

HISTORY OF ABUSE AND ITS TRANSMISSION TO PARENTING: A COMPARISON AMONG ADOLESCENT AND ADULT MOTHERS

Shannon Carothers Bert, Ph.D.
University of Oklahoma, Department of Human Relations

Robin Gaines Lanzi, Ph.D.
University of Alabama at Birmingham, Department of Health Behavior

ABSTRACT

Utilizing data collected in the Parenting for the First Time Project, this study's major objective was to assess the associations among maternal exposure to abuse, both past and more recent, and subsequent parenting practices and behavior among teen and adult first-time mothers. Retrospective and cross-sectional data were obtained using in-person interviews during the prenatal period and at six months postpartum. Teen mothers were found to report a higher frequency of exposure to and engagement in abuse than their adult counterparts, and history of abuse related to parenting. For the total sample of mothers; particularly higher education adult mothers, history of abuse was a significant predictor of parenting practices and behaviors. Taken together, these findings elucidate the urgent need to stop the cycle of violence and abuse.

INTRODUCTION

Every 41 seconds a child in the United States is confirmed to have been abused or neglected (Children's Defense Fund 2011). According to Child Maltreatment 2009, the most recent report of data from the National Child Abuse and Neglect Data System (NCANDS), a nationally estimated 763,000 children were found to be victims of child maltreatment in the federal fiscal year (FFY) 2009 (U.S. Department of Health and Human Services 2010). An estimated 78% suffered neglect, 18% were physically abused, 10% were sexually abused, 8% were emotionally or psychologically maltreated, and 2% were medically neglected. In addition, an

estimated 10% experienced "other" types of maltreatment such as "abandonment," "threats of harm to the child," and "congenital drug addiction." Based on a study using self- and parent reports, nearly 9 million children were victims of child maltreatment during a one year time-frame (Finkelhor et al. 2005). This translates into more than one out of seven children between the ages of two and seventeen experiencing some form of maltreatment. The consequences of experiencing child abuse and neglect can be devastating in terms of the child's physical, psychological, and behavioral outcomes both short-term and long-term (DHHS 2001). The purpose of this article is to examine the long-term behavioral

consequences of experiencing child abuse in terms of mothers' current parenting practices among a sample of first-time adolescent and adult mothers. To place this in context, we begin with a brief review of the literature on the developmental consequences of experiencing child abuse and neglect.

Children who have experienced child maltreatment have been shown to have issues with depression, self-esteem, aggression, delayed language development, and low academic achievement during infancy through childhood (DHHS 2001) and adverse chronic disease and mental health problems into adulthood (Danese et al. 2009; Silverman, Reinherz, and Giaconia 1996). Child maltreatment in the first six months of life is particularly harmful, both psychologically and biologically. Neuroimaging studies are beginning to show how early child maltreatment affects brain functioning and can cause certain regions of the brain to form and function improperly with long-term consequences on cognitive, language, and socio-emotional development, and mental health (DHHS 2001; Dallam 2001; Perry 2001; Watts-English et al. 2006).

How these child maltreatment experiences affect the child later in life in terms of risky behaviors, employment, education, and parenting is a major societal concern. Research shows that abused and neglected children are less likely to graduate from high school (Langsford et al. 2007) and at least 25% more likely to experience delinquency, drug use, and teen pregnancy (Kelley, Thornberry,

and Smith 1997; Runyan et al. 2002). Being abused or neglected as a child has been shown to increase the likelihood of adult criminal behavior by 28% and violent crime by 30% (Widom and Maxfield 2001). It is noteworthy that child maltreatment, however, does not only occur among those from impoverished backgrounds, it occurs in families from all walks of life and different economic, ethnic and racial, religious, and educational backgrounds (DHHS 2001).

The ability to develop and maintain healthy, intimate relationships into adulthood has been shown to be greatly affected by early child maltreatment (Colman and Widom 2004). The intergenerational transmission of child maltreatment is particularly concerning. It is estimated that about 30% of abused and neglected children will eventually maltreat their own children, continuing the awful cycle of abuse and neglect (Prevent Child Abuse New York 2003). Despite alarming rates, child maltreatment and its relationship to future parenting is vastly understudied. Utilizing data collected in the Parenting for the First Time Project (Centers for Prevention of Child Neglect 2002), this study's major objective was to assess the associations among maternal exposure to abuse, both past and more recent, and subsequent parenting practices and behavior among a diverse sample of first-time mothers (i.e., teen, lower education adult, and higher education adult). This study was informed by a model of parenting influences (Whitman et al. 2001; Lanzi et al.

