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ASSESSING THE IMPLEMENTATION AND EFFECTS OF A TRAUMA-FOCUSED INTERVENTION FOR YOUTHS IN RESIDENTIAL TREATMENT

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This paper describes methods being used to implement and assess the effects of a trauma-focused intervention in residential treatment programs for youths with emotional and behavioral problems, and histories of maltreatment and exposure to family or community violence. Preliminary baseline profiles of the therapeutic environments and youths are also presented. The intervention, referred to as the Sanctuary Model® (Bloom, 1997), is based in social psychiatry,

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trauma theories, therapeutic community philosophy, and cognitive-behavioral approaches. Within the context of safe, supportive, stable, and socially responsible therapeutic communities, a trauma recovery treatment framework is used to teach youths effective adaptation and coping skills to replace nonadaptive cognitive, social, and behavioral strategies that may have emerged earlier as means of coping with traumatic life experiences.

KEY WORDS: adolescents; trauma intervention; residential treatment; evaluation.

INTRODUCTION

A large body of evidence has accumulated showing that traumatic life experiences, such as child maltreatment and exposure to family or community violence, are associated with developmental problems, increased risk of mental health problems, and aggressiveness. For example, studies examining the consequences of maltreatment at various life stages have shown that children who have been physically abused are more likely to be aggressive in day care and school (1–3), to display delinquent and serious violent behavior as adolescents (4,5), and to be arrested for violent crime as adults (6). Reviews of studies isolating the effects of sexual abuse on children have shown associations with increased posttraumatic stress symptoms, anxiety, depression, and sexual and behavioral problems (7). Studies have also documented the consequences of physical and sexual abuse on psychopathology in later adolescence and adulthood (8–14). In some cases, neglect has been found to have a more detrimental effect on development than abuse (15–17). Another body of research has documented associations between witnessing violence in the home and risk of victimization and perpetration of violence (5,18–21); and between exposure to community violence and disruptions in normal development, anxiety, depression, PTSD symptomatology (7,22–25), and increased aggression (26,27).

In reviewing interventions for children who have experienced trauma, associated with maltreatment or exposure to violence in home or community environments, Berliner (7, p.498) argued for trauma-specific treatment approaches that are "designed to change maladaptive thoughts, feelings, and behaviors associated with the traumatic event." However, relatively few studies have assessed the effectiveness of interventions to prevent or ameliorate the negative outcomes associated with traumatic life experiences (7,11,28–31). A comprehensive review of studies evaluating the effectiveness of programs, aimed at preventing

and treating violence, revealed only a dozen controlled studies of mental health interventions for children exposed to physical abuse and neglect, sexual abuse, and domestic violence (32). For example, positive child-level effects have been found in testing a therapeutic day treatment for preschoolers who had been abused and neglected (15); in a trial of peer-initiated social interactions for maltreated preschoolers (29); in comparing individual cognitive behavioral therapy with children and parents, family therapy, and routine community services (33); in cognitive-behavioral interventions for sexually abused children (34–36); and in group treatment interventions for children exposed to domestic violence (37–38).

This paper describes the methods being used to implement and assess the effects of a trauma-focused intervention in residential treatment programs for youths with emotional and behavioral problems, and histories of maltreatment and exposure to family or community violence. We also present preliminary baseline profiles of the therapeutic environments and of youths. The intervention, referred to as the Sanctuary Model® (39), is based in social psychiatry, trauma theories, therapeutic community philosophy, and cognitive-behavioral approaches. Within the context of safe, supportive, stable, and socially responsible therapeutic communities, a trauma recovery treatment framework is used to teach youths effective adaptation and coping skills to replace nonadaptive cognitive, social, and behavioral strategies that may have emerged earlier as means of coping with traumatic life experiences.

THE SANCTUARY MODEL

The Sanctuary Model was originally developed for adults and older adolescents in short-term, inpatient treatment but is currently being adapted for youths aged 12–20 years in residential treatment programs. Though the model is being adapted for a younger target population, it is being implemented in accord with the basic tenets of the original Sanctuary Model (39). The Sanctuary Model rests upon the basic premise that the therapeutic environment is a critical determinant in facilitating the recovery process. Successful implementation of the model requires not only the implementation of new treatment protocols, but also requires change in the program philosophy and milieu toward a nonviolent and community-oriented paradigm, change in the organizational culture, and change in attitudes and behavior of youth and staff as community members.

