effective in helping women to recover from some of the effects of trauma. We want to find out if attachment informed TREM, as compared to TREM, can enhance these results further.

Attachment-informed TREM is a new group therapy approach that is being used for the first time for this study but borrows ideas from other treatments already in use. If you choose to be in the study, you will not be randomly placed in a group, but instead you can select which group you are able to attend based on the day and time that each group is held. The two groups are similar but there are some differences. The same topics are covered in both groups; both groups follow a format for building skills in areas that trauma survivors often benefit from learning; psycho-education is provided for both groups; and both groups have discussion and an activity related to the discussion. The activities typically involve simple arts and crafts but also could be role plays, body relaxation, using one's imagination and the like. The only difference between the groups is that the attachment-informed group will focus on relationships in different ways. This study is being conducted for a dissertation for a doctorate in social work degree.

**Why was I asked to participate in the study?** You are being asked to join this study because you are a woman who has experienced trauma and are also coping with depression, anxiety, and/or substance abuse issues. You have been referred to this group by your therapist or some other helping professional or you have self-referred. You will be able to participate in a TREM group even if you decide you do not want to be a part of the research study.

**How long will I be in the study?** You will be in the study for the length of the group which is 16 weeks plus 2 other meetings to fill out the questionnaires. This means for 16 weeks we will ask you to spend one day per week participating in this study by attending the women's trauma group. Each session will last approximately 1½ hours. You will be asked to fill out a questionnaire that takes about 30-45 minutes to complete. You will do this before your first trauma group starts and after the last group ends. Taking this questionnaire is the only difference between being in the group as a research participant group member versus just being a group member not in the study.

**Where will the study take place?** You will be asked to come to the agency that you already are attending for other services. The group meets one time per week with the day depending on which group you join. We will let you know which day to come within the next two weeks. You will check in at the front desk as you would for any other appointment and the secretary will direct you to the group room or to the waiting room where the co-facilitators will find you.



**What will I be asked to do?** You will only be asked to do one thing that is different from just being a group member--meet with the researcher twice to complete a questionnaire that will likely take between 30-45 minutes. Complete the questionnaire before the first TREM group. Attend weekly trauma group for 16 weeks—you will join either TREM or attached-informed TREM group depending on which day you are able to attend (if you have no preference you will be assigned to a group based on keeping a balanced number between the groups). When group is completed, arrangements will be made for you to fill out the same questionnaire that you completed before group started but with one less section to fill out. This will likely be scheduled within the week group ends, perhaps even right after the last group if that suits your schedule.

**What are the risks?** The trauma checklist portion of the questionnaire asks about your trauma experiences with yes or no questions. Some women may find this upsetting, but research has shown that other women have actually found filling out the checklist to be a positive experience. It was selected for use in this study because it has been designed to be sensitive to trauma survivors' feelings and not to be prying or overwhelming. Nonetheless, it should be noted that questions are asked about your trauma experiences in one section of the questionnaire. Both groups will focus on learning about trauma healing and discuss feelings related to trauma experiences but attachment-informed TREM will process more feelings related to relationships. People may find this emotionally tough while others may find it more comforting.

If you would become suicidal or homicidal, standard agency policy would be used to address the situation and support your safety. In other words, study participants would be treated in the same manner as non-study group members and have access to the same services. The agency has a 24 hour crisis hotline that you can call. If you talk in group about being suicidal or homicidal one of the therapists will speak with you privately to assess your level of risk and determine a safety plan. Your individual therapist or case manager can also be contacted. If they are not available, you could meet with any available therapist at the agency. If safety cannot be ensured, you will be supported by one of these professionals in going to a hospital. Your emergency contact, family member or friend can be called to support you as well. If you are a danger to yourself or others and refuse to go to the hospital, an involuntary commitment process will be started by one of the co-facilitators by filling out a petition with a crisis worker unless a safety plan can be agreed on.

Study participant's confidentiality is a top priority and the study is designed for minimal risk of any breach in confidentiality. Study data will be kept with the researcher in a locked file drawer with no names attached to the questionnaires, just an identification number that will be assigned. The data will be entered into the researcher's laptop with only the identification number, and the laptop is password protected. The list of names attached to the study identification numbers will

be kept in a locked file drawer in the locked office of the researcher. No names or identifying descriptors will be reported. This signed consent form will not be kept with your medical record. Instead, it will be kept in another locked drawer in the researcher's office. The researcher will not be looking at your medical record held by the agency for the purposes of the study.

**How will I benefit from the study?** Your participation in this study could help us understand what ideas and strategies are important to include in future trauma groups to promote growth and healing, and this may benefit you in the form of feeling good knowing you have contributed to the development of new trauma knowledge that could potentially help other women, in the future, heal from trauma. Additionally, some women have participated in TREM more than once and, if you chose to do so, it is possible that a future TREM group might be strengthened based on information learned from this study.

**What other choices do I have?** Your alternative to being in the study is to not be in the study. Whatever your decision, you can still join the TREM group that fits your schedule.

**What happens if I do not choose to join the research study?** You may choose to join the study or you may choose not to join the study. Your participation is voluntary. There is no penalty if you choose not to join the research study. You will lose no benefits or advantages that are now coming to you, or would come to you in the future. Your therapist, case worker, nurse, or doctor will not be upset with your decision. If you choose not to join the research study, you can still join the TREM group that fits your schedule. Since there is no difference between being in the study or not being in the study except for taking a questionnaire before the first group and after the last group, groups members will function in the exact same way as research study group members. If you are currently receiving services and you choose not to volunteer in the research study, your services will continue. There is no obligation to be in this study and your services will not change if you decline.

**When is the study over? Can I leave the study before it ends?** The study is expected to end after all participants have completed all visits and all the information has been collected. The study may be stopped without your consent for the following reasons:

- o The PI feels it is best for your safety and/or health-you will be informed of the reasons why (for example, if your mental health declined to a level of instability that the group would be overwhelming)
- o You have not followed the study instructions of the PI, the sponsor or the Office of Regulatory Affairs at the University of Pennsylvania can stop the study anytime
- o If you cannot maintain your financial agreement with the agency which is required to stay in group therapy, you cannot remain in the research study either.
- o If you relapse with your substance use disorder and attempt to attend group under the influence of drugs or alcohol more than one time you will be asked to leave the study.

You have the right to drop out of the research study at any time during your participation. There is no penalty or loss of benefits to which you are otherwise entitled if you decide to do so. Withdrawal will not interfere with your future care. If you choose to leave the study at any point, it will not affect your participation in the TREM group in any way. If you no longer wish to be in the research study, please contact the research investigator, at (267) 404-5799 and take the following steps:  Call Melanie Masin-Moyer, the research investigator, at the above listed number and let her know your decision to withdraw from the study. Nothing else needs to be done. You may remain in the therapy group even if you choose to no longer participate in the research study.

**How will confidentiality be maintained and my privacy be protected?** We will do our best to make sure that the personal information obtained during the course of this research study will be kept private. However, we cannot guarantee total privacy. Your personal information may be given out if required by law. If information from this study is published or presented at scientific meetings, your name and other personal information will not be used.

Participant confidentiality is a top priority. Study data will be kept with the researcher in a locked file drawer with no names attached to the questionnaires, just an identification number that will be assigned. The list of names attached to the study identification numbers will be kept in a locked file drawer in the locked office of the researcher. The data will be entered into the researcher's laptop with only the identification number, and the laptop is password protected. No names or identifying descriptors will be reported. This signed consent form will not be kept with your medical record. Instead, it will be kept in another locked drawer in the researcher's office. The researcher will not be looking at your medical record held by the agency for the purposes of the study.

Anonymity will be maintained by not including any names or other identifying information in

**What is an Electronic Medical Record?** An Electronic Medical Record (EMR) is an electronic version of the record of your care within a health system. An EMR is simply a computerized version of a paper medical record. If you are receiving care or have received care within the University of Pennsylvania Health System (UPHS) (outpatient or inpatient) and are participating in a University of Pennsylvania research study, results of research-related procedures (i.e. laboratory tests, imaging studies and clinical procedures) may be placed in your existing EMR maintained by UPHS. However, this research study is not part of the UPHS. Study data will not be part of you EMR at your mental health agency and the researcher will not be accessing your EMR for the purposes of the study. This consent form will not be kept with your electronic medical record. Instead, it will be kept separately in a locked drawer in the researcher's office.

**What happens if I am injured from being in the study?** We will offer you the care needed to treat injuries directly resulting from taking part in this research. We may bill your insurance company or other third parties, if appropriate, for the costs of the care you get for the injury, but you may also be responsible for some of them.

There are no plans for the University of Pennsylvania to pay you or give you other compensation for the injury. You do not give up your legal rights by signing this form.

If you think you have been injured as a result of taking part in this research study, tell the person in charge of the research study as soon as possible. The researcher's name and phone number are listed in the consent form.

**Will I have to pay for anything?** There are no costs for this study beyond what you normally pay for your therapy. If you have a co-pay, it will remain the same as will the cost of whatever travel arrangements you normally make to come to appointments at this agency.

