Longitudinal Pathways to Resilience in Maltreated Children

Principal Investigator: Dante Cicchetti, Ph. D.

Study Protocol and Final Report

Longitudinal Pathways to Resilience in Maltreated Children

9/30/97 - 9/29/00

OBJECTIVES

Understanding the enduring detrimental effects of child maltreatment, as well as identifying resilient maltreated children who strive to adapt successfully despite their dire experiences, are vital concerns that require a developmental perspective over time. The longitudinal study of maltreated youth has been targeted as an important priority by the National Research Council (1993) in order to inform social policy and legal decisions, design effective prevention and intervention strategies, and further developmental science. However, few prospective studies of maltreated children, informed by an ecological-developmental theoretical perspective (Belsky, 1993; Cicchetti & Lynch, 1993), have been conducted. Furthermore, to date few longitudinal studies examining resilient strivings in maltreated children have been published. Thus, in addition to the paucity of longitudinal work examining maltreated children, the delineation of the mediators and moderators of resilient outcomes in these high-risk youth is limited.

A longitudinal framework inherent was deemed necessary for broadening our conceptualization of the course of development in maltreated youth, a perspective not possible with one-time, cross-sectional data. Furthermore, much of our knowledge of the sequelae of child maltreatment is based on research investigating group differences between maltreated and nonmaltreated children at one point in time. In addition, the available cross-sectional data uses a variable-centered data analytic strategy, contrasting maltreated and nonmaltreated groups at the level of the variable. In contrast, person-centered strategies have the advantage of moving from the group/variable level to examining commonalities across multiple variables within the same individuals. As a result, different patterns across variables may be observed within a group. Although variable-centered approaches are informative, the longitudinal perspective opens up many opportunities for discerning divergent pathways of adaptation over time, particularly at the individual, person-centered rather than the group, variable-centered level of analysis (Cicchetti & Rogosch, 1996). Resilience in maltreated youth, or competent functioning despite the many adversities these children experience, is a case in point. Identification of resilient maltreated children requires moving beyond group mean differences to also examine person-centered variations

within this very high risk group.

Consequently, the objectives of this study were as follows:

1. To investigate stability and change in the longitudinal course of adaptation and maladaptation in maltreated and nonmaltreated low-income youth.
2. To differentiate subgroups of maltreated children who evidence divergence in their longitudinal developmental course, including resilient children as well as children who show continuity of negative adaptation.
3. To examine child characteristics, maltreatment experiences, family features, and aspects of the social ecology as mediators and moderators of individual differences in the developmental pathways exhibited longitudinally by maltreated and nonmaltreated youth.
4. To identify factors that may promote resilient adaptation in maltreated children.

To address these critical concerns, this investigation built upon a prior one-year longitudinal study funded by NCCAN (Cicchetti, Manly, & Lynch, 1994). Prospective follow-up assessments of 300 six- to twelve-year-old low income, maltreated and nonmaltreated children were targeted at periods years three and four beyond the initial baseline assessments. The multi-modal, multi-domain assessments across a four-year time span were sought in order to provide an invaluable opportunity to explore diverse patterns of adaptation among maltreated children over time, as well as to provide insights into processes contributing to variation in developmental trajectories.

Data regarding children's adaptation and current symptomatology was collected in the context of a summer camp program that the children attended. In addition, home visits were conducted concurrently with the third year child camp assessments, during which time the parent or primary caregiver of each child in the study was interviewed. Finally, information regarding children's history of maltreatment was scored from updated DSS records according to our maltreatment classification system.

A total of 300 school-aged children were included in the original study. Of these, we were able to obtain year three assessments on 263 and year four assessments on 249. The sample consisted primarily of low income urban children and families. Half of the children had a history of child maltreatment as documented by the Monroe County Department of Social Services; the remaining children were demographically comparable to the maltreated children but had no history

of child maltreatment. Both boys and girls were included in the sample.

METHODOLOGY

The proposed project built upon our prior NCCAN-funded project that obtained baseline and one-year follow-up assessments. For the third-year assessments, we were able to re-recruit and assess 263 of the 300 children (88% retention rate). For the fourth-year assessments, follow-ups were obtained for 249 children. Attrition was primarily due to families moving from the area, thus precluding children attending the summer camp program. Additionally, some subject loss resulted from children attending summer school, which conflicted with their ability to participate in the summer camp.

