The Relationship Between Childhood Traumatic Experiences and Gang-Involved Delinquent Behavior in Adolescent Boys

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Abstract

The extent to which both traumatic life experiences and resiliency factors contributed to gang-involved delinquent behavior in adolescent males was investigated. Results indicated that the juvenile delinquent residential treatment setting participants had significantly higher levels of both Posttraumatic Stress Disorder (PTSD) symptomatology and emotional numbing than regular education high school students. Results also revealed that emotional numbing in the residential treatment setting participants positively correlated with gang-involved delinquent behavior. In addition, the low resiliency scores of residential treatment setting participants positively correlated with both gang involvement and delinquency. Practical implications of this study were discussed, including the effectiveness of screening for PTSD symptomatology when considering admission to a residential treatment facility and creating treatment goals.

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Gang - involved delinquent behavior is a concern that has a far reaching impact in school and communities (Black & Krishnakumar, 1998; Fest, 1999; Maldonado - Dura'n & Millhuff, 2002; Smith & Thornberry, 1995). This behavior poses a threat to society, and professionals struggle to address this problem so that children and families are not continually impacted.

Experts that work with gang-involved and delinquent adolescents state that many youth have experienced traumatic life events to such an extent that their either suffer from PTSD symptomatology or have become desensitized to violence (Astor, 1998; Battin - Pearson, et al., 1998; Crimmins, et al., 2000; Esbesen, 2000). When reviewing traumatic experiences and their impact, Freud (1920) believed that each individual possessed a type of psychological shield that protected him from harmful stimuli. If this shield were breached, the individual would feel helpless and traumatized, and this traumatic/helpless feeling would be experienced over and over until the individual was able to create an appropriate defense mechanism to deal with the emotion (i.e. violence, aggressive behavior, and/or delinquent behavior). Freud also believed assisting an individual to create a healthy defense mechanism was the best treatment for any type of posttraumatic reaction (Freud, 1920; Freud, 1939).

In relation to experiencing trauma, Horowitz and Solomon (1978) explained that individuals will create an emotional denial/ numbing tendency to protect themselves from having to reexperience the hurtful and disturbing emotions and ideas they have suffered from traumatic experiences. They elaborated that

this tendency is so powerful, that it is able to alienate and isolate the traumatic experience for the person so that they do not have to assimilate too quickly to their current environment and that they may be able to participate in a functional way in their everyday life. Horowitz and Solomon's (1978) research looks at PTSD and Vietnam War veterans. Their research demonstrated that when the veterans had to integrate their life traumatic experiences from the war into their former lives, they experienced numerous psychological problems, such as, low self - worth, shame, depersonalization, frustration, and reactive rages, and various psychosocial disabilities (Johnson, 1998). Similar to other researchers, it was concluded that the behavioral difficulties experienced by the Veterans resulted from their life traumatic experiences in the war Horowitz & Solomon, 1978; Johnson, 1998; Trimble, 1981; Van der Kolk, 1996).

In the context of this study, it is important to state that children can and have experienced extreme traumatic life events (Anthony & Cohler, 1987; Conner, 2002; Ebensen et al., 1993; Garbarino, 1997; Johnson, 1998; Maldonado-Dura'n & Milhuff, 2002; NIMH, 2002; Smith & Thornberry, 1995). Theoretical knowledge of posttraumatic reactions support maladaptive behavior as a result (Bilchik, 1999; Carrion & Steiner, 2000; Ebensen et al., 1993; Flannery, 1998; Loeber & Stouthamer-Loeber, 1998; NIMH, 2002; Smith & Thornberry, 1995; Thornberry & Burch, 1997). Although, there is extensive research focused on PTSD symptomatology in adult population and war survivors, society has been seeing an increase in youth that have experienced traumatic life events expressing similar maladaptive behaviors (Hawkins et al., 2000; Mussen & Kessen, 1983; Sullivan & Wilson, 1995; Thornberry & Krohn, 2000; Wilson & Kean, 1997).