The SAGE Recovery Framework

The treatment approach utilized in the Sanctuary Model is organized around theoretical assumptions about the effects of trauma (40–42) and a therapeutic framework for facilitating client movement through four stages of recovery: *Safety* (attaining safety in self, relationships, and environment); *Affect modulation* (identifying levels of affect and modulating affect in response to memories, persons, events); *Grieving* (feeling grief and dealing with personal losses), and *Empowerment* (trying out new roles, ways of relating and behaving as a "survivor" to ensure personal safety and help others) (43). The SAGE framework accents the critical tasks needed to affect recovery from traumatic life experiences. The terminology used to describe the framework has been adapted slightly to facilitate youths' understanding of the meaning of these stages. Affect modulation is translated as emotional management; grieving is rephrased as loss; and empowerment is interpreted as focusing on the future. The SAGE recovery framework is integrated into the primary therapeutic modalities of the Sanctuary Model, which include the therapeutic community itself, community meetings, and psychoeducation exercises and groups.

Therapeutic Community

The basic philosophy of a therapeutic community emphasizes that the community itself is the most influential factor on treatment; that clients are responsible for their own treatment; that the operation and management of the community should be more democratic than authoritarian; and that clients can facilitate each others' treatment. The Sanctuary Model adds to these core values an emphasis on creating a "living-learning environment" (39, p.127) which is physically, psychologically, socially, and morally safe for both clients and staff. Problem-solving is encouraged on personal, interpersonal, and community levels. Staff strive to create a nonhierarchical working atmosphere. The professional roles and boundaries of staff are clearly distinguished from those of clients, without setting up physical or psychological barriers, and while empowering clients as influential community members and decision-makers (39).

The implementation of the Sanctuary Model, and subsequent changes in behavior and organizational climate, require a reiterative learning process. Implementation begins with eight hours of formal staff training in the basic principles of the model and methods of diffusing the model into the environment and all aspects of treatment. For example,

in training sessions staff begin to draft a Sanctuary Model mission statement for their units. Tools are also introduced that will be used in the psychoeducation program such as "safety plans," which offer safe and healthy alternatives for youths to engage in when feeling unsafe, upset, or uncomfortable.

Community Meetings

The notion of community is reinforced twice daily in community meetings that are aimed at teaching youths how to rely on their community and how to become caring and responsible community members. A protocol is followed in which all community members share feelings, state their goals for the day, ask for specific help from other members in achieving their goals, share successes at the end of the day, and discuss ways to solve community problems.

Psychoeducation Program

The psychoeducation program follows the SAGE recovery framework and is structured around protocols that are used daily in the residential units, and in formal weekly psychoeducation group sessions. The 12 session psychoeducation group curriculum incorporates knowledge of the developmental needs of youth, trauma theories, and cognitive-behavioral approaches to promote the development of accurate perceptions of self in relation to others, self esteem, social skills and accurate information processing, skills to identify and manage their emotions and behaviors, empathy and attachments to others, and problem-solving and decision-making strategies. New skills learned in the psychoeducation groups are practiced and reinforced in everyday activities on the unit, and to prepare for home and community passes.

On-going follow-up technical assistance and consultation are provided for staff in each residential unit to translate the Sanctuary Model philosophy, principles, and language into daily programming, team meetings, treatment planning, community meetings, and work with families.

METHODS

Design

The Sanctuary Model is being implemented in three residential programs that are located on one large campus in a suburb of the

northeastern part of the United States. Each program is composed of smaller residential units or cottages that serve from seven to sixteen youths. The Sanctuary Model was first piloted in five residential units, across the three programs, that self-selected to participate in the initial phase of the project. During this phase, the staff training protocol and manual was developed and piloted. The current study was designed to formally examine the implementation of the Sanctuary Model and to assess the proximal effects of the model on the therapeutic community and on selected attributes of youths' functioning and behavior. A comparison group design, with measurement at five points (baseline, 3,6,9, and 12 months), is being employed. Four residential treatment units, out of the 12 nonpilot units were randomly assigned to implement the Sanctuary Model in July, 2001. Eight other units, providing the standard residential program, serve as the usual services comparison group. Staff training in the new randomly assigned Sanctuary Model units took place between October, 2001 and January, 2002.