Follow-up assessments of the children's functioning included information from a number of sources including children, parents, camp counselors, children's peers in camp, and centralized DSS records. Data regarding children's adaptation and current symptomatology was collected in the context of the summer camp program that the children attended. In addition, home visits were conducted concurrently with the children's third-year camp attendance, during which time the primary caregiver of each child in the study was interviewed. Finally, information regarding children's maltreatment experiences since the conclusion of the initial NCCAN grant was obtained from DSS records and scored according to our maltreatment classification system (Manly et al., 1994).

Sample. Our targeted sample consisted of 300 children who were recruited for our prior one-year longitudinal study and their parent or primary caregiver. About 56% of the children had experienced legally documented child maltreatment and were referred to the project from caseworkers at the Monroe County, NY, DSS. The other half of the sample was composed of demographically comparable children who had not experienced maltreatment; they were identified from families receiving welfare. The children were drawn from the inner city of Rochester, NY, an urban area with high levels of violent crime and poverty, with higher concentrations of poverty within the neighborhoods where families in the study reside. The sample is racially and ethnically diverse: 65% of the children are African-American; 22% are Hispanic-American; 10% are European-American; and the remainder are from other racial/ethnic groups. The sex distribution of the sample is 63% male, consistent with a higher incidence of maltreatment among boys. Overall, the maltreatment sample is representative of the Monroe County child maltreatment population, and

the nonmaltreated group is demographically equivalent to the maltreatment group.

At the time of the prior baseline assessments, children were between the ages of 5.7 to 11.9 years. In the current investigation, children were again assessed at third and fourth years beyond the initial baseline assessments. At the third year, children were between the ages of 7.7 to 13.9 years. Each child's parent or primary caregiver also participated in research interviews at the prior baseline assessment period, and again were interviewed concurrent with the third year child assessments.

For all maltreated children who participated in the prior project, extensive searches of DSS records were conducted in order to attain a comprehensive history of each child's documented maltreatment experiences. The DSS record data were coded utilizing the Manly and colleagues (1994) nosological system for defining child maltreatment. All cases were updated concurrent with the third-year follow-up assessments. The child maltreatment nosological system specifies the subtypes of maltreatment that children have experienced, including physical abuse, sexual abuse, physical neglect, and emotional maltreatment. Ratings of severity and chronicity of maltreatment within each of these subtypes are made, as well as documentation of the perpetrators of maltreatment and the developmental periods in which maltreatment occurred. Consistent with the extant literature, the maltreatment experiences of the sample were diverse and extensive, with most children having been subjected to multiple forms of maltreatment (Cicchetti & Rizley, 1981).

The nonmaltreatment status of all children who comprised the comparison group had been previously established by thoroughly screening DSS records to verify that no documented maltreatment records existed for these children's families. In addition, children in families who had received any preventive services through DSS, provided when risk for maltreatment is evaluated by DSS as high, were screened out of the original sample, to minimize the presence of undetected maltreatment in the comparison group. Concurrent with the three- and four-year assessments, DSS record screenings were again conducted to verify the continuity of lack of maltreatment in the participating families of children in the nonmaltreatment group.

Parents appreciated having the opportunity to have their children participate in the summer camp program, and children enjoyed the recreational activities of the day camp and the sensitive support provided by the camp staff. Our many years of working with this population have resulted in high skill in subject recruitment and retention. Interviewers were keenly sensitive to the needs of participating families and highly skilled in making research participation a comfortable and valuable experience for parents and children.

Procedures and Measures

Congruent with the methodology of our prior NCCAN study, each summer, families were approached and asked if they would agree to have their child attend a week-long summer day camp program. At the camp, the children participated in a variety of recreational activities in groups of six to eight same-age and same-sex peers. Half of the children in each of the groups had a history of maltreatment, the other half were nonmaltreated. Each camp group was conducted by three trained camp counselors. Each camp day lasted for seven hours, providing 35 hours of interaction between children and the camp counselors. In addition to participating in the camp recreational activities, the children also took part in the research assessments noted below (see Cicchetti & Manly, 1990, for detailed descriptions of camp procedures). Periodically throughout the week, children participated in interviews with trained research assistants. Parents gave their informed consent before camp began allowing their children to participate in the research. Subsequently, children were given the option to decide for themselves whether or not they wanted to participate, thus resulting in child assent for participation. In return for their participation in the research activities, children were be allowed to choose from a variety of small prizes. Using prizes as incentives in our research with children resulted in nearly perfect compliance with the research. The counselors were trained on completing a range of assessment measures based on their observations and interactions with the children in their respective groups. The counselors and research interviewers who administered assessment measures to children were unaware of both the maltreatment status of the children and the research hypotheses.