Just as research detailed potential detrimental consequences resulting from experiencing traumatic life events, there are also experts that have identified children that have been exposed to traumatic life events and do not become participants in gangs or delinquent behavior. These children are deemed resilient and applauded for their ability to persevere and succeed in the face of difficult life circumstances (Anthoy & Cohler, 1987; Garbarino, 1997; Reynold & Kamphaus, 1998). In identifying the development of resiliency, Wolin (2003) reports resiliency factors develop in the presence of nurturing and protective environments (i.e., schools, communities, and families). She indicated that for children who do not have such environments accessible to them, support offered through special services; including therapy, can function as surrogate protective environments (Wolin, 2003). Factors such as personality characteristics, personal attributes, environmental characteristics, caring parenting behaviors and family cohesiveness, school/home relations, caring, mentoring by teachers, provision of opportunities to learn in school, and involvement in community activities and sports are commonly tied to resiliency (Carver, 1998; Wolin, 2003; Widom, 2003. Black and Krishnakumar (1998) support the claim that parents who provide encouragement and reassurance during adversity help restore a sense of safety and trust for the child. Parents that assist their children with understanding and processing traumatic life events provide them with the appropriate resiliency tools to recover from a traumatic experience successfully (Garbarino et al., 1992).

The ability to accurately predict those children who are more likely to engage in gang-involved delinquent behavior can contribute to the reduction of violence in schools and communities, as it will also aid in the development of more effective, proactive methods of intervention. Traditionally, treatment of youth participating in gang-involved delinquent behavior has not included the addressing of traumatic life events, although more recent literature provides some evidence to the contrary (Alat, 2002; Hawkins et al, 2000; Maldonado - Dura'n & Millhuff, 2002; OJJ, 2001). In addition, investigation into the development and acquiring of resiliency skills is beginning to play more of a role in treatment options for gang - involved delinquent youth in residential treatment settings (Brendtro & Shahbazian, 2003).

The objective of the present study was to evaluate the extent to which both traumatic life experiences and resiliency factors contribute to gang - involved delinquent behavior in adolescent males. The Trauma Symptom Checklist for Children (TSCC) evaluated clinical levels PTSD symptomatology and emotional numbing while the Behavior Assessment Symptom Checklist (BASC), based on four subscales, provided scores evaluating resiliency factors. Gang - involved delinquent behaviors were assessed through combined scores earned on the Denver Youth Survey (DYS) (gang involvement) and the Self Report Delinquency Scale (SRD) (delinquent behavior). Statistical analyses were performed in an attempt to validate and determine the influence of the PTSD symptomatology and resiliency factors on gang - involved delinquent behavior of adolescent males.

Method

Participants

Participants for this study were composed of the adolescent male high school students with no juvenile delinquent history and adolescent males in a residential treatment setting that had a pending PINS petition or JD charge. The participants were all from the Nassau County area in New York. There were 65 participants in each group and they were all between the ages of 14 and 17.

Results

On the PTSD symptomatology scale, the residential treatment setting participants had mean scores higher than the typical high school students. An independent samples t - test demonstrated that the residential treatment setting group participants earned significantly higher scores on the PTSD symptomatology subscale (t = 2.88, p < .01). The residential treatment setting participants also earned higher mean scores on the scale evaluating Emotional Numbing. An independent samples t - test revealed Emotional Numbing was also significantly higher in the residential treatment group (t = 1.99, p = .04). Therefore, results supported that residential treatment setting participants had significantly higher levels than the comparison group of both PTSD and Emotional Numbing.

Emotional Numbing, Delinquency and Gang Involvement scales were compared using a correlation matrix. Results indicated that Emotional Numbing was significantly correlated with both Gang Involvement (r = .47, p < .01) and Delinquency (r = .25, p = .03). These results indicated that Emotional Numbing positively correlated with gang - involved delinquent behavior.

Resiliency was composed of four factors on the BASC, which included the participants' relationship with their parent, their interpersonal relationships, self - esteem and self reliance. While controlling for PTSD, MANOVA results indicated that the residential treatment participants' interpersonal relations F (1,138) = 5.64, p = .01 and self reliance F (1,138) = 6.55, p = .01 scores were significantly lower than those resiliency variables in the typical high school students and both accounted for 4 % of the variance respectively. However, the resiliency variables of relationship with parent F (1,138) = 1.92, p = .16 and self - esteem F (1,138) = 2.96, p = .08) were not significantly lower. Therefore 2 of the 4 resiliency variables were determined to be significant lower in the residential treatment participants than in the typical high school students. In addition, MANOVA results demonstrated that both Gang Involvement F (1,138) = 5.13, p = .02 and Delinquency F (1,138) = 4.03, p = .04 were significantly higher than the residential treatment setting participants, accounting for 2 and 4% of the variance respectively,

supporting that the residential treatment participants had higher levels of gang - involved delinquent behavior.