Sample

The three residential programs are operated by a large private mental health and social service agency. The programs provide residential, therapeutic, and special educational services for children and adolescents, referred primarily by public child welfare and mental health agencies. Youths aged 12 to 20 years were recruited to participate in the research study. The youth sample is composed of all youths for whom full informed written consent was obtained from custodial agencies, legal guardians, parents, and youths. The demographic composition of the youth sample is described in the results section of the paper. The staff sample is composed of staff that work in the program and who voluntarily elected to participate in surveys and focus groups through a process of fully informed, written consent. The human subjects protocol developed for this research project was reviewed and approved by the Columbia University Institutional Review Board and by state and city agencies that retain custody of youths.

Measures

Youth Demographics and History

Demographic and historical variables will be used to describe the characteristics and background of youths, to examine the equivalence of youths assigned to each research condition, and to assist in explaining

findings. These variables include age, gender, ethnicity, reason for referral, diagnosis at baseline, prior placement history, and duration of exposure to research conditions. Demographic and historical data are abstracted from client records at baseline. The Maltreatment Classification System (44) is being used as a protocol for gathering data on history of abuse and neglect from client records at intake. Exposure to violence in home, community, or neighborhood is assessed through youth self report using the My Exposure to Violence (My-ETV) instrument (45).

Outcome Measures

Therapeutic Environment. Two measures are being used to assess change in the therapeutic environments. First, the short form of the Community Oriented Program Environment Scale (COPES-S) (46), is being used to assess the extent to which units are operating as therapeutic communities. The COPES-S instrument was adapted slightly by deleting one scale originally intended to measure staff control and substituting this with a new scale intended to measure Sanctuary-specific dimensions related to the physical, social, and psychological safety of the environment for staff and clients. Second, trends in the occurrence of critical incidents (e.g., harm to self, others, or property) will be analyzed through accessing data from a centralized agency management information system.

Youth. Eight instruments are being used to measure specific attributes of youths that are hypothesized to be responsive to the Sanctuary Model. These measures include the Checklist of Child Distress Symptoms (47), the Rosenberg Self Esteem Scale (48), the Nowicki-Strickland Locus of Control Scale (N-SLCS) (49), the peer form of the Inventory of Parent and Peer Attachment (50), the Parent Adolescent Communication Scale (51), the Youth Coping Index (YCI) (52), the Social Problem Solving Questionnaire (53), and the Child Behavior Checklist (CBCL) (54).

Implementation

Progress in implementing the model is documented through consultants' process notes and periodic reviews of the Sanctuary Project Implementation Milestones checklist. The Milestones checklist contains a list of criteria by which implementation of the Model can be assessed (e.g., two community meetings are convened daily, community meetings

are jointly led by staff and residents; psychoeducation exercises are used on the unit to help youths identify and manage feelings). Qualitative data on staff perceptions of the course of implementation, and challenges in implementing the Model, are gathered through focus groups.

Data Collection

The Community Oriented Program Environment Scale was administered to direct care personnel in group surveys during October and November, 2001, as staff training on the new randomized Sanctuary Model units was being started. Baseline data on youths were collected between January and March, 2002, which coincided with the very early stages of model diffusion at the community level, but before the psychoeducation groups were implemented. Youth interviews were conducted individually by research assistants, typically in two 45 minute sessions. The parent form of the Child Behavior Checklist was completed by direct care staff, who were considered to be the primary counselors of individual youths for whom the questionnaires were completed.

Analysis

For this preliminary analysis, descriptive analyses were conducted only on baseline measures of the youths' demographic and background characteristics, the My Exposure to Violence (My-ETV) instrument, the Child Behavior Checklist; and on the baseline measure of the Community Oriented Program Environment Scale (COPES-S). Data were analyzed separately for the four randomly assigned Sanctuary Model residential units, and for the eight Standard Residential Services units. Because entire residential units were randomized to research conditions, and not individual youths, statistical analyses of group differences must take into account the clustering effects of unit-level randomization. Future papers will report results of these multi-level analyses that assess group differences while controlling for unit level variation.

RESULTS

Profiles of Youths

Preliminary results are presented for key descriptive measures of youths residing in the four randomly assigned Sanctuary Model (SM)

units and the eight Standard Residential Services (SRS) units. The results are considered to be preliminary because they represent approximately 80% of all youths for whom baseline data is being collected.