**Will I be paid for being in this study?** There is no compensation for this study.

**Who can I call with questions, complaints or if I'm concerned about my rights as a research subject?** If you have questions, concerns or complaints regarding your participation in this research study or if you have any questions about your rights as a research subject, you should speak with the Principal Investigator listed on page one of this form. If a member of the research team cannot be reached or you want to talk to someone other than those working on the study, you may contact the Office of Regulatory Affairs with any question, concerns or complaints at the University of Pennsylvania by calling (215) 898-2614.

When you sign this document, you are agreeing to take part in this research study. If you have any questions or there is something you do not understand, please ask. You will receive a copy of this consent document.

Signature of Subject

Print Name of Subject

IRB Approved: From: 04-29-2015 To: 04-19-2016

University of Pennsylvania Informed Consent Form

## Appendix C

### TREM OUTLINE

#### **PART I: EMPOWERMENT**

1. Topic 1 & 2
  - Introductory Session (p. 13)
  - Topic 2--What It Means to Be a Woman (p.19)
2. Topic 4--Physical Boundaries (p. 34)
3. Topic 5--Emotional Boundaries: Setting Limits and Asking for What You Want (p. 41)
4. Topic 7--Developing Ways to Feel Better: Self-Soothing (p. 56)

#### **PART II: TRAUMA RECOVERY**

5. Topic 13--The Body Remembers What the Mind Forgets (p. 96)
6. Topic 14--What Is Physical Abuse? (p. 103)
7. Topic 15--What Is Sexual Abuse? (p. 109)
8. Topic 17--What Is Emotional Abuse? (p. 120)
  - Touch on Topic 6
9. Topics 19 & 28
  - Topic 19--Abuse and Psychological or Emotional Symptoms (p. 130)
  - Topic 28—Feeling Out of Control (p. 189)
10. Topics 20 & 26
  - Topic 20—Trauma and Addictive or Compulsive Behavior (p. 135)
  - Topic 26—Self-Destructive Behaviors –exercise #3 only
11. Topics 21 & 29
  - Topic 21—Abuse and Relationships (p. 141)
  - Topic 29—Relationships (p. 196)
12. Topic 8--Intimacy and Trust (p. 62)—just touch on 9 & 10
  - Topic 9--Female Sexuality (p. 68)
  - Topic 10--Sex with a Partner (p. 74)

#### **PART III: ADVANCED TRAUMA RECOVERY ISSUES**

13. Topic 22--Family—Myths and Distortions (p. 153)
14. Topic 24--Decision Making: Trusting Your Judgment (p. 167)
15. Topic 27--Blame, Acceptance, and Forgiveness (p. 184)
16. Topic 33--Closing Ritual (p, 219)

## Appendix D

### ATREM OUTLINE

#### **PART I: EMPOWERMENT**

1. Ch. 1--Introductory Session (p. 13)
  - a. Ch. 2--What It Means to Be a Woman (p.19)
2. *Psycho-education on Attachment Theory*
3. Ch. 5--Emotional Boundaries: Setting Limits and Asking for What You Want (p. 41)
  - Ch. 4--Physical Boundaries (p. 34)—just do intro exercise (can modify with tissue paper on floor or taped boxes on table and game pieces) and discuss briefly and then move on to emotional boundaries for most of the time
4. Ch. 7--Developing Ways to Feel Better: Self-Soothing (p. 56)
  - a. Ch. 28—Feeling Out of Control (p. 189)—tie in briefly to set stage for self-soothing

#### **PART II: TRAUMA RECOVERY**

5. Ch. 13--The Body Remembers What the Mind Forgets (p. 96)
6. *Brochure About Me and Group in a Pocket*
7. Ch. 14--What Is Physical Abuse? (p. 103)
8. Ch. 15--What Is Sexual Abuse? (p. 109)
9. Ch. 17--What Is Emotional Abuse? (p. 120)
  - Touch on Topic 6
10. Chapter 19 Abuse and Psychological Symptoms (p.130) --\*\*focus\*\*
  - a. Ch. 20—Trauma and Addictive or Compulsive Behavior –question #1 only
  - b. Ch. 26—Self-Destructive Behaviors—question #3 only
11. Chapters 21 & 29
  - a. Ch. 21—Abuse and Relationships (p. 141)
  - b. Ch. 29—Relationships (p. 196)
12. Ch. 8--Intimacy and Trust (p. 62)—touch on 9 & 10 briefly
  - a. Ch.9--Female Sexuality (p. 68) & Ch. 10--Sex with a Partner (p. 74)
13. *Attachment-Themed Fables*

#### **PART III: ADVANCED TRAUMA RECOVERY ISSUES**

14. Topic 22--Family—Myths and Distortions (p. 153)
15. Ch. 24--Decision Making: Trusting Your Judgment (p. 167)—save time to talk about decision making related to forgiveness, etc.
  - Ch. 27--Blame, Acceptance, and Forgiveness (p. 184)
16. Ch. 33--Closing Ritual (p. 219)—and repeat Brochure About M

## Appendix E—Week 2

### Psycho-education on Attachment Theory

## Attachment theory: Background Information **for Co-leaders**

### (Specific outline for facilitating the group starts on page 7)

#### ❖ History

- John Bowlby transformed the thinking of his era in terms of the significance of the bond between an infant and his or her primary caregiver
- Developed based on his ethological studies of the biological and survival needs of primates (and other animals) and his observational studies of neglected children
  - Contributions from developmental psychology, systems theory, psychoanalytic theory, and others, i.e. an integrated theory
- According to Bowlby, humans, from birth, are instinctively motivated to develop close relationship bonds that provide a safe haven from danger and anxiety
  - People need safe havens throughout their lives
- He showed the critical importance for a baby/child to have a stable, secure bond with a primary caregiver, because this bond helps shape personality and emotional development and impacts relationship quality throughout life (Bowlby describes this as “cradle to grave”)
  - Attachment theory is not meant to explain all facets of human personality or describe the whole parent-child relationship, but it does provide valuable insight into aspects of relationships and emotional development
  - Bowlby believed attachment styles can change at any point in life through new, healthy relationship experiences
  - Over 100 studies have explored the relationship between adult attachment and anxiety and depression; overall findings are that the more secure the attachment style of the person, the less severe the symptoms of depression and anxiety

#### ❖ Key Concepts

- **Attachment**=emotional bond characterized by maintaining connection with a specific person especially during times of stress



- Infants and children seek closeness to their primary caregivers in times of need to protect themselves from perceived danger and to alleviate distress (have a hierarchy of attachment figures after the primary)
  - But, babies/children are also very curious and it is in their natures to want to explore the world
- Example: when a mom is holding a baby and the baby ducks her head and cuddles close into the mom's body when meeting a new person but also peaks out at this stranger while mom is talking to this new person.
- If the primary caregiver is consistently attuned and appropriately responsive to the child's particular needs more often than not, a secure base will be formed over the course of repeated interactions
    - **Secure base**→ a caregiver who provides emotional containment and soothes the child when distressed and also promotes curiosity and exploration
    - Secure relationships—the caregiver is sensitive and responsive to the infant/child's needs, and this child then learns that others in the world are trustworthy, that closeness is safe and beneficial, and that he/she does not need to fear abandonment
      - Responsible and available caregivers provide protection from overstimulation and threat, teach social interaction and other skills, and also sense when the baby needs some space
      - A child with a secure base can venture away from his or her primary caregiver with growing confidence, for the child knows the caregiver is a safe haven, readily available for comfort, assistance, or encouragement to offset any feelings of distress and fear that might arise in the course on his or her adventures.
    - Insecure relationships—caregiver repeatedly acts in ways that are insensitive, unresponsive, inconsistent and/or inappropriate (for example, neglects on-going crying from the infant); the child learns that others are unavailable, unreliable, or untrustworthy and so this child may fear abandonment, avoid his/her own needs, or feel very emotionally vulnerable
      - Without a secure base children can grow up struggling with things like trust, low self-esteem, and unhealthy connectedness (clinginess or aloofness in their relationships)
    - These early attachment patterns influence future relationships in adulthood

- 2 ways that relationships are affected throughout life → Internal Working Models and Affect Regulation
  - Babies learn how to soothe themselves first through their experiences of being soothed by the primary caregiver → this leads to an ability for **affect regulation** (being able to maintain an optimal arousal level, i.e. not over or under stimulated)
    - If the caregiver is soothing during stress the infant/child learns to turn towards the attachment figure to feel secure and comforted
    - Once the child has this felt security, he/she can resume healthy, natural exploration of his/her world
    - Over time these examples allow the child to learn how to self-soothe and appropriately rely on others when needed
  - Based on early experiences with attachment figures, babies/children develop a general set of ideas (mental schemas or mental representations), that are predominantly unconscious, about how much they can count on others when they are in need as well as ideas regarding themselves as worthy and loveable or not...
    - **Internal Working Model (IWM)** → internalized sets of beliefs, based on early experiences with caregivers, that guide thoughts, feelings, reactions, perceptions, predictions, and behaviors in relationships throughout people's lives
    - IWMs are activated automatically in social situations and are not something a person typically is aware of
    - IWMs contain views of self, others, and the world
    - IWMs can also be thought of as an imaginary lens that colors how we look at relationships and focuses our attention in a particular way
    - Develop more than one IWM but there is usually one that predominates, likely because used most frequently and recently
- Example: Nothing was ever good enough for Judy's parents. She brought home a 96 on a test and they asked what about the other 4 points. Now, she constantly feels like her performance at work is lacking in some way and anxiously awaits criticism from her boss.

