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**CONTRIBUTIONS TO THE STUDY OF VIOLENCE AND TRAUMA:  
MULTISYSTEMIC THERAPY, EXPOSURE THERAPY, ATTACHMENT STYLES AND  
THERAPY PROCESS RESEARCH.**

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**ABSTRACT**

The prevention of future violence through engaging violent adolescents in multisystemic therapy and the treatment of trauma with exposure therapy are two of the most important scientific advances in the field of interpersonal violence in the past 20 years. A particularly significant methodological innovation is the development of reliable and valid measures of both childhood and adult attachment, because attachment deficits and their remediation are central to understanding and treating perpetrators of violence. In the coming decades, we need to refine existing treatment programmes to make them effective for cases currently classified as treatment-resistant. This will involve psychotherapy process research on the interaction between therapeutic mechanisms of change and unique personal vulnerabilities of treatment-resistant cases.

## **MAJOR SUBSTANTIVE CONTRIBUTIONS OF PAST TWO DECADES**

The prevention of future violence through engaging delinquent adolescents and members of their social networks in multisystemic therapy (Henggeler, 1999) and the treatment of trauma with exposure therapy and adjunctive skills training (Carr, In Press; Keane, 1998) are two of the most important scientific advances in the field of interpersonal violence in the past 20 years.

### **Multisystemic therapy**

In the 1980s Scott Henggeler (1999) and his colleagues developed MST. They were partly motivated by conclusive evidence which showed that out-of-home residential placements in juvenile detention centres or hospitals - the main approach to treating violent youngsters - was ineffective, potentially harmful and extremely costly (Aos, Phipps, Barnoski, & Lieb, 1999; Dishon, McCord & Poulin, 1999). Multisystemic Therapy (MST) is a home-based intensive and highly effective approach to treating antisocial children and adolescents. Involvement in violence becomes a thing of the past for a significant proportion of youngsters who receive this form of treatment (Henggeler & Lee, 2003). MST developed out of structural and strategic family therapy (Carr, 2000a; Haley, 1976; Minuchin & Fishman, 1981). However, with MST, Henggeler widened the focus of intervention to include not just the family system, but the individual and community systems also (Henggeler, Schoenwald, Borduin, Rowland, Cunningham, 1998; Henggeler, Schoenwald, Rowland, Cunningham, 2002). This elaboration of family therapy was informed by relevant research on the aetiology of antisocial behaviour.

Longitudinal studies show that a proportion of children and adolescents with antisocial behaviour problems grow up to become violent antisocial adults (Earls & Mezzacappa, 2002). Whether or not antisocial youngsters become violent adults is

determined by multiple risk and protective factors (Rutter, Giller, & Hagell, 1998). Such factors include individual strengths and vulnerabilities, family characteristics, and features of the wider community (including the peer group, school and neighbourhood). Learning difficulties, difficult temperament and problems with regulating negative emotions are examples of individual risk factors, while easy temperament and good problem-solving skills are examples of individual protective factors. Examples of family-based risk factors include insecure attachment, family violence and family disorganization, while examples of protective family factors include secure attachment, parental co-operation and effective discipline practices. Membership of deviant peer groups and a low level of family support are examples of community-based risk factors. In contrast, involvement with non-deviant peers and a high level of family support are examples of protective factors.

In MST it is assumed that because antisocial behaviour is caused and maintained by many factors within a youngsters multisystemic social network, effective treatment involves identifying specific factors relevant to each case, and then tailoring a multisystemic intervention package to modify these (Henggeler et al., 1998, 2002). Consideration is given to individual, family, and extrafamilial factors. Intervention may be necessary in any one, or a combination of these systems. In this sense MST rests on a social-ecological conceptualization of adolescent violence (Bronfenbrenner, 1979).

MST is guided by a set of nine principles (Henggeler et al., 1998; 2002). First, assessment aims to identify the links between the identified problems and the youngster's systemic context. Second, in therapy there is a focus on the use of individual, family and systemic strengths as a basis for change. Treatment techniques are integrated from empirically supported cognitive behavioural therapy and pragmatic family therapies. Third, interventions are designed to promote responsible behaviour and decrease irresponsible behaviour. Fourth, interventions address well-defined problems in a present-focused and

action-oriented way. Fifth, interventions aim to modify sequences of behaviour within the youngsters network that maintain their key problems. Sixth, interventions are developmentally appropriate and take account of youngsters' ages and families' lifecycle stages. Seventh, interventions require daily or weekly effort. Eighth, effectiveness is evaluated continuously from multiple perspectives, and treatment providers assume accountability for overcoming obstacles to successful therapy. Ninth, interventions are designed to promote treatment generalization and long-term maintenance of therapeutic change by empowering parents to address youngsters' needs in the home, school and community.