Demographics and Background Characteristics

Table 1 presents the demographic and background characteristics for 111 youths residing in the four randomly assigned Sanctuary Model (SM) units ($n = 48$) and the eight Standard Residential Services (SRS) units ($n = 63$). Ages ranged from 12 to 20 years, with a mean of 15.4 years. Youths in the SM units were somewhat younger than youths in the SRS units. Although there were more males than females in both groups, the proportion of females in the SM group was higher (38%) than in the SRS group (19%). A larger proportion of the SM group was black, not Hispanic (60%) than the SRS group (44%). Youths in both groups averaged six prior placements, including an average of three psychiatric hospitalizations. However, the SM group had a higher mean number of foster care placements (3.9) in comparison to the SRS group (2.6).

Youths' maltreatment history was abstracted from client records at intake which contained reports of the referring agencies, and psychosocial and psychiatric evaluations. The Maltreatment Classification System (44) was used to record incidents of abuse and neglect reported in the intake materials. Incidents were recorded by type and whether they were substantiated or alleged. Table 1 presents the number and proportions of youths whose records contained any incidents of substantiated maltreatment in the categories presented. The number columns do not add up to the total number of youths because youths may have experienced more than one type of maltreatment. For example, 23 youths in the SRS group, or 37% of the 63 youths in this group, had a history of at least one incident of substantiated physical abuse; 13% had at least one incident of substantiated sexual abuse; and 43% had at least one incident of substantiated neglect. The proportions were similar for the SM group. Results of an interrater reliability analysis will be presented in future papers.

Exposure to Violence

The My-ETV (45) surveys adolescents about lifetime and prior year exposure to a wide range of violent events that may be witnessed or actually experienced. The instrument was adapted for this study to ask about lifetime exposure only. Survey respondents indicate that they have or have not experienced each type of event. Results of the My-ETV

TABLE 1
Demographic and Background Characteristics of Youths

	Standard residential services ($n = 63$)				Sanctuary model ($n = 48$)			
	n	%	*M*	SD	*n*	%	*M*	SD
Age	63	100	15.7	(1.7)	48	100	15.0	(1.6)
Gender								
Male	51	81.0	—	—	30	62.5	—	—
Female	12	19.0	—	—	18	37.5	—	—
Ethnicity*								
Hispanic	24	39.3	—	—	13	27.1	—	—
Black, not Hispanic	27	44.3	—	—	29	60.4	—	—
White, not Hispanic	7	11.5	—	—	5	10.4	—	—
Asian, Orient., Pac. Isl.	1	1.6	—	—	—	—	—	—
Biracial	1	1.6	—	—	1	2.1	—	—
Other	1	1.6	—	—	—	—	—	—
Number of Prior Placements								
Total	60	95.0	6.1	(3.8)	47	97.9	6.3	(3.3)
In RTC	38	60.3	1.4	(0.6)	33	68.7	1.7	(1.5)
In Group Home	11	17.4	1.0	(0.0)	10	20.8	1.2	(0.4)
In Treat. Foster Care	14	22.2	1.5	(0.8)	1	2.1	1.0	(0.0)
In Foster Care	23	36.5	2.6	(2.3)	20	41.6	3.9	(2.0)
With Relatives	20	31.7	1.6	(1.6)	16	33.3	1.1	(0.3)
In Psychiatric Hospital	52	82.5	3.7	(2.3)	40	83.3	3.2	(1.8)
History of Maltreatment								
Any substantiated physical abuse	23	36.5	—	—	15	31.3	—	—
Any substantiated sexual abuse	8	12.7	—	—	6	12.5	—	—
Any substantiated neglect	27	42.9	—	—	23	47.9	—	—
Any substantiated maltreatment	44	69.8	—	—	34	70.8	—	—

*Percentages are calculated with $n = 61$ due to missing data.

are shown in Table 2 for 91 youths who have completed the questionnaire thus far. Youths in both groups appear to have witnessed, or been victims of, violence to a similar extent. The only major difference was on the item that asked if youths were ever seriously threatened with harm. More than twice as many youths in the SM group, than in the SRS group, responded in the affirmative to this item.