2009) and a biosocial ecological systems theory of child development (Ramey, Ramey, and Lanzi 2006). Based on our previous work (Bert, Guner, and Lanzi 2009), the aim of the current study was to document the rates of maternal exposure to physical and sexual abuse among a sample of first-time mothers, as well as the consequences of this exposure for parenting. Retrospective and cross-sectional data were obtained using in-person interviews during the prenatal period and at six months postpartum.

The following research questions were addressed: 1) What is the incidence of exposure to physical and sexual abuse among a sample of first-time teen, lower education adult, and higher education adult mothers?; 2a) Does having a history of abuse transfer to, or predict maternal parenting practices and behavior?; and 2b) Does the transmission of abuse to parenting differ as a function of the type of first-time mother (i.e., teen, lower education adult, or higher education adult)? The overarching hypothesis was that teen mothers would report a higher frequency of exposure to and engagement in abuse than their adult counterparts; subsequently influencing their parenting practices and behavior.

METHODS

Participants

Participants were drawn from the *Parenting for the First Time Project* (Centers for the Prevention of Child Neglect 2002), a larger longitudinal prospective study designed to under-

stand sub-threshold levels of neglectful parenting among a population-based, representative sample of first-time teen mothers and an ethnically matched sample of first-time adult mothers and their children. Mothers were asked to participate in the project if they were pregnant and had no prior live births and if they met age and education requirements (see below). Based on these criteria, 684 mothers were recruited during their pregnancies through primary care facilities in four communities that varied in size and ethnic composition including: Birmingham, Alabama; Kansas City, Kansas/Missouri; South Bend, Indiana; and Washington, D.C.

Studies by the U.S. Census Bureau have consistently shown that individuals with higher levels of education have higher income levels and more access to external sources of support (i.e., financial and social) than individuals with less education. With the understanding that education level relates to access to external sources of support, mothers were recruited into three groups: teens (less than 19 years of age at the time of the child's birth, $n=389$), lower education adult (older than 21 years of age but less than 2 years of college, $n=168$), and higher education adult (older than 21 years of age and more than 2 years of college, $n=127$).

The overall sample of mothers ranged in age from 14-36 years of age at the time of the child's birth, with a mean age of 19.8 years. The average age of teen mothers was 17.5 years with lower education adult mothers average age of 25.5 years, and higher

education adult mothers average age of 36.3 years. The sample was 68.5% African American, 14.4% European American, 14.3% Hispanic/Latina, and 2.8% of other ethnicities. Nearly half of the children were male (46.5%) and they varied considerably in their weight. Sixty-three percent of the sample completed the 12th grade, 11% completed community college or a vocational program, and 25% completed a four-year degree or graduate school.

Each group had mothers with monthly family incomes in the lowest range (i.e., less than \$415/month), however the upper limit of family incomes were different between groups with the highest monthly family income reported for higher education adult mothers (\$16,666+), followed by teen (\$8,336-\$12,500) and lower education adult (\$4,166-\$5,000) mothers. The most frequently reported (i.e., mode) monthly incomes were "less than \$415" for teen and lower education adult mothers and "between \$4,100-\$5,000" for higher education mothers.

Measures

History of abuse. During their third trimester of pregnancy, mothers were administered the *Family and Maternal Life History Questionnaire* (Centers for the Prevention of Child Neglect 2002), a retrospective measure of exposure to, and engagement in, possible stressors such as abuse and trauma. This particular measure was developed specifically for the Parenting for the First Time Project. Six specific items relate to abuse and were utilized

in the current study. (1) Has anyone hit you or physically hurt you in the past year? (2) Have you hit or physically hurt anyone in the past year? (3) Have you been seriously threatened by anyone in the past year? (4) When you were growing up, would you say that you experienced any physical abuse? (5) When you were growing up, did you experience any sexual abuse? (6) When you were growing up, did you see physical abuse of other people in your family or house? Responses range from 0-2, with 0 representing "No", 1 representing "Yes, once", and 2 representing "Yes, more than once". Descriptive analyses were also conducted on individual items. In addition, items were summed to form a continuous abuse index and used to predict parenting practices and behavior. Cronbach's (1951) alpha coefficient for the abuse construct was 0.75.