#### ❖ **Adult Attachment Styles**

- Descriptions of adults with different attachment styles, based on their early life experiences with caregivers, represent dimensions more so than discrete categories because people don't typically fit purely in one category but instead have more or less characteristics of attachment anxiety and avoidance:

- In general, there is 1 type of secure attachment (secure) and 3 types of insecure attachments (preoccupied, dismissing-avoidant, and fearful/disorganized)
  - Brief Overview:
    - Secure adults → increased marital satisfaction; more close friends; can struggle with issues like anyone else but are able to seek support when needed and benefit from the support they receive; and, they offer support to others, empathize, demonstrate compassion, and are forgiving
    - Insecure adults (all 3 types) → struggle to stay engaged with others when their feelings are hurt; less frustration tolerance; less successful at offering support; harder for them to manage conflict; struggle with relationship breakdowns
  
- Attachment anxiety and avoidance, when viewed together, can be conceptualized in terms of 4 dimensional quadrants (see page 9 for diagram)
  - **Attachment security**
    - Low attachment avoidance and low attachment anxiety
    - Positive view of self and positive expectations of others availability
    - Can express and share their emotions; adaptively regulate affect and use constructive means of coping
    - Comfortable with intimacy and autonomy; higher self-esteem and regard for others; higher levels of cognitive organization and cognitive consistency
    - Better able to express emotion and resolve conflicts
  
  - **Preoccupied**
    - High attachment anxiety and low attachment avoidance
    - negative view of self and positive view of others
    - A strong need for closeness, and fear of being rejected
    - Strong need for approval
    - Can overwhelm others with their needs
    - Can seem clingy
    - Need others to help them regulate emotions
    - Functioning based on strong emotions like anxiety, dependence, anger, jealousy; often relate to others in ways that are extreme and opposite (idealization-deprecation)

- Risk-taking or addictive behavior for affect management
- Stick with unhealthy relationships
- Primary attachment figures didn't accurately empathize with or emotionally regulate this person as a child, so he/she never learned to reflect on his/her feelings, desires, and intentions as separate from those of others
- Trouble expressing opinions
- **Dismissing-avoidant**
  - High attachment avoidance and low attachment anxiety
  - Develops a positive view of self and negative view of others
  - Difficulty experiencing or expressing emotions; avoid emotions that stir up feelings of vulnerability
  - Excessive need for self-reliance and fear of depending on others and distance from others to avoid relying on anyone for help
  - Minimize meaning/impact of negative (traumatic, interpersonal) events
  - Perceives and presents him or herself as strong, normal, and self-reliant
  - Discomfort with intimacy
  - Might seem narcissistic (all about me)
  - Have never felt known
  - Limited ability to look inward and know feelings because caregiver did not engage in these behaviors which limited development of this skill
  - Denial of distress and sometimes hostile and oppositional, especially around any signs of what they deem weakness
- **Fearful/disorganized**
  - Many complex trauma survivors are this style
  - High attachment anxiety and high attachment avoidance
  - Caregivers have often been a contradictory source of both comfort and danger and this person anticipates the same behavior from others (including the therapist) whom they approach with longing and fear
  - Highly dysregulated emotions
  - Use approach-avoidance behavior
  - Interaction style can seem confusing
  - Overtly distressed, depressed, have social issues and occupational ones
  - Poor impulse control, dissociation, self-loathing, and chronic hopelessness

❖ **Attachment theory and therapy:**

- Use the information from the attachment screening as your guide, before the group even begins, to develop some understanding of the needs of each member. This

group is an opportunity for the members to engage in new relational experiences that contradict early attachment failures and create repairs in attachment styles and relationships in and outside of group.

- By keeping attachment styles in mind, from the get-go, you can better conceptualize and empathize with the group members in terms of their symptoms, emotional regulation capacities, interpersonal skills, and their attitudes and engagement in therapy.
  - Helps the therapist with anticipating potential issues and reactions
- Group members need to feel as if the group, and you, as therapists, provide a secure base that they can use for comfort when distressed and safety for exploring new ways of thinking, feeling, and living.
  - This is likely the most critical function for the co-leaders
- Bowlby proposes 5 key therapeutic tasks for functioning within an attachment model:
  1. Provide a secure base built on felt security, trust, support, and encouragement
  2. Promote exploration on the ways each member engages in relationships in the present based on faulty IWMs of self and other, i.e. biased feelings, perceptions, etc.
  3. Focus on the relationship between therapist and client (for our purposes—therapists and group members and between-group members)
  4. Encourage clients to examine how current perceptions, expectations, and feelings about relationships may be rooted in earlier experiences of relationships in childhood or adolescence
  5. Explore how clients' IWMs may not be helpful or appropriate in the present or future

➤ See Outline that follows

## Therapist's outline to follow during group

- GTQ drawing

- Before beginning the discussion, provide each member with a blank piece of paper and a pencil. See the GTQ (attached on page 9) ...ask each member to diagram their family. Tell them that it can be helpful if they use placement to depict closeness and size to reflect status.
- Once completed have each member turn it over and set aside for later discussion

- Handout: “Learning Your Attachment Style Can Light Up Your Life” by Dr. Becker-Phelps—go through this handout carefully with the group (therapist copy on pages 10-12)

- Make copies of the “for group members” version of this handout and give to each member (see page 13)
- Clarify that these descriptions represent dimensions more so than discrete categories because people don't typically fit purely in one category but instead have more or less characteristics of attachment anxiety and avoidance
- NOTE: After discussing the secure attachment style (i.e. right before going over the 3 types of insecure attachment styles) make sure you highlight that these insecure attachment behaviors you will be discussing likely served them well when in abusive, neglectful, or unhealthy relationships in that they helped them survive challenging times the best ways they knew how. These behaviors likely have become problematic in the present, but they are not indications of being inadequate, incapable, or unintelligent!! They are products of earlier relationship experiences and are capable of being changed into healthier ways of being so that they can be happier and healthier.

- Return to GTQ

- Have members take out Family-of-Origin drawing and discuss in light of the information above
- Members who wish to can hold up their drawings and explain what it means to them or just describe what they drew
- Others members can be prompted to provide feedback to the member who just shared
- Members can be asked what kind of attachment style they think they have

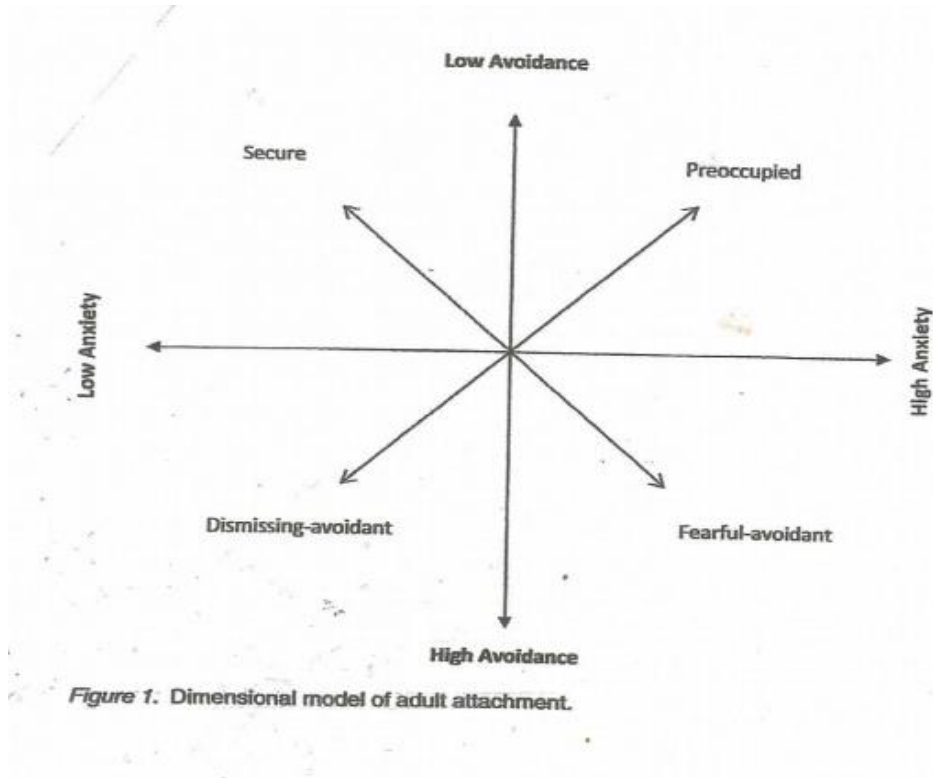
- End on note of hope about change being possible: Reiterate that attachment styles can change through new relational experiences and the fact that they are in this group is a great example of already taking steps towards health and healing.

**Group Therapy Questionnaire (MacNair-Semands, 2004)**

Diagram your family. It can be helpful if you use placement to depict closeness and size to reflect status.