TABLE 2
Results of My Exposure to Violence (My-ETV)

	Standard residential services ($n = 46$)		Sanctuary model ($n = 45$)	
	n	%	*n*	%
Ever Witnessed?				
Seen someone else get chased?	37	80.4	32	71.1
Seen someone else get hit, slapped, punched, beaten up?	38	82.6	38	84.4
Seen someone else get attacked with a weapon (not getting shot at)?	19	41.3	19	43.2
Seen someone else get shot? (Wounded)	9	19.6	9	20.0
Seen someone else get shot at? (not Wounded)	10	21.7	7	15.6
Heard gunfire nearby?	32	69.6	31	68.9
Seen a serious accident where someone was hurt badly or died?	19	41.3	15	33.3
Seen someone killed violently?	7	15.2	4	9.1
Seen someone threaten to seriously hurt another person?	17	37.0	18	40.0
Found a dead body?	3	6.5	2	4.4
Ever Happened to You? (Victimization)				
Been chased?	25	54.3	23	51.1
Been hit, slapped, punched, beaten up?	35	77.8	30	68.2
Been attacked with a weapon (not getting shot at)?	9	19.6	12	26.7
Been shot? (Wounded)	0	0	0	0
Been shot at? (Not Wounded)	5	10.9	5	11.1
Been in a serious accident where you or someone else was hurt badly or died?	6	13.0	5	11.1
Been sexually assaulted, molested, raped?	5	11.1	4	8.9
Threatened by someone to seriously hurt you?	7	15.2	16	35.6

Overall, results show fairly high exposure rates for both groups. The proportions of youths reporting witnessing someone being hit, slapped, punched, or beaten up (83%–84%); or directly experiencing these types of events (68 %–78%) appear quite high, but might reflect the broadness of this question. More alarming are rates showing that 41% to 43% of youths have seen someone else attacked with a weapon, and that 20% to 27% have been attacked with a weapon themselves. Twenty percent have seen someone else shot, and 11% reported being shot at, but not wounded. Perhaps as an indicator of the inner city areas where many of these youths come from, 69% reported they have heard gunfire nearby. Future analyses will report on the frequencies of these events in the lifetimes of these adolescents.

Child Behavior Checklist

Table 3 presents results of the Child Behavior Checklist (54). Youths older than 18 years were excluded from the analysis because the instrument was normed on youths only up to 18 years of age. Therefore the total number of youths in this analysis is 78. The mean *T* scores on all scales for the SM group are slightly higher than the mean *T* scores of the SRS group. The mean scores on all scales are close to the clinical cutoff of 67, and all have fairly large standard deviations. Externalizing scores are generally higher than internalizing scores.

TABLE 3
Results of the Child Behavior Checklist

	Standard residential services ($n = 47$)		Sanctuary model ($n = 31$)	
T scores	M	SD	M	SD
Withdrawn	61.0	9.9	61.8	10.4
Somatic Complaints	55.9	8.3	58.5	12.4
Anxious/Depressed	60.6	11.1	64.7	12.3
Social Problems	63.7	10.4	67.2	13.0
Thought Problems	62.8	10.1	66.4	12.0
Attention Problems	62.9	11.0	66.2	12.3
Delinquent Behavior	65.0	8.7	67.8	9.3
Aggressive Behavior	64.9	11.4	68.9	13.2
Internalizing	58.8	11.5	61.7	14.0
Externalizing	64.5	11.4	68.5	9.8
Total Problem	64.3	10.5	67.6	11.4

TABLE 4
Results of the Community Oriented Program Environment Scale

	Standard residential services ($n = 44$ staff)		Sanctuary model ($n = 20$ staff)	
	M	SD	*M*	SD
Involvement	2.5	1.0	3.0	1.1
Support	2.3	1.0	3.0	1.2
Spontaneity	1.9	1.0	2.5	1.3
Autonomy	2.0	1.2	2.0	0.9
Practical Orientation	2.8	1.1	2.9	1.0
Personal Problem Orientation	1.6	1.0	2.0	1.2
Anger and Aggression	2.8	1.0	2.6	1.1
Order and Organization	3.0	1.1	2.9	1.1
Program Clarity	3.1	1.0	3.2	1.2
Safety	2.6	1.1	3.0	1.0
Total Score	24.7	4.9	26.8	5.7

Profiles of the Therapeutic Communities

Community Oriented Program Environment Scale

Results of the baseline administration of the COPES-S (Table 4) showed that the SM units were functioning somewhat higher (or closer to an ideal therapeutic community) than the SRS units. The largest difference was found on the support scale where the SM units had a mean of 3.0, in comparison to the mean of 2.3 for the SRS units.