Treatment lasts about 4 months. However, during treatment there may be up to 15 contact hours per week as required. To facilitate this, therapists have low caseloads, intensive regular supervision, and operate a 24-hour on-call service. MST is offered by trained therapists with maximum caseloads of 4-6 families. Therapists operate in teams of 2-4 members and receive weekly supervision from designated, expert MST supervisors, with one supervisor allocated half-time to each MST therapy team. Treatment manuals; regular supervision; routine evaluation of treatment and supervision with integrity checklists; and the provision of regular weekly phone consultation to therapists and supervisors at MST sites ensures treatment fidelity.

Nine treatment outcome studies (including three controlled trials) have been published and for 7 of these follow-up data from 1-4 years have been reported (Henggeler & Lee, 2003). Compared with routine services, MST leads to a significant reduction in violent offending, drug abuse, school problems, mental health problems and a significant improvement in personal adjustment and family functioning. MST has been shown to be effective for male and female youngsters from 12-17 years and for both African-American and white families. Economic analyses of outcome data have shown that MST is less

costly and more effective than routine community based services and residential services (Schoenwald, Ward, Henggeler, Pickrel, Patel, 1996).

MST is unquestionably one of the most important contributions of the past two decades to our scientific understanding of how to prevent antisocial youngsters from growing up to be violent men.

### **Exposure therapy**

While MST focuses on perpetrators, exposure therapy offers survivors of violence a way to resolve the psychological fallout from victimization. Following traumatic violence about a third of individuals develop post-traumatic stress disorder (PTSD), a syndrome characterized by re-experiencing the traumatic event, the use of avoidant coping strategies to cope with traumatic memories, emotional numbing, and hyperarousal (APA, 2000; WHO, 1992). Re-experiencing of the traumatic event may present as recurrent flashbacks or nightmares and intensification of distress when exposed to reminders of the event. With avoidance, cognitive and behavioural strategies are used to avoid thoughts, feelings, activities, or situations associated with the trauma. Attempts to avoid external situations associated with the trauma may lead to a constricted lifestyle. Attempts to suppress negative affect associated with the trauma may lead to generalized constricted affect, an inability to have tender or loving feelings, and problems with making and maintaining relationships. Drug and alcohol abuse may also occur as a way of avoiding trauma-related affect. With hyperarousal a variety of difficulties may occur including an exaggerated startle response, hypervigilance, poor concentration, irritability or outbursts of anger, and difficulty falling or staying asleep.

In the 1980's, Terence Keane (Keane et al., 1998) and his team found that exposure therapy was effective in treating the PTSD symptoms of Vietnam War veterans.

Exposure therapy, involves prolonged and repeated recollection of traumatic memories until they no longer elicit severe anxiety. Keane et al (1985) proposed that PTSD symptoms could be explained by a two factor conditioning theory. Through classical conditioning, cues present at the time of the trauma that were paired with trauma experiences which elicited extreme trauma-related anxiety, later elicit similar post-traumatic anxiety and intrusive memories. Repeated exposure to these cues, in the absence of traumatic events, would lead to extinction, but people suffering from PTSD avoid these cues, and this avoidance is negatively reinforced through instrumental conditioning. According to this formulation, exposure therapy works by promoting extinction of the classically conditioned anxiety response (or habituation to trauma memories and cues), and blocking negative reinforcement of avoidance responses.

Foa (Rothbaum & Foa, 1999) and others (Brewin, 2001; Ehlers & Clark, 2000), impressed by changes in beliefs and memory functioning of trauma survivors have proposed cognitive models of PTSD. Foa argues that traumatic events lead to the establishment of memory fear-structures, which include many representations of traumatic stimuli and responses and beliefs about these. These memory fear-structures are activated by trauma-related information resulting in PTSD symptoms (Rothbaum & Foa, 1999). Exposure therapy corrects pathological elements of the fear-structure by promoting habituation and blocking negative reinforcement of avoidant responses as suggested by Keane et al (1985), but also by promoting cognitive changes. These include, modifying the spurious belief that anxiety persists indefinitely unless avoidance occurs; facilitating the incorporation of safety information into the trauma memory; facilitating realization that the trauma was a specific occurrence rather a representation of a dangerous world; and reframing PTSD symptoms as a sign of mastery and courage rather than evidence for personal incompetence.

Controlled evaluations of exposure therapy have shown that it is effective in alleviating PTSD symptoms in adult survivors of rape (Foa & Rothbaum, 1997), children who have survived CSA (Carr, In Press; Enright & Carr, 2000), and survivors of other diverse forms of violence (Rothbaum & Foa, 1999). Exposure therapy reduces PTSD symptoms including nightmares, flashbacks, intrusive traumatic memories, avoidant coping, emotional numbing, hyperarousal, concentration impairment, irritability and anger (Carr, In Press; Enright & Carr, 2000; Keane et al., 1998; Rothbaum & Foa, 1999).