**Dimensional Model of Adult Attachment Styles (Marmarosh et al. (2013))**





## Learning Your Attachment Style Can Light Up Your Life

### *Therapist's Guide*

(by Leslie Becker-Phelps with “add-ins” by present researcher)

- Have you ever walked through your home when it's pitch black and stumbled over something? Most likely, you would have stepped over that shoe or walked around that box if the lights were on. But they weren't. The same thing happens for us psychologically; we trip over the things we cannot see. And, what's worse, we often don't know how to turn on the light, so we keep tripping.
- One of the invisible obstacles that we don't see is our style of relating to others. It can create conflict, anger, loneliness, depression, anxiety, and a host of other kinds of distress. We begin learning right from birth how to relate to people. As infants, we respond to the expressions we see in our parents' eyes. Particularly through the early years of childhood, we form our understanding of who we are and how others will respond to us. Our style of attachment to our primary caregivers plays an important part in how we connect to others through our lives.
  - **Add-in:**
    - Predominantly parents, but can also be other important people in our lives
    - We can have different attachment styles with different people but we tend to mainly rely on one, especially in situations with new people
    - Based on these interactions, we form sets of beliefs that we often are not aware of that guide thoughts, feelings, reactions, perceptions, predictions, and behaviors in relationships throughout our lives
    - These sets of beliefs contain views about ourselves, others, and the world
    - It is like an imaginary lens that colors how we look at things and focuses our attention in particular ways
    - The attachment style we develop from our early experiences are generally stable throughout our lives but can be altered by important life events and new relational experiences
- One way to think about attachment styles involves people's levels of avoidance and anxiety. People can range from low to high on each of these. This lays out **four basic styles of attachment:**
  - **Add-in:** These descriptions represent dimensions more so than discrete categories because people don't typically fit purely in one category but instead have characteristics of attachment anxiety and avoidance)—draw quadrant on board to demonstrate

- **Secure Attachment** (low avoidance, low anxiety): If you relate positively to others and yourself, you probably have a secure attachment style. Securely attached people are generally happy in their relationships, feeling that they and others are sensitive and responsive to each other. They sense that connection can provide comfort and relief in times of need. They also feel that they are good, loved, accepted, and competent people.
  - **Add-in:**
    - Caregivers provided a secure base filled with comfort when needed and encouragement to explore the world once calm again.
    - They learned how to manage their emotions without becoming overly distressed or shutting down which helps them deal with conflict and relationship stress as adults.
    - *“Can you think of anyone on TV, in the movies, or in a book that this description reminds you of? Do you know anyone like this in your own life, now or in the past? Would this person be a role model for you-why or why not?”*

✚ **Add-in:** Make sure you highlight that the insecure attachment behaviors you will be discussing likely served them well when in abusive, neglectful, or unhealthy relationships in that they helped them survive challenging times the best ways they knew how. These behaviors likely have become problematic in the present, but they are not indications of being inadequate, incapable, or unintelligent!! They are products of earlier relationship experiences and are capable of being changed into healthier ways of being so that they can be happier and healthier.

- **Preoccupied Attachment** (low avoidance, high anxiety): If you are always worried about what others think of you and don't really factor in your thoughts and feelings, this style of attachment most likely fits you. People with a preoccupied attachment style feel a powerful need to be close to others, and they show this by clinging. They need a lot of validation and approval. They are concerned that others don't value them, and they also doubt their own worth in relationships. So, they often worry a lot about their relationships.
  - **Add-in:**
    - *“What do you think it feels like to be in a relationship with someone who is clingy like this? What do you think a person with this attachment style needs to feel more secure?”*

- **Dismissing-Avoidant Style** (high avoidance, low anxiety): Although the need for connection is biologically wired in people, those with this style of attachment deny it.

They like to see themselves as independent and self-sufficient; and they minimize the importance of relationships. To keep their relationships unimportant, they suppress or hide their feelings. They also often think of other people less positively than they think of themselves. When faced with rejection, they cope with it by distancing themselves.

- **Add-in:**

- *“What do you think it feels like to be in a relationship with someone who is so emotionally distant? What do you think a person with this attachment style needs to feel more secure?”*

- **Fearful-Avoidant Style** (high avoidance, high anxiety): People with this style of attachment tend to think of themselves as flawed, dependent, and helpless. And, they think they aren't worthy of loving or caring responses from their partners. Thus, they don't trust that others see them positively, and they expect to get hurt. So, although they want to be close to others, they also fear it. Understandably, they often avoid intimacy and suppress their feelings.

- **Add-in:**

- *“While it is not true for everyone, this attachment style is often associated with people who grew up in abusive families. Does that make sense based on the description? If so, how? If not, why not?”*

- In thinking about personal connections in this way, you can naturally see how people often get in their own way of developing healthy relationships. Their established ways of viewing themselves and others are like invisible obstacles that trip them up. Although they know that their relationships are less than fulfilling, they fail to see that their attachment style is the problem - that it prevents them from moving freely toward the close connection they need.
- Recognizing your style or pattern of relating, switches on the light, allowing you to see how you help or hinder your relationships. You can also decide to be different - or at least decide to work on changing your approach and step around that no-longer-invisible obstacle.

<http://www.psychologytoday.com/blog/making-change/201105/learning-your-attachment-style-can-light-your-life>

**\*\*\*Copy the handout on page 13 for client**

## Learning Your Attachment Style Can Light Up Your Life

By Leslie Becker-Phelps, Ph.D.

- One way to think about attachment styles is based on the work of Kim Bartholomew and involves people's levels of avoidance and anxiety. People can range from low to high on each of these. This lays out four basic styles of attachment:

- Secure Attachment (low avoidance, low anxiety): If you relate positively to others and yourself, you probably have a secure attachment style. Securely attached people are generally happy in their relationships, feeling that they and others are sensitive and responsive to each other. They sense that connection can provide comfort and relief in times of need. They also feel that they are good, loved, accepted, and competent people.

- Preoccupied Attachment (low avoidance, high anxiety): If you are always worried about what others think of you and don't really factor in your thoughts and feelings, this style of attachment most likely fits you. People with a preoccupied attachment style feel a powerful need to be close to others, and they show this by clinging. They need a lot of validation and approval. They are concerned that others don't value them, and they also doubt their own worth in relationships. So, they often worry a lot about their relationships.

- Dismissing-Avoidant Style (high avoidance, low anxiety): Although the need for connection is biologically wired in people, those with this style of attachment deny it. They like to see themselves as independent and self-sufficient; and they minimize the importance of relationships. To keep their relationships unimportant, they suppress or hide their feelings. They also often think of other people less positively than they think of themselves. When faced with rejection, they cope with it by distancing themselves.

- Fearful-Avoidant Style (high avoidance, high anxiety): People with this style of attachment tend to think of themselves as flawed, dependent, and helpless. And, they think they aren't worthy of loving or caring responses from their partners. Thus, they don't trust that others see them positively, and they expect to get hurt. So, although they want to be close to others, they also fear it. Understandably, they often avoid intimacy and suppress their feel.

<http://www.psychologytoday.com/blog/making-change/201105/learning-your-attachment-style-can-light-your-life>

## Part 2: Attachment Psycho-education--Information for therapists

Purpose: How to “infuse” attachment-based work in your TREM session; how to conduct group therapy from an attachment mindset

--Cognitive and Emotional Elements:

- **Cognitive:**
  - Use attachment-based language to help clients understand their thought, feelings, and behaviors
    - Example: Talk about the link between “view of self” and early relationships or how managing one’s feelings is first learned without even realizing it during those early attachment years
  - Present comments as possibilities for them to consider
    - Link early and/or significant attachment experiences to present functioning
    - Example: “Sue, I wonder if it is hard for you take in Liz’s care and concern, because you have not been able to count on people who were supposed to care about you. Recently your husband has been emotionally cut-off from you, but I am even thinking way back as a young child when your mom would be “checked out” most of the time.” What do you think?”
      - ✓ Remember: therapy activates internal working models and these views of self and others get re-enacted in session
  - Help the client and encourage the group to reassess or reappraise internal working models based on cognitive distortions of inadequacy or guilt or views of others as always manipulative and threatening
  - Reflect on and conceptualize each client’s behavior, thoughts, and feelings as reflections of their attachment styles
    - Use this perspective to interpret their behavior for yourself so that you can respond in the most attuned way possible
    - Use the attachment style information to help guide you in knowing when to tread lightly, back off, or go deeper
    - Example: The client who talks incessantly and seems over-invested in everyone else’s business and then gets really upset when she thinks no one gives her that kind of attention in return. If you know she has a preoccupied attachment style, she may seem less challenging or frustrating because you can keep in mind where the behavior comes from and plan

for how to help her build a secure group attachment so that she can let that annoying behavior go.