Parenting. Six months after the birth of her child, maternal child abuse potential was measured with an abbreviated version of the *Child Abuse Potential Inventory* (CAPI; Milner 1986). This 25-item measure assesses parental rigidity, such as attitudes about children's behavior, and unhappiness. Mothers responded either "agree" or "disagree" to statements such as "People expect too much of me" and "Children should never cause trouble." Higher scores (agreeing with the statements) indicate a higher likelihood of abuse. The Total score, Unhappiness subscale score, and Rigidity subscale score were utilized in the current study. The CAPI has a test-

retest reliability index of 0.90 (Milner 1986).

Mothers' style and philosophy of parenting were also assessed at six months postpartum using the *Parenting Style Expectations Questionnaire* (Bavolek 1984). The 27-item questionnaire required mothers to indicate their degree of agreement with statements that reflected their empathetic awareness, attitudes toward the use of physical punishment, abuse/neglect and authoritarianism. The total measure was found to have internal consistency of 0.89 with a test-retest reliability index of 0.87 (Bavolek 1984). For the current investigation, four subscales were used: Responsivity and Empathy, Punishment, Abuse and Neglect, and Authoritarian parenting. For the Responsivity and Empathy subscale,

higher scores are associated with positive parenting practices; however, for the remaining three subscales higher scores represent less positive parenting. For congruency in interpretations of the descriptive results, the Punishment, Abuse and Neglect, and Authoritarian subscales were reversed scored to coincide with the Responsivity and Empathy subscale. However, these subscales were taken back to their original state for the prediction analyses.

RESULTS

Data analyses were conducted as follows: First, frequencies and percentages of exposure to each of the six abuse items were calculated individually for the divergent types of mother (i.e., teen, lower education

Table 1. Frequency and Percentage of Each Endorsed Abuse Item as a Function of Type of Mother.

	Teen (n=389)		Lower Education Adult (n=168)	
	n	%	N	%
Has anyone hit you or physically hurt you in the past year?	47	12.0	19	11.4
Have you hit or physically hurt anyone in the past year?	73	19.1	10	5.9
Have you been seriously threatened by anyone in the past year?	49	12.9	6	3.6
When you were growing up...				
...would you say that you experienced any physical abuse?	44	11.8	19	11.2
...did you experience any sexual abuse?	41	10.5	23	13.7
...did you see physical abuse of other people in your family or house?	113	29.0	34	20.2

Note: ** $p < 0.01$, * $p < 0.05$.

Table 1 (continued). Frequency and Percentage of Each Endorsed Abuse Item as a Function of Type of Mother.

	Higher Education Adult (n=127)		Total (n=684)		X ² -value
	n	%	n	%	
Has anyone hit you or physically hurt you in the past year?	4	3.4	70	10.2	7.29*
Have you hit or physically hurt anyone in the past year?	6	5.1	89	12.8	24.86**
Have you been seriously threatened by anyone in the past year?	4	3.5	59	8.5	17.16**
When you were growing up...					
...would you say that you experienced any physical abuse?	3	2.6	66	9.9	8.58*
...did you experience any sexual abuse?	10	0.08	74	10.8	1.91
...did you see physical abuse of other people in your family or house?	12	10.3	159	23	18.07**

Note: ** $p < 0.01$, * $p < 0.05$.

adult, and higher education adult). Chi-square analyses were then computed to determine whether differences existed between mothers in their rates of exposure to past and more recent forms of abuse. Next, abuse items were combined to form an abuse index; comparisons were made between mothers on their rates of "no history of abuse" (i.e., an abuse index score of 0) versus "history of abuse" (i.e., an abuse index score of 1 or higher). Fourth, descriptive analyses were used to describe mean abuse index scores and six month parenting practices and behaviors separately for each type mother. Next, an analysis of variance (ANOVA) was conducted to determine whether mean differences existed among mothers on their exposure to abuse and parenting

at six months postpartum. Correlation analyses were then conducted to determine the interrelationships between exposure to abuse and six month parenting practices and behavior. Lastly, multiple regression analyses were then used to examine the predictive relationships between maternal history of abuse and subsequent parenting.