Professional guidelines for the treatment of PTSD in children and adults have been developed, based on the results of extensive treatment outcome research (Cohen, 1998; Foa, Davidson & Frances, 1999; Foa, Keane & Friedman, 2000; Vernberg & Vogel, 1993). The standard exposure treatment program consists of 9 to 12, 90-minute sessions and includes three key components (1) psychoeducation about trauma reactions; (2) imaginal exposure involving repeated recounting of the traumatic memories until habituation occurs; and (3) in-vivo exposure to trauma-related cues such as situations or objects that, despite being safe, are feared and avoided and compromise the survivor living a full life. In addition to the core components of exposure therapy, additional elements may be added. These include self-monitoring of PTSD symptoms, sleep management training, coping skills training to manage anxiety, anger, and sexual urges (in the case of CSA victims), cognitive restructuring to address spurious catastrophic post-traumatic beliefs, and relapse prevention. With children and adolescents, parent training is essential to equip parents with the skills required help them facilitate their children's recovery. With adults, to equip partners with the skills to help them facilitate their spouse's recovery, the psychoeducational sessions may include partners, and couples therapy focusing on conjoint problem-solving and communication skills may be conducted.

Exposure therapy is unquestionably one of the most important contributions in the past two decades to our scientific understanding of how to help survivors of violence overcome the crippling psychological fallout from victimization.

### **METHODOLOGICAL INNOVATION: ASSESSMENT OF ATTACHMENT STYLES**

John Bowlby (1969, 1973, 1980, 1988) proposed that the quality of attachment between an infant and caregiver formed a template for the development of relationships in later life. Specifically, he proposed that secure early attachment to caregivers, associated with an attuned responsive parenting style, leads in later life to positive peer relationships, fulfilling romantic relationships and productive parental relationships. In contrast, insecure or disorganized early attachment, associated with unresponsive, neglectful or abusive parenting, leads in adulthood to problematic, neglectful, abusive or violent romantic and parental relationships, and to problematic relationships with peers. Empirical research provides growing support for Bowlby's theoretical predictions (Dosier, Stovall, & Albus, 1999; Lyons-Ruth & Jacobvitz, 1999). A particularly significant methodological innovation, arising from attachment theory has been the development of reliable and valid procedures for evaluating attachment styles (Crowell, Fraley & Shaver, 1999; Solomon & George, 1999) including the Strange Situation (Ainsworth, Blehar, Waters & Wall, 1978), the Adult Attachment Interview (George, Kaplan & Main, 1996) and many self-report instruments including the Experiences in Close Relationships Scale (Brennan, Clark & Shaver, 1998). These assessment procedures and instruments have facilitated the scientific investigation of the continuity of insecure and disorganized attachment styles across the lifespan and their relationships to marital violence, child abuse, and offending behaviour (Lyons-Ruth & Jacobvitz, 1999). At a clinical level measures of attachment styles may routinely be incorporated into assessment protocols in evaluation studies of programmes for marital

violence, child abuse and neglect and the treatment of violent offenders (e.g. O'Reilly & Carr, 2004; Marsa, O'Reilly, Carr, Murphy, O'Sullivan, Cotter, & Heavy, 2004). This is particularly important because effective intervention programmes must help perpetrators of violence to develop internal working models of self and others and relationship skills associated with more secure attachment styles.

### **FUTURE PRIORITIES: THERAPY PROCESS RESEARCH**

MST programmes for violent youngsters (Henggeler, 1999), programmes for families at risk for child abuse (Edgeworth & Carr, 2000; O'Riordan & Carr, 2002), programmes sexual offenders (Carr, 2000b) and exposure therapy programmes for victims of violence (Carr, In Press; Rothbaum & Foa, 1999) have all been shown to helpful for some, but not all cases. In the coming decade, we need to refine existing treatment programmes in these and other areas to make them effective for cases currently classified as treatment-resistant. This will involve therapy process research on the interaction between clearly articulated and measured therapeutic mechanisms of change (such as engagement or exposure) and the unique personal vulnerabilities (such as attachment style) of treatment-resistant perpetrators and survivors.

### **CLOSING COMMENT**

MST, exposure therapy, and attachment style assessment procedures each arose out of very clearly articulated theoretical frameworks. In advancing future research on trauma and violence, particularly in the area of psychotherapy process research, we would do well to base this costly empirical work on clearly thought out hypotheses and to remember the apocryphal adage 'There is nothing more practical than a good theory'.

## WE SITES OF INTEREST

MST website : <http://www.msstservices.com/>

National Centre for PTSD: [http://www.ncptsd.org/facts/treatment/fs\\_treatment.html](http://www.ncptsd.org/facts/treatment/fs_treatment.html)

International Attachment Network Website: <http://www.attachmentnetwork.org/links.html>

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