- **Experiential/Emotional/Body-based**

- Think Right Brain which is in charge of emotions and is mostly unconscious
  - Attachment experiences are incorporated into the right brain's implicit (unconscious) procedural memories as internal working models (schemas) of coping in relationships in terms of affect regulation
- Attachment bond is a bond of emotional communication that is expressed through the bodily based emotional states
- Attachment bonds are co-created so the clients need us to be attuned to them and for us to help get the connection back on track when it goes off
  - Some of the best learning comes from rupture and repairs because perfect attunement is impossible at all times
- Attunement comes not just from the words spoken, but more importantly, from the right brain communications which happen implicitly and are non-verbal; the body will reflect the emotions so pay attention to:
  - Voice tone and rhythm
  - Body posture
  - Gestures
  - Facial expressions
  - Voice volume and speed
  - Eye contact
  - Respiration rates
- Use your own nonverbal to help connect or sooth the clients and help them do this for each other; you can help with hyperarousal or hypoarousal by using tone, volume, eye contact, appropriate touch, etc.
  - Increase client's ability for accurately picking up on facial, vocal, or bodily cues of others
    - ✓ Have them stop check out their assumptions of what they think other group members are feeling towards them and/or tune in to their own body for signs of tension, tightness, numbness, etc. (i.e. help them to recognize arousal in their bodies) and help them be within a window of tolerance
    - ✓ Model and then encourage them to give reassurances to others with their facial expressions and tone
    - ✓ Help them to recognize signs of hurt or pain or frustration on someone else's face

## ❖ **Specific attachment styles**→

- **Preoccupied group member:**
  - Often at first as charming and dedicate group members but also fragile and pleasers; desperate for approval and to not be abandoned
  - Often good at mirroring the other members and making them feel special and validated
  - Easily become frustrated, resentful, disappointed, and angry
  - Needs lots of reassurances and closeness—excessively so which can suffocate other members and the co-leaders
  - Dismissing members may be disgusted with them or have no patience for their neediness
  - Easily overwhelmed by their feelings and need help putting feelings into words and gaining some distance from their feelings
  - Be curious and offer interpretations tentatively for preoccupied member to reflect on
  - Example: “Jane, I wonder if it is difficult for you to look within yourself for answers to this very personal problem because there is this fear inside of you that worries that if you do, we won’t be around to help you anymore if you need us?”
  - Example: in response to tense interchange— “Brenda, how do you think Alice feels about you right now?”; “Alice, is that accurate?”
  - Example: “Krista, how does it feel to hear that you cutting yourself makes Lucy scared?”
  - Example: “Krista, it seems as if your self-criticism gets in the way of taking in Lucy’s compliment. What do you think makes it difficult to hear?”
  - Example: “How did you feel the moment after Lucy said she was worried about you?”
- **Dismissing-Avoidant Group Member:**
  - Less facial gazing, vocal or physical supportiveness, or attentive listening
  - Only like to show their strengths; acts like they don’t need the group
  - Rejects feedback
  - Often first to drop out
  - Might seem arrogant
  - Often respond well to CBT because emotions are harder for them to deal with
  - Example: “Randi, you have been taking care of yourself for so long that it makes me wonder how that might affect how you feel towards Nancy. What do you think?”
  - Example: “Randi, for a moment I saw something in your eyes, and it looked like you just felt sad right now?”

- Example: “Nancy, can you share with Randi about your experience with him earlier in the group?” “Randi, what do you hear Nancy saying?”
- Example: “Let’s do quick shaking out of our arms and legs to wake ourselves up and keep us in the room.”
  
- Fearful Group Member:
  - Can be hard to get a clear picture of them because they oscillate between characteristics of preoccupied and dismissing
  - Many trauma survivors
  - Drop out risk
  - Need to be extra perceptive and careful to subtle nonverbals
  - Usually either drawn to secure or dismissing group members
  - Sense of safety in group especially important
  - Support with distress tolerance
  - Lots of empathy needed and express this through body language and reflective statements
  - Example: “Joan, do you mind if we continue with this a bit longer?”
  - Example: “Joan, I think I sensed something in your voice like frustration? I can easily accept you saying you are fine and not frustrated but I wanted to double check because feelings like that are too important to ignore.”



## Examples of Typical Attachment-Informed Responses by Therapists

(Taken or adapted from Marmarosh et al., 2013)

1. Example: in response to Sue crossing her arms tightly across her chest and looking down after Liz expressed worry for her--“Sue, I wonder if it is hard for you take in Liz’s care and concern, because you have not been able to count on people who were supposed to care about you. Recently your husband has been emotionally cut-off from you, but I am even thinking way back as a young child when your mom would “checked out” most of the time.” What do you think?”
2. Example: in response to Jane repeatedly saying that she did not know why she was feeling or acting the way she was in regards to a personal issue-- “Jane, I wonder if it is difficult for you to look within yourself for answers to this very personal problem because there is this fear inside of you that worries that if you do, we won’t be around to help you anymore if you need us?”
3. Example: in response to a tense interchange— “Brenda, how do you think Alice feels about you right now?”; “Alice, is that accurate?”
4. Example: “Krista, how does it feel to hear that you cutting yourself makes Lucy scared?”
5. Example: “Krista, it seems as if your self-criticism gets in the way of taking in Lucy’s compliment. What do you think makes it difficult to hear?”
6. Example: “How did you feel the moment after Lucy said she was worried about you?”
7. Example: in response to Dave getting irritated with Mary who was sharing about her worsening symptoms during their last group session: “I can see you are both getting upset. Dave, I imagine you were trying to be helpful. I wonder what it was like for you to hear that Mary was feeling panicky again as we are ending group?”
8. Example: in response to Nancy describing why she felt annoyed at Rob for his comment about her not being independent enough: “Rob, what do you hear Nancy saying?”
9. Example: in response to a group member saying she was too anxious to lean on another client for support— “If you weren’t so anxious, what would it feel like to know Kim wanted to hug you?”
10. Example: in response to a group member crying and saying she felt desperately alone and empty: “Who, in the group, do you feel least lonely with? (the group member says Jamie) ...OK, can you look at Jamie and share with her how you are feeling right now? You can just focus on her and tell her what you are feeling.”
11. Example: in response to Randi rolling her eyes when Nancy was talking about how her husband takes care of all her needs--“Randi, you have been taking care of yourself for so long that it makes me wonder how that might affect how you feel towards Nancy. What do you think?”

12. Example: in response to therapist noticing a change in body language--“Randi, for a moment I saw something in your eyes, and it looked like you just felt sad right now?”
13. Example: in response to Randi saying and doing things that might have hurt Nancy’s feelings earlier in group. “Nancy, can you share with Randi about your experience with him earlier in the group?” “Randi, what do you hear Nancy saying?”
14. Example: “Let’s do quick shaking out of our arms and legs to wake ourselves up and keep us in the room.”
15. Example—therapist senses Sam is feeling some deep feelings but cannot put words to it, so she is helping him name them— “...all this rage and pain seems like it is eating you up inside and keeping you alone. Does that sound like what is going on inside of you?”
16. Example: the therapist wants to focus on in-group behaviors so that Sharon can see how she comes across in the here and now— “Julie, can you help Sharon understand how you came to see her as not caring about what you were saying in the group?”
17. Example: the leader is hoping to facilitate a corrective relational experience: “I can see you are withdrawing, Joanna and withdrawing may feel like the best thing to do right now—it is familiar for you...it can feel like the best option. But I think you have much going on inside of you that the group does not know about and keeps you from feeling understood. This is an opportunity to do something differently and maybe feel differently—better- because of it.”

# Appendix F

## Week 6

### Attachment—view of self; view of others; group attachment building

#### **Title: The Body Remembers What the Mind Forgets, PART 2: How the Self Acts, Reacts, and Reenacts in Relationships Based on the Past**

(think of body in terms of brain and behavior, i.e. attachment as a behavioral system in the brain and how this system is affected by trauma in ways that may be forgotten, minimized, or not recognized)

(Reminder—the legacy of early (and to some degree, later) attachment experiences is the impact it has on view of self and others as well as emotional regulation (i.e. how one behaves in relationships and interacts with others in terms of emotional reactivity and ability to manage these emotional reactions))

#### **Goals:**

1. Forming more accurate views of self and others
  2. Understanding the connection between the brain, trauma, and the struggle to feel positive about yourself
  3. Using the group as a self-soothing/emotional regulation strategy
- 

### ***Key Points***

(see p. 3 for *order of steps* to conduct this activity)

#### **--Brochures ...**

- Remind them that when they write down the 8 or so things they think about themselves, we are not just asking for positives, but a true representation of qualities of how they see themselves
- ***BEFORE REVIEWING RESPONSES:*** Ask the group if it is OK for them to put the part of them that is skeptical about believing in their worth and taking in compliments on a shelf (we are not asking them to give up that skepticism because it has likely served a survival/protective function for them and we are not trying to take it away; we are just asking if the part of them that is starting to feel safe in the group and trust the group can

be in charge right now while the part that is skeptical of their worth watches from the wings)

- **ALSO: BEFORE REVIEWING RESPONSES:** Take several deep *breaths* and center themselves into a mindful state by focusing on their breath and shining a *flashlight* inward to notice and body tensions and breath relaxation into those parts)
  
- Also, as part of this discussion (again, see p. 3 for specific outline of order of steps), handout **graphs** of their specific individual (dyad) and group attachment styles to further this point of the struggle to take in the good and to have accurate views of self or use graphs to demonstrate how their reactivity plays out in relationships (in other words, use the graphs to help them understand how their relationship patterns made sense for their survival in the past but may not be serving them well now)
  - You will likely need to review some information from week 2 in order for them to make sense out of their graphs; briefly give a few describing words for each attachment style
    - Remind them that they may possess more or less of these qualities based on where the dot is located, i.e. may be in dismissing region but close to secure so may have some qualities of secure
    - Can have different styles with different people but one tends to be their “knee-jerk” style, especially in new situations
    - Changeable
    - Based on questionnaires that have a good chance of accurately representing them but may not be a perfect representation
  
- **Discuss** (*if time*) some of the recent **brain science** that can help explain their reactivity and trouble absorbing the good (handout on brain)
- Have them take a few breaths and again focus flashlight inward to notice how they feel in their body now post-activity (relaxed? Tightness anywhere? Lighter? Heavier?)
  - This breathing and focusing inward part makes this more experiential which is critical for promoting growth and change
  
- Message of HOPE—activities like this help build new neural pathways as does the next activity...