A one - way ANOVA revealed that the residential treatment setting participants reported significantly lower interpersonal relationship scores F(1, 138) = 4.80, p = .03 and significantly lower self - reliance scores F (1, 138) = 6.77, p = .01, supporting that 2 of the 4 resiliency factors were significantly lower than that of the typical high school students. MANOVA results also supported that the Resiliency scores significantly correlated with both Gang Involvement F (1,138) = 5.13, p = .02 and Delinquency F(1, 138) = 4.03, p = .04.

Discussion

The current study sought to examine traumatic life events and resiliency skills in an effort to determine the extent of their relationship in the prediction of gang-involved delinquent behavior and PTSD symptomatology in adolescent males in a residential treatment setting and in a typical high school setting.

PTSD Symptomatology and Emotional Numbing

The results supported that the residential treatment setting participants had significantly higher levels of PTSD symptomatology and emotional numbing when compared to typical high school students. Participants that enter the residential treatment program, often arrive through court order with juvenile delinquent charges or under Person in Need of Supervision (PINS) petition status. Often during the first thirty days (the diagnostic period) of their stay, residents discuss their life history, which often seems to include many difficult and challenging life experiences. The impact of these experiences seems to be compounded by the fact that the residents often come from dysfunctional family systems that may include, but are not limited to, parents with mental disorders, histories of parental drug and alcohol abuse, physical abuse as victim and/or perpetrator, sexual abuse as victim and/or perpetrator, and not having parents at all. Often these residents have a history of running away from home, school truancy, and poor grades. Therefore it was quite probable that the exposure to and magnitude of traumatic events in these residential treatment participants resulted in PTSD symptomatology. Paradoxically, however, it was also probable that repeated exposure to these events resulted in desensitization to violence, so much so that it was often considered normal in the experience of the residential treatment participants. Further, although many of the residential treatment participants endorsed responses consistent with the PTSD symptomatology, very few actually earned scores in the clinically significant range. However, that will be discussed in more detail later. The typical high school students also endorsed responses that reflected some level of PTSD symptomatology, but their responses were significantly lower than those of the residential treatment setting participants. The assumption is that every individual has been exposed to some traumatic or distressing life event. Each of those events may have had the potential to develop into a more serious clinical issue such as PTSD but the typical high school student is believed to have less exposure to traumatic life experiences overall.

The TSCC subscale that evaluated PTSD symptomatology, asked questions directly from the criteria of PTSD as identified by the DSM – IV - TR. Although many individuals report PTSD symptomatology after experiencing a traumatic life event, those symptoms are not classified as PTSD until the same symptoms are experienced with similar intensity consistently for at least one month after the event. It appears that the difference between the participants in residential treatment and the typical high school student is what may happen to them or what level or support they are given in that time immediately

following the traumatic event. However, even if the symptoms do not persist, it is still important to be aware and be able to monitor the symptomatology to ensure that the symptoms do not develop into a more problematic issue.

Emotional numbing or desensitization was also examined in hypothesis one as it is reported be a contributing factor to gang - involved delinquent behavior. The emotional numbing score of the typical high school students was significantly lower than that of the residential treatment setting participants, indicating that typical high school students are not as desensitized to violence and the consequences of violating societal norms as the residential treatment setting participants. In addition, the emotional numbing scale also evaluated feelings of depersonalization and avoidance. This score was significantly higher in the residential treatment setting participants. Seligman and Garber (1980) explain the presence of emotional numbing through the development of learned helplessness. They reported that externalized attribution of control is learned from the exposure to many violent and traumatic experiences and the learned helplessness response results in motivational deficits when the victim of traumatic experiences ceases to initiate adaptive responses. Many of the study participants were placed in treatment because they have broken the law numerous times and the residential treatment facility is the last chance the participant has to learn to make better life decisions before they are sent to a penitentiary. The elevated emotional numbing score in this group suggested that they have become so desensitized to violence and/or traumatic situations that is has impaired their judgment, which may indeed be the reason they are placed in residential treatment.