In addition to the data collected at the summer camp, the primary caregiver of each child in the study was interviewed during a home visit. The caregiver visits were completed within one month of the child's camp attendance in order to ensure that child and parent perceptions and ratings were collected contemporaneously. The specific measures administered, as well as their psychometric properties, are described below.

Violence in the Exosystem

Assessments of community violence include examinations of the level of violence in neighborhoods and in schools. Both child- and parent-reports of the level of violence experienced in the community were obtained.

Community Violence Survey. As part of individual interviews conducted in camp, children were asked to complete the Community Violence Survey developed by Richters and Martinez

(1993). This questionnaire asks children to rate the frequency with which they have experienced, witnessed, or heard about various acts of violence in their community. Examples of the kinds of violence children are asked to rate include: shootings, stabbings, sexual assault, muggings, drug deals, arrests by the police, murders, and suicides. Children rate how frequently they have experienced each form of violence from never in their life to daily. This measure has been used effectively with samples of school-aged urban children residing in violent Washington, D.C. neighborhoods (Richters & Martinez, 1993). One-week test-retest reliability of the composite variable reflecting the sum of all reported exposure to violence is r = .81.

In addition, as part of home visits with children's primary caregiver, parents completed a self-report form of the Community Violence Scale (Richters & Martinez, 1993). This scale similarly assesses the frequency with which individuals have been victimized by, have witnessed, or have heard about 20 forms of violence (explicitly not including exposure from the media).

Domains of Functioning. Children completed the Domains of Functioning questionnaire (Greenberg, 1993) as part of individual interviews conducted in camp. This questionnaire has two subscales in which children rate the level of safety versus danger present in their school (25 items) and in their neighborhood (7 items). Each subscale contains items that children score on a four-point scale (from "almost never or never true" to " almost always or always true").

Neighborhood Satisfaction Scale. As part of home visits with the primary caregiver, parents completed the Neighborhood Satisfaction Scale based on Greenberg's (1993) Domains of Functioning "neighborhood" subscale. Parents rate 7 items describing how safe their neighborhood is on a four-point scale.

Demographic Characteristics of the Microsystem

Demographics Interview. This interview, conducted with primary caregivers, provides information regarding familial poverty and socioeconomic status. Developed by Carlson and Cicchetti (1979), this interview provides information concerning family income, parental education, parental occupation, presence of adult partners, and history of receiving welfare. We have found this measure to be an excellent means of developing representative comparison samples, both in our work on the NCCAN-funded Harvard Maltreatment Project and at the Mt. Hope Family Center.

Domestic Violence in the Microsystem

Conflict Tactics Scale. As part of home visits with children's primary caregivers, parents completed the Conflict Tactics Scale (Straus, 1979), an 18-item instrument describing a variety of

tactics that adults use in conflict situations ranging from rational discussion to acts of violence. The Severe Violence Index from the Conflict Tactics Scale includes such acts as hitting someone with an object, kicking or biting a person, burning a person, and using a gun or a knife on someone. This measure is a widely used questionnaire for assessing within-family violence between adults.

Child Maltreatment in the Microsystem

Maltreatment Classification and Rating System. Children's maltreatment history was delineated by examining official records at the Monroe County Department of Social Services. For children with documented histories of maltreatment, the Barnett, Manly, and Cicchetti (1993) nosological classification system for child maltreatment was employed by trained research assistants. This nosology allows us to further specify children's maltreatment history by indicating: (a) the maltreatment subtype, (b) the severity of maltreatment, (c) the frequency/chronicity of maltreatment, (d) the developmental period during which maltreatment occurred, (e) the number of court-ordered separations from the primary caregiver that children have experienced, and (f) the perpetrator of maltreatment.

Individual Development

A. Interpersonal Functioning

Children's interpersonal functioning was assessed through ratings provided by children's counselors and peers at camp. All of these ratings were on 35 hours of observation and interaction during the week of camp.