DISCUSSION AND CONCLUSIONS

The current research is designed to test the hypothesis that adding a trauma-focused intervention to the existing residential treatment program will address maladaptive behaviors and functioning that may have developed in response to repeated traumatic experiences. To test the hypothesis, residential units were randomly assigned to the Sanctuary Model and methods were developed to assess change in the therapeutic environments and youths participating in the Sanctuary Model units, in comparison to the standard residential services units. Youths could not be assigned individually to either condition because they are already placed into specific units by age, gender, and problem type. The random assignment by unit, therefore, showed some notable differences

in the composition of youths, with somewhat younger youths, a greater proportion of females, a greater proportion of black youths, and youths with a higher number of foster care placements participating in the Sanctuary Model units, in comparison to youths in the standard residential units. However, youths in the two conditions were similar in total number of prior placements, number of prior psychiatric placements, history of maltreatment, exposure to violence, and in their clinical profiles.

The profiles of the therapeutic environments showed that the Sanctuary Model units scored higher than the Standard Residential Services units on most scales of the COPES instrument. Higher scores might reflect the timing of the Sanctuary Model training which overlapped somewhat with the COPES survey administration, or staff's knowledge that their units had been randomly assigned to participate in the Sanctuary Model. Subsequent papers will report findings of analyses that directly test the hypothesis that adding the Sanctuary Model will produce greater changes in the therapeutic environments and youths participating in the Sanctuary Model project than in the Standard Residential Services units.

As stated above in the analysis section, multilevel analyses will be conducted to examine differences in outcomes between the two research conditions. Multilevel modeling will account for the clustering effects of youths being nested within residential units that were assigned to each research condition. Therefore, measuring variation in service delivery and treatment at the residential unit level is an important consideration. The Sanctuary Milestones Implementation Checklist, a measure of treatment integrity, quantifies the extent to which the Sanctuary Model is being implemented on each unit, and will be used in the multilevel analyses.

To better understand the possible sources of variation in Sanctuary Model implementation, focus groups are being conducted with staff to gather information on their perceptions of model implementation. In the first round of focus groups, questions centered on how staff interpret the key concepts and principles of the Sanctuary Model and how they integrate these into their practice. These qualitative findings, which are being reported in another paper, revealed a complex mosaic of the staff's actual experiences in implementing the model, their impressions of the impact of the model on the therapeutic environment and on youth, and their thoughts on factors which promote and inhibit model implementation.

The approach taken in implementing the Sanctuary Model in this residential treatment context was to provide formal training, manuals,

and as much consultation and technical assistance as possible without losing the essential democratic, grass roots philosophy of the original Sanctuary Model. However, results of the first round of focus groups conducted in the early stages of model implementation suggest a need for further training, structuring, and modeling. Formal booster trainings have been initiated in response to identified needs. While the need to respond to identified implementation needs is of utmost importance, care is also being taken on the part of program developers to encourage the program staff and clients to initiate problem-solving on their own and to take greater ownership of the model.

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REFERENCES

1. George C, Main M: Social interactions of young abused children: Approach, avoidance, and aggression. Child Development 50:306–318, 1979.
2. Kinard EM: Emotional development in physically abused children. American Journal of Orthopsychiatry 50:686–690, 1980.
3. Reidy TJ: The aggressive characteristics of abused and neglected children. Journal of Clinical Psychology 33:1140–1145, 1977.
4. Huizinga D, Loeber R, Thornberry T: Urban Delinquency and Substance Abuse: Initial Findings. Washington, DC, US Department of Justice, Office of Juvenile Justice and Delinquency Prevention, 1994.
5. Thornberry TP, Huizinga D, Loeber R: The prevention of serious delinquency and violence: Implications from the program of research on the causes and correlates of delinquency, in Sourcebook on Juvenile Offenders. Washington, US Department of Justice, 1995.
6. Widom CS: Child abuse, neglect, and adult behavior: Research design and findings on criminality, violence, and child abuse. American Journal of Orthopsychiatry 59:355–367, 1989.
7. Berliner L: Intervention with children who experience trauma, in Rochester Symposium on Developmental Psychopathology. Developmental Perspectives on Trauma:

Theory, Research, and Intervention, Vol 8. Edited by Cicchetti D, Toth S. Rochester, University of Rochester Press, 1997.
8. Bryer JB, Nelson BA, Miller JB, et al: Childhood sexual and physical abuse as factors in psychiatric illness. American Journal of Psychiatry 144:1426–1430, 1987.
9. Giese AA, Thomas MR, Dubovsky SL, et al: The impact of a history of childhood abuse on hospital outcome of affective episodes. Psychiatric Services 49:77–81, 1998.
10. Kaplan SJ, Pelcovitz D, Salzinger S, et al: Adolescent physical abuse: Risk for adolescent psychiatric disorders. American Journal of Psychiatry, 155:954–959, 1998.
11. Malinowsky-Rummell R, Hansen DJ: Long-term consequences of childhood physical abuse. Psychological Bulletin 114:68–79, 1993.
12. Mullen PE, Martin JL, Anderson JC, et al: The long term impact of the physical, emotional, and sexual abuse of children: A community study. Child Abuse and Neglect 20:7–21, 1996.
13. Read J: Child abuse and severity of disturbance among adult psychiatric inpatients. Child Abuse and Neglect 22:359–368, 1998.
14. Silverman AB, Reinherz HZ, Giaconia RM: The long-term sequelae of child and adolescent abuse: A longitudinal community study. Child Abuse and Neglect 20:709–723, 1996.
15. Culp RE, Richardson MT, Heide JS: Differential developmental progress of maltreated children in day treatment. Social Work Nov–Dec: 497–499, 1987.
16. Eckenrode J, Laird M, Doris J: School performance and disciplinary problems among abused and neglected children. Developmental Psychology, 29:53–62, 1993.
17. Kendall-Tackett KA, Eckenrode J: The effects of neglect on academic achievement and disciplinary problems: A developmental perspective. Child Abuse and Neglect 20:161–169, 1996.
18. Finkelhor D, Gelles R, Hotaling G, et al (Eds): The Dark Side of Families: Current Family Violence Research. Beverly Hills, Sage, 1983.
19. Hotaling GT, Sugarman DB: An analysis of risk markers in husband to wife violence: The current state of knowledge. Violence Victims 1:101–124, 1986.
20. Jaffe PG, Wolfe DA, Wilson S, et al: Similarities in behavioral and social maladjustment among child victims and witnesses to family violence. American Journal of Orthopsychiatry 56:142–146, 1986.
21. Kratcoski PC: Youth violence directed toward significant others. Journal of Adolescence 8:145–157, 1985.
22. Berton M, Stabb S: Exposure to violence and post-traumatic stress disorder in urban adolescents. Adolescence 31:489–498, 1996.
23. McCloskey LA, Walker M: Posttraumatic stress in children exposed to family violence and single-event trauma. Journal of the American Academy of Child and Adolescent Psychiatry, 39:108–115, 2000.
24. Singer M, Menden Anglin T, Song L, et al: Adolescents' exposure to violence and associated symptoms of psychological trauma. JAMA 273:477–482, 1995.
25. Taylor L, Zuckerman B, Harik V, et al: Exposure to violence among inner city parents and children. American Journal Disabled Children 146:487, 1992.
26. DuRant R, Pendergrast R, Cadenhead C: Exposure to violence and victimization and fighting behavior by urban black adolescents. Journal of Adolescent Health 15:311–318, 1994.
27. Schwab-Stone M, Ayers T, Kasprow W, et al: No safe haven: A study of violence exposure in an urban community. Journal of the American Academy of Child and Adolescent Psychiatry 34:1343–1352, 1995.