--**Don't forget: Group in a Pocket**

## **Step-By-Step Guide**

**\*\*2 activities this week (both included here)**

### **Brochure about ME—Adapted Version**

(Repeat last group session 16)

- Originally designed by Debbie Cook, CTRS, CLP of New Hampshire Hospital on February 10, 1999 (<http://www.recreationtherapy.com/tx/txself.htm>)
  - Basic concept utilized but adapted by the present researcher to fit the needs and purpose of attachment-informed TREM group
  
- Size of Group: 4 minimum
- **Equipment:** Boxes of markers or pens, one sheet (8.5 x 11) of paper per person and 8-10 post-it notes for each member
- **Objective:** To facilitate participants sharing feedback with other group members regarding view of self
  
- **Description:** Have each *group member* write her first name on both side of the paper they were each given. Mark one side “side 1” and the other side “side 2.” On the first side ask each member to write a list of at least 8 qualities that she thinks describe the kind of person she is. Prompt them to think mainly about internal qualities but some external ones are OK too. Also, suggest they try to be as specific and descriptive as possible, i.e. not just “nice”. Instruct them to **flip the page over to side 2**, and then pass the paper to their **right**. Ask them to look at the paper now in front of them and to write down 1-2 qualities that they think **describe the person** whose paper is now in front of them. Have them place a **post-it** over what they have written so that no one else can see it. Continue in this fashion until each member has her **original paper back**.
  
- **Order of activities:**
  - Do the writing and passing portion of the activity.
  - Do not read them immediately!! Put aside for the moment.
  - Brief attachment review (p.2); copy and give out handout again describing styles (included in this section)

- Give graphs; explain their meaning (draw example on flip chart)
  - Explain how taking in the good can be really hard and our attachment styles help to explain that struggle as well as the way the brain functions for many people after trauma
- Comment on shelving skepticism (p.1)
- Breathe. Flashlight. Ground.
- Go over brochure—give them a few minutes to read the responses privately to themselves and then generate whole group discussion with the following prompts
- Flashlight again.  
(don't forget group pocket activity after discussion)

➤ **Discussion:** Prompt with the following questions:

- Would anyone like to read both sides of her paper to the group?
- What was it like to read things others had written about you?
- Were you surprised about anything that was written? Confused? Any other feelings?
- What do you agree or disagree with that was written?
- Does anyone want to ask the group for clarification about something that was written?
- Can you think of examples of things you have said or done that might have led another member to write a particular quality down on your paper? Can you ask the group to offer examples of actions or comments they remember you making that fit a particular descriptor?
- How will you use this information outside of group in terms of how you interact with others in your life?

**DO 2<sup>nd</sup> ACTIVITY...**

## **Putting the Group in Your Pocket—Week 6**

(Marmarosh & Corazzini, 1997)

- ❖ This activity will be implemented as designed. Its creation evolved from the first author's group experience of encouraging the group members to think of their group as being with them in their natural worlds during upsetting times.

- ❖ **Equipment:** Index cards (one for each member); pens or markers
- ❖ **Objective:** facilitating group members' internalization of the group and fostering secure group attachments
- ❖ **Description:** The members are asked to write the initials (or first name only) of each group member on their cards. They are then instructed to carry the group card with them for the whole week between-groups and to pull out the card as a prompt to think of the group whenever they encounter distressing situations, feel alone, or need support.
- ❖ **Discussion:** Prompt with the following questions:
  1. Can someone share when they used the card, i.e. what were the circumstances?
  2. How did it feel to use the card?
  3. Any barriers to using the card?
  4. In general, how do you think the group is functioning? Issues? Successes?
  5. Ask the members to continue to keep the card with them throughout the duration of the group.
- ❖ **Follow up—**Besides initial discussion during weeks 7 and 9

## Appendix G

### EFT

**Based on the work of Gary Craig <http://www.emofree.com/>**

- **Other resources:** <http://www.total-health.com/EFT/eft.html>; Curran, 2009
- Emotional Freedom Technique (EFT) is based on ideas that have existed for over 5,000 years and were discovered by the Chinese.
- It is based on the energy system of acupuncture.
- Combines: exposure, cognitive restructuring, waking hypnosis and relaxation with tapping on pressure points while repeating a phrase out loud
- It keeps our energy running smoothly in the body. Stimulates or balances the body's energy system. (Balances the brain to bring some calm???)
- Sometimes our energy system short-circuits/gets disrupted which may send too much energy to some parts of the body and not enough to other parts.
- It can be very helpful when people cannot shift patterns of thinking. For example, cannot stop thinking of yourself as stupid no matter how often people say you are smart or how often you say it to yourself. Even if you recognize that it is a cognitive distortion (not rational), it is still hard to let go of feeling stupid.
  - It is getting at this feeling through the body instead of trying to deal with obstacles that our conscious thinking can put up as barriers.
- We will be tapping parts of our head and body that correspond to meridians or main energy channels.
  - A more scientific explanation has been proposed for how it works: physical stimulation, i.e. tapping, of certain pressure points during exposure to trauma or an upsetting thought may send deactivating signals directly to the amygdala or the fear center of your brain resulting in rapid reduction of maladaptive fear.
  - Some researchers argue effect is more because placebo, desensitization, or distraction rather than energy flow
- Unlike like plain affirmations, EFT has you identify a problem and label it with a phrase so you set up the initial zzzt (short circuit) that is behind the scenes so tapping has something to resolve (i.e. activates)
- Basic procedure; but also can add hand tapping and the 9 gamut



- One article says just rubbing the gamut spot can be calming even if you do not do the actual 9 gamut procedure (which is a good add on if basic recipe is not helping enough)
  - Some variations in order and wording so you may seem some slightly different steps if you go to different websites but the general steps are very similar:
    1. Identify the issue—any negative experience or emotion—and observe how it feels to you. Some approaches add on: As you summon up the feeling locate where you feel it in your body and name the feeling.
    2. On a scale of 0-10, how intense is this feeling (10 is worst)
    3. We are going to *firmly tap* with *at least 2 fingers* on the “karate chop” spot or *rub* the “sore spot” (go 3 in down and 3 over from the “u”) as we say a sentence 3x.
      - a. “Even though I have this bells palsy, I deeply and completely accept myself.”
      - b. “Even though I have this feeling, I deeply and completely accept myself.
      - c. “Even though I’m doing this silly tapping thing, and not quite sure what I am doing, that is OK I’m just learning.”
      - d. “Even though I am scared, I am safe and OK.”
    4. Now we are going to go through 8 tapping points and instead of saying this whole sentence, we will just say a reminder phrase as we tap 5-7x (no need to count).
    5. We will end with “Top of Head” (TH) but not all do so (some start with TH ).
      - Eyebrow (inner) (EB)
      - Side of Eye (SE)—bony part right outside of eye
      - Under Eye (UE)—bony part about 1 inch under eye in line with center of pupil
      - Under Nose (UN)—midway between nose and upper lip
      - Chin (CH)-midway between chin and lower lip
      - Collarbone (CB)—find “u” and go 1 inch down and 1 inch over
      - Under arm (UA)—4 inches below the arm pit
      - Top of Head (TH)
    6. Test the intensity again—can repeat until you hit zero or plateau at some level—can do other 2 parts if not zero—hand and gamut
-

Trauma...

When we experience an overwhelming situation, an intense surge of energy in the form of thoughts, emotions, and physical sensations surges through us. The energy meridians and acupuncture points do their best to transport and hold the excess energy generated.

Sometimes, this creates an overload to our energy system and causes it to crash like a computer can crash when there is too much information or a power surge. EFT comes in to help release the burden of this excess charge trapped in the memory of the trauma with the tapping techniques.

During EFT, emotions are given attention and acknowledged and gradually released, until the excess energy is cleared helping to restore balance in our energy system.

The set-up statement allows the emotion to simply be, without resistance or rejection of our self. This acceptance, along with tuning in which occurs when you give the problem an intensity rating, brings the emotion into the present moment.

Under these conditions, the emotion can be safely felt and expressed because we make a distinction between the emotion being unacceptable while we are still acceptable.

By focusing on the problem/emotion the underlying energy disruption is activated. In this way, the timing of the tapping coincides with the energy disruption and can help push the energy through to restore the flow of energy.

Similarly, as described by Laurel Purnell (Tapping In) and Linda Curran (personal communication via a workshop, 2015) the concept of dual awareness is relevant in that we are allowing for rewiring (“fire together, wire together”) when we consider the problem at the same time as self-acceptance. This is new information for the brain (I have an issue but I am still OK/safe/worthy) to process (create new neural networks) while “starving” the old neural pathways of the same old rut of searing into our brains a connection between the problem and our own sense of inadequacy, worthlessness, or self-blame.