The lower emotional numbing score in the typical high school students may be attributed to the fact that the typical high school student does not have that same level of exposure (whether it be in number of times or magnitude) to violent traumatic events as does the population that exists in the residential treatment setting. In addition, a typical high school student, in this study, had no formal history of delinquency or PINS status. Therefore, it is probable that when exposed to a traumatic events or ganginvolved delinquent behavior, the event or behavior is still shocking and viewed as inappropriate. Many of the residential treatment setting participants provided situation specific reasons why ganginvolved delinquent behavior was appropriate. In addition, when these participants discussed violence in their family or among their peer groups, it was stated as a common occurrence often explained in an unemotional manner, not as necessarily an exception to their daily routine. The typical high school students, although aware of gang-involved delinquent behavior and traumatic experiences involving violence, had a difficult time thinking of personal examples, but often referred to movies or television shows when providing examples.

Emotional Numbing and Gang-Involved Delinquent Behavior

The data reflected that the residential treatment setting participants' emotional numbing score positively correlated with both gang involvement and delinquent behavior. When discussing gang - involved delinquent behavior with the residential treatment setting participants, many spoke of their behaviors with levity. When asked if it was worth the consequences or if asked about how the victims of the crime may have felt, they seemed to struggle with empathy and understanding the impact of their behavior on someone else. They often attempted to justify their behavior or explain it as "the person should have known better than to come to my neighborhood", the victim "should not have had so much money on them", or "they should not have said that to me". The aforementioned attitude seemed to be common among the residential treatment participants and is consistent with not only being desensitized to violence, but also with poor problem solving and social skills and inadequate frustration tolerance. The attribution of the inappropriate behavior was more often external for the residential treatment participants and they very rarely took responsibility for their own behavior. When responsibility was taken, it was only by those individuals that had been in placement for longer than six months, and even

then they still explained that they did not necessarily feel guilty about the actual incident, but were definitely sorry that they were caught. They talked of being in the moment and thinking more about the immediate gratification results, not of the consequences of being caught. When discussing their ganginvolved delinquent behavior, some of the residential treatment setting participants said that in the moment, they were aware of what they were doing, but felt they were watching someone else perform the act. One participant described his involvement when participating in a drive-by shooting. He explained that everything seemed to be happening in slow motion. He stated he was so angry at them (the other gang), although in retrospect he could not remember why. He stated that when he pulled the trigger, he did not care about who or what he shot as long as he hit someone. He reported that everything seemed to be happening as if he was watching himself in a movie. He stated, ".... it was kind of cool".

On the DYS, gang involvement is ascertained initially by directly asking the question if the participant is currently or has ever been involved in a gang, and then depending on the response, the level of gang involvement is determined through a variety of questions that examine the illegal activities of the gang. Gang involvement is strictly prohibited at the residential treatment setting. Participants were very hesitant to admit involvement in a gang for fear of further penalty against them when the information was disclosed to their respective treatment team. A condition to have the residents participate in this study was to have the information available to the participant's treatment team upon request. For residential treatment participants that had been in the facility for over six months, if they even admitted to gang involvement, they made it very clear it was a part of their past and they had no intention of pursuing it upon release from the residential treatment setting. The residents that were new to the facility were more likely to admit current gang involvement and often bragged about their activities.

The SRD scale evaluated delinquent behavior in terms of general, minor, moderate, serious, and violent delinquency. Many of the questions that evaluated serious and violent delinquency were similar to the items of the DYS that evaluated level of gang-involvement. When reviewing the data, this score overlap assisted in validating the responses of the residents and for the residents that denied gang involvement, it either validated or disproved their claim. Some residential treatment participants claimed that although their friends were in gangs and they spent time with them participating in the same activities, they were not a part of the gang or gang involved.