Pupil Evaluation Inventory. The Pupil Evaluation Inventory (PEI) was completed by camp counselors as a rating of children's social adaptation. This measure was developed as an index of behavior for first through ninth grade children (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976). The inventory contains 35 items, which were selected because of their relation to identifiable types of behavior and their association with psychopathology (Pekarik et al., 1976). The inventory is presented as an item-by-child matrix. Camp counselors are asked to put a check by the name of each child who fits a particular item description (e.g., "Those who try to get other people in trouble").

Pekarik et al. (1976) report that factor analysis produces three distinct factors: Aggression (20 items), Withdrawal (9 items), and Likeability (5 items). The factors are internally consistent as indicated by split-half correlations above .70 across factors and different raters. Test-retest reliability over two weeks is also high, with all correlations greater than .80. Teacher and peer

ratings correlate significantly, ranging from .47 to .83 for all three factors.

Peer Nominations. On the final day of camp, children evaluated characteristics of the peers in their camp group using a peer nomination method developed by Coie and Dodge (1983). Each child was asked to select one peer from the group who best fit the following descriptions: most liked, least liked, cooperative, leader, shy, disruptive, and fighter. The total number of nominations each child receives from peers for each category is calculated, and these totals are converted into proportions of possible nominations for each descriptive category.

Behavior Ratings. On two separate occasions during the week of camp, counselors rated each child on nine items tapping three aspects of interpersonal functioning: prosocial behavior, aggression, and withdrawal. These behavior ratings, developed by Wright (1983), were completed during unstructured 45-minute play periods for the children. Our previous work has shown that inter-rater reliability among groups of three raters is highly reliable (alphas ranging from .67 to .93). Internal consistencies of the three subscales from the behavior ratings also demonstrates high reliability (alphas of .90). Because agreement is high among raters, the behavior ratings were averaged across all three camp counselors to yield scores for the three dimensions of social behavior.

B. Self Functioning

Self-Esteem Inventory. This measure was completed as part of individual interviews with children in camp. The measure allows children to report their perceptions of self by evaluating a set of 58 items on whether or not each item is characteristic of themselves (Coopersmith, 1981). The total self worth scale from this measure can be used as an indicator of self-esteem and valuing of the self. Coopersmith (1981) has demonstrated adequate reliability and validity of the scale.

California Child Q-Set. After extensive week-long observations of the children in the camp setting, camp counselors completed this measure to assess children's personality functioning (Block & Block, 1969). This Q-Set consists of 100 diverse items about children's personality, cognitive, and social characteristics. Raters sort the individual items into a fixed distribution of nine categories ranging from most to least descriptive of the individual child. Individual profiles are thus generated for each child. Inter-rater agreement among groups of counselors ranges from .74 to .93. Two dimensional scores will be derived from the Q-sort data for this study: ego-resilience and ego-control. These two dimensions reflect the degree to which children are able to flexibly modify their level of control as a function of the demand characteristics of the environment (Block & Block,

1980).

C. Cognitive Functioning

Peabody Picture Vocabulary Test, Revised (PPVT-R). This assessment was completed by children in camp. It is a widely used test of receptive vocabulary. Although not a comprehensive measure of general intelligence, the PPVT-R measures an important aspect of general intelligence through assessing vocabulary ability, which has been shown to be highly related to general intelligence. The PPVT-R demonstrates adequate internal consistency (median split half reliability of .80), and an average correlation of .64 with WISC full scale IQ (Dunn & Dunn, 1981).

D. Symptoms of Distress in Children

Symptoms of distress were assessed though self-, parent-, and counselor ratings.

Levonn Measure. In the context of individual interviews at camp, children younger than 9 years old completed the *Levonn* Measure (Richters, Martinez, & Valla, 1990), which is a cartoon-based measure in which children rate the frequency of various distress symptoms. This culturally sensitive cartoon-based interview (1) depicts the central character as an urban child (i.e., Levonn), (2) includes depictions of symptoms associated with post-traumatic stress disorder, (3) includes a 2 or 3 sentence script with each cartoon, and (4) uses a response format for indicating frequency that consists of pictures of a thermometer filled with varying degrees of mercury for "never", "some of the time", and "a lot of the time".