## Appendix H—Week 13

### Discussion Questions for Fables

#### ❖ “Better Safe Than Sorry” (Harris, 2003)

1. What do you think about the choices the main character in this fable made?
2. How could she have balanced safety with enjoying the world outside of her house?
3. How safe or anxious do you feel in the world?
4. What is your safe haven now? As a kid?
5. How much of your life is ruled by fear?
6. When you look at the relationships in your life, do you push people away when you are upset or pull them in close? Does anyone ever tell you that you keep them too close?
7. What is more upsetting for you—events out in the world or situations in your own life (friends, family, work, etc.)? Why?
8. Anything else you want to ask or share about this story?

#### ❖ “Attachment” (Friedman, 1990)

1. Do you think life would be simpler or better (or not) if people lived as they do on the island in the story?
2. How would you feel being so connected to your partner all the time?
3. How much alone time do you need? Do you get it? How do you feel and what do you think about when you are alone?
4. Why do you think they stopped living this way after the main character left?
5. How would you feel if the islanders did not seem upset or to care that you were leaving? Why do you think they were not upset when the main character left?
6. The islanders never felt anxiety, anger, depression, or loss for very long, if at all, because of their constant bond with another...would you feel less of these emotions if you were more bonded with someone? Are there other ways not to be overwhelmed by these emotions?
7. Were the islanders’ bonds special or just functional?
8. Anything else you want to ask or share about this story?

#### ❖ “Jean and Jane” (Friedman, 1990)

1. Do you think Jean could be described as having a secure attachment style? Why or why not? What about Jane?

2. Jean reflected on her patterns of behavior around others to try to understand why she was unhappy—do you ever do this? If so, what have you discovered about yourself?
3. Jean thought Jane was better than her—how did this affect her behavior? Do you compare yourself to others? If so, how does it make you feel?
4. Are you more like Jean or Jane? Who would you rather be like?
5. Why do you think it was so hard for Jean to connect with her therapist?
6. Do you find it hard to talk to your therapist? Why or why not? How can a therapist help a client feel more comfortable talking about themselves and their pasts?
7. Do you think Jean's perceptions of Jane changed after seeing her outside of the therapist's office?
8. Anything else you want to ask or share about this story?

# Appendix I

## Fidelity Checklist Sample

### Week 2

# Clients in Group Today: \_\_\_\_\_

Task	Response	
	Yes	No
Agenda #1		
Agenda #2		
Agenda #3		
Exercise #1		
Exercise #2		
Topic <b>2</b> — Exercise #3		
Introduce Group Care Motto		

Task	Response	
	Yes	No
Psycho- education		
GTQ drawing		
Identification of Attachment Style		
Highlight relational feelings		

## Appendix J –TREM/ATREM Questionnaire

**Please answer the following:**

- Age: \_\_\_\_\_ years old
- Ethnicity (circle): (1) Caucasian (White) (2) African-American (3) Hispanic  
(4) Other
- Highest grade completed in school: \_\_\_\_\_
- Relationship Status (circle one ): (1) Married (2) Divorced (3) Significant Other  
(4) Single (5) Widowed
- Employment Status (circle one): (1) Working (2) Not working (3) Caregiver  
(4) Not Working Due to Disability

➤ **Please read each of the following statements and rate the extent to which you believe each statement best describes your feelings about close relationships.**

	Not at all Like Me	2	Somewhat Like Me	3	4	Very Much Like Me	5
1. I am comfortable depending on others.....	1	2	3	4	5		
2. I often worry that romantic partners don't really love me.....	1	2	3	4	5		
3. I find it difficult to trust others completely.....	1	2	3	4	5		
4. I worry about others getting too close to me.....	1	2	3	4	5		

5. I am comfortable having other people depend on me.....	1	2	3	4	5
		<u>Not at all</u>	<u>Somewhat</u>	<u>Very Much</u>	
		<u>Like Me</u>	<u>Like Me</u>	<u>Like Me</u>	
6. My desire to merge completely sometimes scares people away.....	1	2	3	4	5
7. I am nervous when anyone gets too close to me.....	1	2	3	4	5
8. I often worry that romantic partners won't want to stay with me.....	1	2	3	4	5
9. I worry about being abandoned.....	1	2	3	4	5
10. I am somewhat uncomfortable being close to others.....	1	2	3	4	5
11. I find that others are reluctant to get as close as I would like.....	1	2	3	4	5
12. Romantic partners often want me to be closer than I feel comfortable being.....	1	2	3	4	5
13. I find it relatively easy to get close to others.....	1	2	3	4	5

➤ **We would now like you to consider your involvement in any kind of social group such as clubs, sports teams, church groups, neighborhood gatherings, extended family gatherings, etc. Please circle the number on the scale that best describes your feelings for each statement.**

Strongly <u>Disagree</u>	Strongly <u>Agree</u>
-----------------------------	--------------------------

14. I find it difficult to allow  
myself to depend on my group.....1 2 3 4 5 6 7

Strongly  
Disagree

Strongly  
Agree

15. I sometimes worry that I will be hurt  
if I allow myself to become too close  
to my group.....1 2 3 4 5 6 7

16. I want to feel completely at one with  
my group.....1 2 3 4 5 6 7

17. I find it relatively easy to get close to  
my group.....1 2 3 4 5 6 7

18. I prefer not to depend on my group or  
to have my group depend on me.....1 2 3 4 5 6 7

19. I often worry that my group does not  
really accept me.....1 2 3 4 5 6 7

20. I am comfortable not being close to  
my group.....1 2 3 4 5 6 7

21. I often worry my group will not always  
want me as a member.....1 2 3 4 5 6 7

22. I am somewhat uncomfortable being  
close to my group.....1 2 3 4 5 6 7

23. My group is never there when I need it....1 2 3 4 5 6 7

24. I don't worry about being alone or not  
being accepted by my group.....1 2 3 4 5 6 7

25. I find my group is reluctant to get as close  
as I would like.....1 2 3 4 5 6 7



26. I am not sure that I can always depend on my group to be there when I need it.....1 2 3 4 5 6 7

Strongly Disagree \_\_\_\_\_ Strongly Agree

27. Often my group wants me to be more open about my thoughts and feelings that I feel comfortable being.....1 2 3 4 5 6 7

28. I sometimes worry that my group doesn't value me as much as I value my group.....1 2 3 4 5 6 7

29. I am comfortable depending on my group.....1 2 3 4 5 6 7

30. I know that my group will be there when I need it.....1 2 3 4 5 6 7

31. I want to be emotionally close to my group, but I find it difficult to trust my group completely or to depend on my group.....1 2 3 4 5 6 7

32. I do not often worry about being abandoned by my group.....1 2 3 4 5 6 7

- **Please indicate how often the following statements about being upset apply to you. Write the appropriate number from the scale below on the line beside each item.**

1-----2-----3-----4-----5  
almost never            sometimes            about half the time            most of the time            almost always

- \_\_\_\_\_ 33. I am clear about my feelings.
- \_\_\_\_\_ 34. I pay attention to how I feel.
- \_\_\_\_\_ 35. I experience my emotions as overwhelming and out of control.
- \_\_\_\_\_ 36. I have no idea how I am feeling.
- \_\_\_\_\_ 37. I have difficulty making sense out of my feelings.
- \_\_\_\_\_ 38. I am attentive to my feelings.
- \_\_\_\_\_ 39. I know exactly how I am feeling.
- \_\_\_\_\_ 40. I care about what I am feeling.
- \_\_\_\_\_ 41. I am confused about how I feel.
- \_\_\_\_\_ 42. When I'm upset, I acknowledge my emotions.
- \_\_\_\_\_ 43. When I'm upset, I become angry with myself for feeling that way.
- \_\_\_\_\_ 44. When I'm upset, I become embarrassed for feeling that way.
- \_\_\_\_\_ 45. When I'm upset, I have difficulty getting work done.

- \_\_\_\_\_ 46. When I'm upset, I become out of control.
- \_\_\_\_\_ 47. When I'm upset, I believe that I will remain that way for a long time.
- \_\_\_\_\_ 48. When I'm upset, I believe that I will end up feeling very depressed.
- \_\_\_\_\_ 49. When I'm upset, I believe that my feelings are valid and important.
- \_\_\_\_\_ 50. When I'm upset, I have difficulty focusing on other things.

1-----2-----3-----4-----5  
 almost never            sometimes            about half the time            most of the time            almost always

- \_\_\_\_\_ 51. When I'm upset, I feel out of control.
- \_\_\_\_\_ 52. When I'm upset, I can still get things done.
- \_\_\_\_\_ 53. When I'm upset, I feel ashamed at myself for feeling that way.
- \_\_\_\_\_ 54. When I'm upset, I know that I can find a way to eventually feel better.
- \_\_\_\_\_ 55. When I'm upset, I feel like I am weak.
- \_\_\_\_\_ 56. When I'm upset, I feel like I can remain in control of my behaviors.
- \_\_\_\_\_ 57. When I'm upset, I feel guilty for feeling that way.
- \_\_\_\_\_ 58. When I'm upset, I have difficulty concentrating.
- \_\_\_\_\_ 59. When I'm upset, I have difficulty controlling my behaviors.
- \_\_\_\_\_ 60. When I'm upset, I believe there is nothing I can do to make myself feel better.
- \_\_\_\_\_ 61. When I'm upset, I become irritated at myself for feeling that way.
- \_\_\_\_\_ 62. When I'm upset, I start to feel very bad about myself.
- \_\_\_\_\_ 63. When I'm upset, I believe that wallowing in it is all I can do.
- \_\_\_\_\_ 64. When I'm upset, I lose control over my behavior.