Resiliency and Gang-involved Delinquent Behavior Excluding PTSD

Results reflected that even when excluding the presence of PTSD symptomatology the residential treatment setting participants still reported lower levels of resiliency skills and higher levels of ganginvolved delinquent behavior. This finding was especially important, because it demonstrated that even if PTSD symptomatology is not a factor; the participants in the residential setting still had fewer resiliency skills and more participation in gang-involved delinquent behavior. Resiliency is often discussed in literature as the factor that gives individuals the strength to persevere in the midst of difficult circumstances. Although it is a fairly broad concept, it is commonly viewed as the ability to "bounce back" after a difficult experience. Resiliency is composed on many factors and it is believed that youth who are consistently exposed to adverse circumstances and adopt inappropriate behaviors to cope with their feelings or as an expression of their feelings, lack resiliency, by definition. It is not surprising that the participants in residential treatment have lower resiliency scores than the typical high school students. The fact that they have been placed in that a residential treatment facility speaks to their inability to make appropriate choices. The data that demonstrates that the residential treatment setting participants have higher levels of gang-involved delinquent behavior than the typical high school students was also expected, given the nature of offenses for which the participants are placed, but also slightly surprising given the strict policy about gang involvement that exists in the facility.

Resiliency was measured through the adaptive behaviors subscales on the BASC. Specifically, self-esteem, self - reliance, interpersonal relationships, and relationships with parents were the factors that were assessed and then evaluated to determine resiliency. In this current study, the factors of self-reliance and interpersonal relationships were the only resiliency variables that were significantly lower in the residential treatment group. Self - reliance was defined by the BASC as a belief in one's self and a belief in one's ability to accomplish a task or achieve a goal. Interpersonal relationships variables identified the participant's ability to forge positive connections with others, communication of wants, desires, and needs appropriately and the ability to resolve conflicts. The lack of these resiliency skills correlated with the participation in gang - involved delinquent behavior. Research about youth that become gang involved and participate in gang-involved delinquent behavior discuss the absence of the ability to make good social decisions (Fest, 1999). Many of the participants from this residential treatment setting attributed their participation in the gang to peer pressure. Some even acknowledged their inability to make good decisions and admitted they are easily influenced by their friends.

The other two resiliency variables were not significantly lower in the residential treatment setting participants. It appeared that in their relationship with their parents and in their self- esteem, residential treatment setting participants did not differ significantly from the typical high school students. Adolescence is a time when the peer group has a significant contribution to decision making in teenagers. Social learning theory supports this finding as it states that the likelihood that a given behavior will occur in a specific situation is a function of an individual's expectancies concerning the outcomes the behavior will produce and the reinforcement value attached to such outcomes (Rotter, 1982). In adolescence, the peer group acceptance provides the reinforcement to encourage or discourage behaviors, and adolescents make decisions about their behaviors often based on how they think in will be received by their peers. In most cases, the parental contribution has been made in value setting, establishing limits and expectations, and overall creation of moral and belief systems. Psychodynamic theory supports that if the parent has not been involved by the time the child enters adolescence, the child has already formed their inherent ideas about right and wrong and is not easily swayed by a new parental directive. If the parents have been involved in a child's life and have explained and taught the child their belief and values system in adolescence, these core beliefs should not deviate far from what has been instilled earlier in life. Although there are always exceptions, it is not surprising that there is not a significant difference in the parent relationship variable between the residential treatment setting participants and the typical high school students. However, it is also possible that parent relationship has absolutely no contribution to resiliency which would also explain the lack of significant difference. It is quite possible resiliency is composed of many more innate factors that are not influenced by the relationship or lack of the relationship with the parent.

In addition, self - esteem did not differ significantly between the groups. Developmentally, adolescence is a time when children globally experience insecurities and areas of confidence when transitioning through high school. Although, it is plausible that having confidence in self would significantly contribute to the ability to make decisions about participating in gang-involved delinquent behavior, there are many unknown variables that contribute to self - esteem that may or may not impact decisions to become a participant in gang - involved delinquent behavior. It is also possible that self-esteem did not differ significantly in groups because regardless of the experience, this group of teenagers was just more alike than different in their feelings about themselves.

Gang-Involved Delinquent Behavior and Resiliency Skills

Results further indicated that the residential treatment setting participants reported significantly lower resiliency scores than the typical high school students. In addition, data revealed that the low resiliency scores of the residential treatment setting participants positively correlated with gang involvement and

delinquent behavior. This finding is consistent with other data results in that it appears that with the presence or absence of PTSD symptomatology, residential treatment setting participants still display significantly lower interpersonal relationship skills and self-reliance skills than do the typical high school student group. The residential treatment setting participant's low resiliency scores positively correlated with gang-involved delinquent behavior. This finding is also consistent with the Ruchkin study (2002) which supported that traumatic exposure can influence aggressive and delinquent behavior independent of actual PTSD. Also, as in previous results, between the participant groups there was an unremarkable difference in the areas of self-esteem and relationship with parent. It is important to note that all participants reported that they experienced a significant traumatic event in their life before participating in any gang involvement or delinquent activity.