Subscales representing depression (10 items, Cronbach's alpha = .78), anxiety/intrusive thoughts (14 items, Cronbach's alpha = .84), and sleep problems (7 items, Cronbach's alpha = .71) emerge from this interview. Correlations among the scales range from .64 to .85, being sufficiently high to justify combining them into a single index of children's distress symptoms.

This measure has been used successfully with school-aged urban children (Martinez & Richters, 1993). One-week test-retest reliability for the composite distress rating computed by summing across all symptom scores is high and significant ($r = .81$, $p < .001$). The composite symptom score is significantly related to parent-rated Child Behavior Checklist scores ($r = .30$, $p < .01$), and to parent ratings of children's distress based on the Checklist of Child Distress Symptoms ($r = .32$, $p < .01$; Martinez & Richters, 1993).

Checklist of Child Distress Symptoms. Children 9 years old and above completed the Checklist of Child Distress Symptoms (Richters & Martinez, 1990). This checklist was developed

from diagnostic criteria described in the Diagnostic and Statistical Manual of Mental Disorders (3rd ed., revised - American Psychiatric Association, 1987). The checklist includes 28 symptom descriptions, each with a Likert scale response format rating symptom presence on a 1 to 4 scale ranging from (1) "never" to (4) "a lot of the time". Children's ratings of their distress symptoms yield two correlated subscales ($r = .64$, $p < .001$) of moderately high reliability: depression (Cronbach's alpha = .71) and anxiety (Cronbach's alpha = .72). Children's composite scores of distress are significantly related to their scores on the Child Depression Inventory ($r = .49$, $p < .01$; Martinez & Richters, 1993).

Children's parents completed the parent-report form of the Checklist of Child Distress Symptoms (Richters & Martinez, 1990) as part of a home visit with the primary caregiver. As above, this is a 28 item checklist indicating the presence of symptoms. Also as above, parents' ratings of children's distress symptoms yield two correlated subscales ($r = .80$, $p < .001$) of moderately high reliability: depression (Cronbach's alpha = .75) and anxiety (Cronbach's alpha = .70). Parent-child agreement about the relative levels of children's symptoms is modest but significant ($r = .32$, $p < .01$; Martinez & Richters, 1993). Overall, children report significantly higher levels of depression and anxiety than their parents report about them.

Children's Depression Inventory. All children completed the Children's Depression Inventory (CDI; Kovacs, 1985), a widely used measure of children's depressive symptoms. The CDI contains 27 items that assess the affective, cognitive, and behavioral concomitants of depression. Children are asked to choose one of three alternatives for each item, selecting the description that best characterizes their functioning over the prior 2 weeks. Scores on the CDI range from 0 to 54, with higher scores indicating more severe depressed symptomatology. Typically scores greater than 12 on the CDI are thought to reflect mild depression, while scores of 19 or above have been equated with clinically significant levels of depression (Smucker et al., 1986). The CDI has been demonstrated to possess high internal consistency and moderate test-retest reliability, to discriminate between clinical and nonclinical groups of children, and to correlate with constructs associated with depression such as self-esteem, perceived competence, and attributional style (Kazdin, 1990).

Child Behavior Checklist. Counselors completed the Teacher Report Form of the Child Behavior Checklist (Achenbach, 1991) at the end of camp. This checklist is a widely used rating of children's externalizing and internalizing symptoms. The teacher version of the Child Behavior Checklist contains a 118 item checklist that covers a broad range of problems relevant to children's

mental health referrals and are identifiable by adults (e.g., "can't sit still, restless or hyperactive" and "gets in many fights"). Each of the behavior problem items is scored on a 3-point scale with 0 = "not true", 1 = "somewhat or sometimes true" and 2 = "very true or often true" of the child. Counselors are instructed to base their ratings of the child on behaviors occurring during the course of children's attendance in camp.

Reliability of the Teacher Report Form (TRF) has been established on an ethnically diverse standardization sample. The median test-retest correlation for all scales of the TRF is .90 over a one-week period. Over longer intervals, median test-retest reliabilities range from .84 for a 15-day period to .68 over a 4-month period. Inter-rater has been reported to range from .30 to .84 across to age levels (6 to 11 and 12 to 16 years old) and across boys and girls. The items of the TRF Child Behavior Checklist correlate positively ($p < .005$) with clinic-referred status.