- \_\_\_\_\_ 65. When I'm upset, I have difficulty thinking about anything else.
- \_\_\_\_\_ 66. When I'm upset I take time to figure out what I'm really feeling.
- \_\_\_\_\_ 67. When I'm upset, it takes me a long time to feel better.
- \_\_\_\_\_ 68. When I'm upset, my emotions feel overwhelming.

➤ **The next group of questions asks about various upsetting events that some people have experienced in their lives. Please circle yes or no to indicate whether or not you have experienced each one.**

69. When you were young, before age 18, did you ever see physical violence between family members? This would include hitting, kicking, punching, and other acts like these.

YES or NO

70. Have you ever been emotionally abused or emotionally neglected? This would include being frequently shamed, embarrassed, ignored, repeatedly told you were "no good", or other experiences like these.

YES or NO

71. Have you ever been physically neglected? This would include not fed, not properly clothes, left to take care of yourself when you felt you were too young or too ill, or other experiences like these.

YES or NO

72. Have you ever been physically abused by someone you knew well? This would include a family member, boyfriend, girlfriend, spouse, or someone else you knew well. Physical abuse includes being hit, choked, burned, or beaten, locked up, shut in a closet, tied up, or chained, or other experiences like these.

YES or NO

73. Have you ever been physically abused or attacked by a stranger or someone you did not know well? This would include being hit, choked, burned, beaten, locked up, tied up or chained, or other experiences like these.

YES or NO

74. Have you ever been robbed, mugged, or physically, *not sexually*, attacked by a stranger or someone you did not know well?

YES or NO

75. Have you ever seen a robbery, mugging, or attack taking place?

YES or NO

76. Have you ever been stalked or had anyone threaten to kill or seriously harm you?

YES or NO

77. Have you ever been strip searched, forcibly restrained, or held against your will by a provider of mental health or substance abuse services?

YES or NO

78. Have you ever been discriminated against in a way that was highly distressing or disturbing because of your race, ethnic group, gender, sexual orientation, religion?

YES or NO

79. Been the victim of a hate crime? Have violence directed at you because of your race, ethnic group, gender, sexual orientation, religion?

YES or NO

80. Have you ever been bothered or harassed by sexual remarks, jokes, inappropriate touching, or demands for sexual favors by someone at work or school?

YES or NO

81. Have you ever been touched or made to touch someone else in a sexual way because you felt forced in some way or threatened by harm to yourself or someone else?

YES or NO

82. Have you ever had sex because you felt forced in some way or threatened by harm to yourself or someone else?

YES or NO

83. Have you ever had unwanted sex in exchange for money, drugs, or other material goods such as shelter or clothing?

YES or NO

**Below is a list of problems that people sometimes have after experiencing a traumatic event. Please rate on a scale from 0-3 how much or how often these following things have occurred to you in the past month:**

0-----1-----2-----3  
Not at all            Once per week            2 to 4 times per            5 or more times  
                                 or less/a little            week/somewhat            per week/very much

- 84. Having upsetting thought or images about the traumatic event that come into your head when you did not want them to \_\_\_\_\_
- 85. Having bad dreams or nightmares about the traumatic event \_\_\_\_\_
- 86. Re-living the traumatic event (acting as if it were happening again) \_\_\_\_\_
- 87. Feeling emotionally upset when you are reminded of the traumatic event \_\_\_\_\_
- 88. Experiencing physical reactions when reminded of the traumatic event (sweating, increased heart rate) \_\_\_\_\_
- 89. Trying not to think or talk about the traumatic event \_\_\_\_\_
- 90. Trying to avoid activities or people that remind you of the traumatic event \_\_\_\_\_
- 91. Not being able to remember an important part of the traumatic event \_\_\_\_\_
- 92. Having much less interest or participating much less often in important activities \_\_\_\_\_
- 93. Feeling distant or cut off from the people around you \_\_\_\_\_
- 94. Feeling emotionally numb (unable to cry or have loving feelings) \_\_\_\_\_
- 95. Feeling as if your future hopes or plans will not come true \_\_\_\_\_
- 96. Having trouble falling or staying asleep \_\_\_\_\_
- 97. Feeling irritable or having fits of anger \_\_\_\_\_
- 98. Having trouble concentrating \_\_\_\_\_
- 99. Being overly alert \_\_\_\_\_
- 100. Being jumpy or easily startled \_\_\_\_\_

➤ **This section is asking about your drug and alcohol use for two different time periods—for the past 30 days and in your lifetime. For lifetime use, we are interested in the number of years that you used 3 or more times per week (do not count the years you used less than 3x/wk). So...**

- In the past 30 days, how many days have you used each of the following...
- AND
- In your lifetime, how many years would you have used each of the following 3 times or more per week...

	In the Past 30 days (# Days)	Lifetime Use of 3 times or more per week (# years)
101. Alcohol (any use at all)? .....	_____	_____
102. Alcohol (to intoxication)? .....	_____	_____
103. Heroin? .....	_____	_____
104. Methadone? .....	_____	_____
105. Opiates (painkillers)? .....	_____	_____
106. Barbiturates? .....	_____	_____
107. Sedatives/Hypnotics/Tranquilizers? (like, “Benzos”,Ativan, Xanax) .....	_____	_____
108. Cocaine? .....	_____	_____
109. Amphetamines? (like, Speed, Ritalin) .....	_____	_____
110. Cannabis (marijuana)? .....	_____	_____
111. Hallucinogens? (like, LSD, PCP, Ecstasy).....	_____	_____
112. Inhalants? (like, “Whippits”, Glue,“Poppers”) .....	_____	_____
113. More than one substance per day		

including alcohol? .....

- **Next is a list of problems people sometimes have. Read each one and circle the number that best describes how much that problem has distressed you or bothered you during the past 7 days, including today.**

	<u>Not At All</u>	<u>A little Bit</u>	<u>Moderately</u>	<u>Quite a Bit</u>	<u>Extremely</u>
114. Feeling no interest in things.....0	1	2	3	4	
115. Nervousness or shakiness inside.....0	1	2	3	4	
116. Feeling lonely.....0	1	2	3	4	
117. Feeling Tense or keyed up.....0	1	2	3	4	
118. Feeling blue.....0	1	2	3	4	
119. Suddenly scared for no reason.....0	1	2	3	4	
120. Feelings of Worthlessness..... 0	1	2	3	4	
121. Spells of terror or panic.....0	1	2	3	4	
122. Feeling hopeless about the future.....0	1	2	3	4	
123. Feeling so restless					



you couldn't sit still.....0                                 1                                 2                                 3                                 4

Not At All     A little Bit     Moderately     Quite a Bit     Extremely

124. Thoughts of ending your life.....0                                 1                                 2                                 3                                 4

125. Feeling fearful.....0                                 1                                 2                                 3                                 4

➤ **We return for the last time to your current relationships. In answering the following questions, think about your current relationships with friends, family members, co-workers, community members, and so on. Please write the number on the line as to what extent each statement describes your current relationships with other people.**

STRONGLY DISAGREE            DISAGREE                    AGREE                      STRONGLY AGREE  
   1                                   2                                   3                                   4

126. There are people I can depend on to help me if I really need it. \_\_\_\_\_

127. I feel that I do not have close personal relationships with other people. \_\_\_\_\_

128. There is no one I can turn to for guidance in times of stress. \_\_\_\_\_

129. There are people who depend on me for help. \_\_\_\_\_

130. There are people who enjoy the same social activities I do. \_\_\_\_\_

131. Other people do not view me as competent. \_\_\_\_\_

132. I feel personally responsible for the well-being of another person. \_\_\_\_\_

133. I feel part of a group of people who share my attitudes and beliefs. \_\_\_\_\_

134. I do not think other people respect my skills and abilities. \_\_\_\_\_

135. If something went wrong, no one would come to my assistance. \_\_\_\_\_

136. I have close relationships that provide me with a sense of emotional security and well-being. \_\_\_\_\_

STRONGLY DISAGREE  
1

DISAGREE  
2

AGREE  
3

STRONGLY AGREE  
4

137. There is someone I could talk to about important decisions in my life. \_\_\_\_\_

138. I have relationships where my competence and skill are recognized. \_\_\_\_\_

139. There is no one who shares my interests and concerns. \_\_\_\_\_

140. There is no one who really relies on me for their well-being. \_\_\_\_\_

141. There is a trustworthy person I could turn to for advice if I were having problems. \_\_\_\_\_

142. I feel a strong emotional bond with at least one other person. \_\_\_\_\_

143. There is no one I can depend on for aid if I really need it. \_\_\_\_\_

144. There is no one I feel comfortable talking about problems with. \_\_\_\_\_

145. There are people who admire my talents and abilities. \_\_\_\_\_

146. I lack a feeling of intimacy with another person. \_\_\_\_\_

147. There is no one who likes to do the things I do. \_\_\_\_\_

148. There are people who I can count on in an emergency. \_\_\_\_\_

149. No one needs me to care for them. \_\_\_\_\_