Practical Implications

Findings from this study have confirmed that identification of PTSD symptomatology can useful in the prediction of gang involvement and delinquent behavior for adolescent males within the residential treatment setting. Results from the current study indicate the importance of including a measure to evaluate the presence of PTSD symptomatology. Based on the current findings early and accurate identification of PTSD symptomatology can serve to predict those residents who are more likely to become involved in gangs and delinquent behavior in the future.

This information can also be helpful in placement meetings when developing treatment goals for residents. In addition, it seems that treatment goals should address the presence of PTSD symptomatology as appropriate. Also, findings assist amplifying the importance in implementing the teaching of resiliency skills into the daily living routine for youth in residential treatment settings. Teaching resiliency skills serves to prepare adolescents that are temporarily removed from society with those abilities that will enable them to better cope with any traumatic or stressful life experience they may encounter after leaving the residential treatment facility setting.

If treatment goals and clinical strategies are established based on presence of PTSD and the development of resiliency skills, it may modify the strategy used in helping the resident and also provide the resident with skills they can use over a period of times as opposed to temporarily stabilizing the inappropriate behavior for which they were admitted. This ultimately should decrease the rate of recidivism for the same offense, and give the resident beneficial skills to better cope with problems or difficult feelings.

Summary

In conclusion, the present study addressed the issues relating the prediction of gang -involved delinquent behavior in adolescent boys. PTSD symptomatology and emotional numbing, resulting from traumatic events were determined to be significantly higher in residential treatment setting participants. Residential treatment setting participants also reported significantly lower scores in two identified resiliency factors. Future research many provide a more complete understanding of the factors which contribute to the prediction of gang – involved delinquent behavior among adolescent males, how resiliency can mediate this impact, and the extent to which traumatic life events influence these behaviors.

References

Alat, K. (2002). Traumatic events and children: how childhood educators can help. Childhood Education, 11. Retrieved November 2, 2003, from InfoTrac Web database.

Anthony, E. and Cohler, B. (eds). The invulnerable child. New York: Guilford Press, 1987.

Astor, R. (1998). Moral reasoning about school violence: informational assumptions about harm within school subcontexts. Educational Psychologist, 33 (4), 207-221.

Battin-Pearson, S.R., Thornberry, T.P., Hawkins, J.D., & Krohn, M.D. (1998). Gang membership, delinquent peers, and delinquent behavior. Juvenile Justice Bulletin, October.

Bilchik, S. (1999). Report to congress on juvenile violence research. Washington, D.C.: OJJ and Delinquency Prevention.

Black, M. & Krishnakumar, A. (1998). Children in low income, urban settings. American Psychologist, 53 (6), 635 - 646.

Brendtro, L. and Shahbazian, M. (2003). Becoming strong at the broken places. Reclaiming Children and Youth, 12. Retrieved November 2, 2003 from InfoTrac database.

Carrion, V. & Steiner, H. (2000). Trauma and dissociation in delinquent adolescents. Journal of the American Academy of Child and Adolescent Psychiatry. vol 39(3), 353-359.

Carver, C. (1998). Resilience and thriving: Issues, models, and linkages. Journal of Social Issues, 54. Retrieved November 2, 2003 from InfoTrac database.

Conner, M.G. (2002). Coping and surviving violent and traumatic events. Retreived August 1, 2002, from http://www.crisiscounseling.org/Traumaloss/CopingWith.

Crimmins, Susan M.; Cleary, Sean D.; Brownstein, Henry H.; Spunt, Barry J.; Warley, Raquel Maria. (2000). Trauma, drugs, and violence among juvenile offenders. Journal of Psychoactive Drugs. vol. 32(1), 43-54.

Esbensen, F. (2000). Preventing adolescent gang involvement. Juvenile Justice Bulletin, September.

Esbensen, F., Huizinga, D., & Weiher, A.W. (1993). Gang and non-gang youth: differences in explanatory factors. Journal of Contemporary Criminal Justice 9(2): 94-116.