One-year follow-up. One-year longitudinal data were obtained on all information (except for the maltreatment and the parent-report ratings) in a second wave of data collection. This comprised the fourth year of measurement. Such a follow-up allows us to look at the stability of linkages among child maltreatment, ecological risk factors, and children's developmental adaptation, and enables us to examine possible pathways to resilience.

References

Achenbach, T. (1991). Manual for the Teacher's Report Form and 1991 Profile. Burlington, VT: University of Vermont, Department of Psychiatry.

Barnett, D., Manly, J.T., & Cicchetti, D. (1993). Defining child maltreatment: The interface between policy and research. In D. Cicchetti and S.L. Toth (Eds.), Child abuse, child development, and social policy, (pp. 7-73). Norwood, NJ: Ablex.

Belsky, J. (1993). Etiology of child maltreatment: A developmental-ecological analysis. Psychological Bulletin, 114, 413-434.

Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In Collins, W. A. (Ed), Development of cognition, affect, and social relations: Minnesota symposia on child psychology (pp. 39-101). Hillsdale, NJ: Erlbaum.

Carlson, V., & Cicchetti, D. (1979). Demographics Interview. Unpublished document, Harvard University: Cambridge, MA.

Cicchetti, D., & Lynch, M. (1993). Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. Psychiatry, 56, 96-118.

Cicchetti, D., & Manly, J.T. (1990). Personal perspectives on conducting research with maltreating families: Problems and solutions. In E. Brody and I. Sigel (Eds.), Family research journeys, Vol. 2: Families at risk (pp. 87-133). Hillsdale, NJ: Erlbaum.

Cicchetti, D., Manly, J. T. & Lynch, M. (1994). An ecological developmental perspective on the consequences of child maltreatment. Funded NCCAN grant proposal.

Cicchetti, D., & Rizley, R. (1981). Developmental perspectives on the etiology, intergenerational transmission, and sequelae of child maltreatment. New Directions for Child Development, 11, 31-55.

Cicchetti, D., & Rogosch, F. A. (1996). Equifinality and multifinality in developmental psychopathology. Development and Psychopathology, 8, 597-600.

Coie, J.D., & Dodge, K.A. (1983). Continuities and changes in children's social status: A five-year longitudinal study. Merrill-Palmer Quarterly, 27, 1-18.

Coopersmith, S. (1981). The Self Esteem Inventories. Palo Alto, CA: Consulting Psychologists Press.

Dunn, L.M., & Dunn, L. (1981). The Peabody Picture Vocabulary Test-Revised. Circle Pines, MN: American Guidance Service.

Greenberg, M. (1993). Domains of Functioning. Unpublished document, University of Washington: Seattle, WA.

Kazdin, A.E. (1990). Childhood depression. Journal of Child Psychology and Psychiatry, 31, 121-160.

Kovacs, M. (1985). The children's depression inventory. Psychopharmacology Bulletin, 21, 995-998.

Manly, J. T., Cicchetti, D., & Barnett, D. (1994). The impact of subtype, frequency, chronicity and severity of child maltreatment on social competence and behavior problems. Development and Psychopathology, 6, 121-143.

National Research Council (1993). Understanding child abuse and neglect. Washington, DC: National Academy Press.

Pekarik, E., Prinz, R., Liebert, D., Weintraub, S., & Neale, J. (1976). The Pupil Evaluation Inventory: A sociometric technique for assessing children's school behavior. Journal of Abnormal Child Psychology, 4, 83-97.

Richters, J.E., & Martinez, P. (1990). Checklist of child distress symptoms. National Institute of Mental Health.

Richters, J.E., & Martinez, P. (1993). The NIMH community violence project: I. Children as victims and witnesses to violence. Psychiatry, 56, 7-21.

Richters, J.E., Martinez, P., & Valla, J.P. (1990). Levonn: A cartoon-based structured interview for assessing young children's distress symptoms. National Institute of Mental Health.

Smucker, M.R., Craighead, E.W., Wilcoxan Craighead, L., & Green, B.J. (1986). Normative and reliability data for the Children's Depression Inventory. Journal of Abnormal Child Psychology, 14, 25-39.

Straus, M.A. (1979). Family patterns of child abuse in a nationally representative sample. Child Abuse and Neglect, 3, 23-25.

Wright, J. (1983). The structure and perception of behavioral consistency. Unpublished doctoral dissertation, Stanford University.