28. Cicchetti D, Toth SL: A developmental psychopathology perspective on child abuse and neglect. Journal of the American Academy of Child and Adolescent Psychiatry 34:541–565, 1995.
29. Fantuzzo JW (1990). Behavioral treatment of the victims of child abuse and neglect. Behavior Modification 14:316–339, 1990.
30. Graziano AM, Mills JR: Treatment for abused children: When is a partial solution acceptable? Child Abuse and Neglect 16:217–228, 1992.
31. Greenwalt BC, Sklare G, Portes P: The therapeutic treatment provided in cases involving physical child abuse: A description of current practices. Child Abuse and Neglect 22:71–78, 1998.
32. National Research Council: Violence in Families: Assessing Prevention and Treatment Programs. Washington, National Academy Press, 1998.
33. Kolko DJ: Child physical abuse, in The APSAC Handbook of Child Maltreatment. Edited by Briere J, Berliner L, Bulkey JA, Carole J, Reid T. Thousand Oaks, Sage, 1996.
34. Cohen J, Mannarino AP: A treatment outcome study for sexually abused pre-school children: Initial findings. Journal of the Academy of Child and Adolescent Psychiatry 35:42–50, 1996.
35. Deblinger E, Lippman J, Steer R: Sexually abused children suffering posttraumatic stress symptoms: Initial treatment outcome findings. Child Maltreatment 1:310–321, 1996.
36. Verleur D, Hughs RE, De Rios MD: Enhancement of self esteem among female incest victims: A controlled comparison. Adolescence 21:843–854, 1986.
37. Jaffe PG, Wolfe DA, Wilson S, et al: Family violence and child adjustment: A comparative analysis of girls' and boys' behavioral symptoms. American Journal of Psychiatry 143:74–77, 1986.
38. Wagar JM, Rodway MR: An evaluation of a group treatment approach for children who have witnessed wife abuse. Journal of Family Violence 10:295–307, 1995.
39. Bloom S: Creating Sanctuary: Toward the Evolution of Sane Societies. New York, Routledge, 1997.
40. Friedrich WN: An integrated model of psychotherapy for abused children, in The APSAC Handbook on Child Maltreatment. Edited by Briere J, Berliner L, Bulkey JA, Carole J, Reid T. Thousand Oaks, Sage, 1996.
41. Herman JL: Trauma and Recovery. New York, Basic Books, 1992.
42. Van der Kolk BA, McFarlane C, Weisaeth L: Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body, and Society. New York, Guilford Press, 1996.
43. Foderaro JF, Ryan RA: SAGE: Mapping the course of recovery. Journal of Therapeutic Communities 21:93–104, 2000.
44. Barnett D, Manly JT, Cicchetti D: Defining child maltreatment: The interface between policy and research, in Child Abuse, Child Development, and Social Policy, Vol 8. Edited by Cicchetti D, Toth SL. Norwood, Ablex, 1993.
45. Buka S, Selner-O'Hagan M, Kindlon D, et al: My Exposure to Violence and My Child's Exposure to Violence, Version 3. Unpublished manual. 1997.
46. Moos RH: Community Oriented Program Environment Scale: Sampler Set Manual, Test Booklets, and Scoring Key, 3rd ed. Redwood City, CA, Mindgarden, 1996.
47. Martinez P, Richters J: The NIMH community violence project: II. Children's distress symptoms associated with violence exposure. Psychiatry 56:22–35, 1993.
48. Rosenberg M: Conceiving The Self. New York, Basic Books, 1979.
49. Nowicki S, Strickland B: A locus of control scale for children. Journal of Consulting and Clinical Psychology 40:148–154, 1973.

50. Armsden G, Greenberg M: The Inventory of Parent and Peer Attachment: Individual differences and the relationship to psychological well-being in adolescence. Journal of Youth and Adolescence 16:427–454, 1987.
51. Barnes HL, Olson DH: Parent–Adolescent Communication Scale, in Family Inventories: Inventories Used in a National Survey of Families Across the Family Life Cycle. Edited by Olson DH, McCubbin HI, Barnes H, et al. St. Paul, Family Social Science, University of Minnesota, 1982.
52. McCubbin HI, Thompson AI, Elver KM: Youth coping index, in Family Assessment, Resiliency, Coping and Adaptation. Inventories for Research and Practice. Edited by McCubbin HI, Thompson AI, McCubbin MA. Madison, University of Wisconsin at Madison, 1996.
53. Sewell S, Paikoff R, McKay M: CHAMP Implementation Measures. Chicago, University of Illinois at Chicago, 1996.
54. Achenbach TM: Manual for the Child Behavior Checklist/4-18 and 1991 Profile. Vermont, University of Vermont, Department of Psychiatry, 1991.