Fest, Jerry T. (1998). Street culture: an epistemology of street-dependent youth. Portland, Oregon.

Flannery, R. (1998). Post-traumatic stress disorder: The victim's guide to healing and recovery. New York: Crossroad Publishing Company.

Garbarino, J. (1997). Educating children in a socially toxic Environment. Educational Leadership. vol. 54.

Freud, S. (1920). Beyond the pleasure principle. In J. Strachey (Ed.), The standard edition of the complete psychological works of Sigmund Freud (vol.18). London: Hogarth.

Freud, S. (1939). Moses and monotheism. In J. Stachey (Ed.), The standard edition of the complete psychological works of Sigmund Freud (vol.23). London: Hogarth.

Hawkins, D.J, Herrenkohl, T.I., Farrington, D.P., Brewer, D., Catalano, R.F., Harachi, T.W., & Cothern, L. (2000). Predictors of youth violence. Juvenile Justice Bulletin, April.

Horowitz, M., & Solomon, G.F. (1978). Delayed stress response syndrome in Vietnam veterans. Journal of Social Issues, 31, 67-80.

Johnson, K. (1998). Trauma in the lives of children. Hunter House Inc. Alameda, Ca.

Loeber, R. & Stouthamer-Loeber, M. (1998). Development of Juvenile Aggression and Violence. American Psychologist, 53 (2), 242 - 259.

Maldonado-Dura'n, M., Millhuff, C.(2002). Child abuse and neglect: osttraumatic stress disorder. EMedicine Journal, 3 (7). Retrieved August 1, 2002, from http://emedicine.com/Peb/topic2650.htm.

Mussen, P., & Kessen, W. (Eds.). (1983). Handbook of child psychology. 4th ed. history, theory, and methods (Vol. I). New York: John Wiley & Sons.National Institute of Mental Health. Facts about post-traumatic stress disorder. Retrieved August 1, 2002, from http://nimh.nih.gov/anxiety/ptsdfacts.cfm.

OJJ and Delinquency Prevention. Publications. Retrieved December 19, 2001, from http://OJJdp.ncjrs.org/pubs/pubs.html

Reynolds, C. R. & Kamphaus, R. W. (1998). Behavior Assessment System for Children. Circle Pines, MN. American Guidance Service, Inc.

Rotter, J. B. (1982). The development and applications of social learning theory: selected papers. New York: Praeger.

Ruchkin, V., Schwab-Stone, M., Koposov, R., Vermiren, R. & Steiner, H. (2002). Violence exposure, posttraumatic stress, and personality in juvenile delinquents. Journal of the American Academy of Child and Adolescent Psychiatry, 41. Retrieved November 2, 2003 from InfoTrac database.

Smith, C. & Thornberry, T.P. (1995). The relationship between childhood maltreatment and adolescent involvement in delinquency. Criminology, vol 33 (4), 451-479.

Sullivan, R.; Wilson, M. F. (1995). New directions for research in prevention and treatment of delinquency: a review and proposal. Adolescence. vol 30, 1-17. Thornberry, T.P. & Burch II, J.H. (1997). Gang members and delinquent behavior. Juvenile Justice Bulletin, June.

Thornberry, T.P. & Krohn, M.D. (2000). The self-report method for measuring delinquency and crime. Measurement and Analysis of Crime and Justice, 4, 33-83.

Trimble, M. R. (1981). Post-traumatic neurosis. Chichester, U.K.: John Wiley. Van der Kolk, B.A. Psychological Trauma. Washington, D.C.: American Psychiatric Press, 1987.

Van der Kolk, B. (1996). The body deeps score: Approaches to the psychobiology of posttraumatic stress disorder. In b. Van der Kolk, A. McFarlane, & L. Weisaeth (Eds.), Traumatic stress: The effects of overwhelming experience on mind, body, and society. New York: The Guilford Press. Widom, C. (1989). The cycle of violence. Science, 244, 160-166.

Wilson, J. P.; Kean, T. M. (1997). Assessing Psychological Trauma and PTSD. The Guilford Press. New York, NY.

Wolin, S. (2003). What is a strength? (analysis of psychological strengths). Reclaiming Children and Youth, 12. Retrieved November 2, 2003 from InfoTrac database.

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