Exposure to Abuse among a Diverse Sample of First-time Adolescent and Adult Mothers

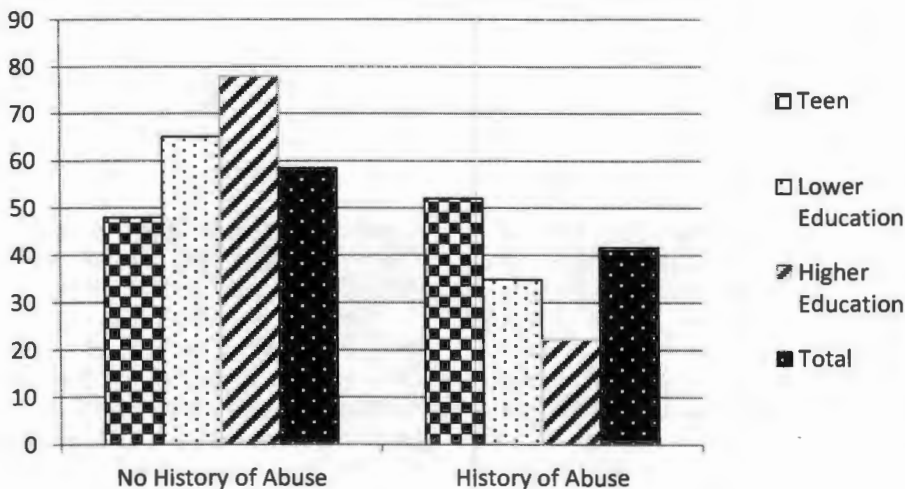
Table 1 presents the six items taken from the *Family and Maternal Life History Questionnaire* that relate to abuse, as well as the frequency and percentage of mother's endorsement of each item respectively. Chi-square analyses found significant differences

among mothers in their rates of reported abuse for five out of the six abuse items; mothers did not differ in their reported exposure to sexual abuse during their childhoods. Values for significant abuse items ranged from 7.29 to 24.86 in which teen mothers were found to endorse items at the highest rates, followed by lower education adult mothers, then higher education adult mothers. Of particular interest, abuse percentages remained considerably higher for teens even when comparing them to the combined percentages of adult mothers; especially for the abuse items related to their engagement in physical violence within the past year, and witnessing physical abuse of persons within their family or homes during their childhoods. To further clarify the differences among teen, lower education adult, and higher education adult mothers in their rates of exposure to

past and more recent abuse, each of the six abuse items were combined to form an abuse index. Index scores ranged from 0-6 ($M=0.76$, $SD=1.12$). An analysis of variance found a significant difference for mean risk scores among types of mothers, $F(2,678)=15.60$, $p<0.001$; teen mothers had a mean risk score of 1.15 ($SD=1.60$), lower education adult mothers had a mean score of 0.91 ($SD=1.44$), whereas mean risk scores for adult high education mothers was 0.39 ($SD=0.88$). Post hoc contrasts using the Bonferroni procedure found that teen mothers had significantly higher mean abuse scores than both lower education and higher education adult mothers.

The abuse index was then dichotomized to form the categories of "no history of abuse" and "history of abuse," and comparisons were made between mothers in their classifica-

Figure 1.



tions within these set categories ($\chi^2_{(2,679)} = 37.89, p < 0.001$; see Figure 1). Approximately 58% of the total sample was classified as having no exposure to abuse. Within the teen sample, 48% reported no exposure to abuse. The remaining 41.6% of the total sample represented those reporting exposure to some form of abuse during their childhood and/or within the past year. Of the teen mothers, 52% were classified as having a history of abuse, followed by 34.9% of lower education and 22.2% of higher education adult mothers experiencing some form of abuse.

Parenting Behaviors among a Diverse Sample of First-time Adolescent and Adult Mothers

In addition to documenting differential rates of exposure to abuse, it was of interest to examine six month parenting as a function of type of mother. Table 2 presents descriptive information on maternal parenting practices and behavior at six months

postpartum for teen, lower education adult, higher education adult, and the total sample of mothers. Analyses of variance (ANOVA) revealed significant differences among mothers for each measure of parenting. Post hoc contrasts were then performed using the Bonferroni procedure. For the *Child Abuse Potential Inventory* (CAPI) Total score, Unhappiness subscale score, and Rigidity subscale score, significant mean differences were documented between teen and higher education adult mothers, as well as between lower education and higher education adult mothers. Overall, teen mothers reported a higher propensity to engage in child abuse than higher education adult mothers, followed by lower education adult mothers.

For the *Parenting Style and Expectations Questionnaire* (PSEQ) Responsivity and Empathy subscale score, Abuse and Neglect subscale score, and Authoritarian Parenting subscale score, significant mean dif-

Table 2. Descriptives of Parenting at Six Months Postpartum as a Function of Type of Mother.

	Teen (n = 389)		Lower Education Adult (n = 168)	
	M	SD	M	SD
CAPI ^a Total	9.46	4.20	8.99	3.99
CAPI Unhappiness	3.24	2.56	3.07	1.74
CAPI Rigidity	6.20	3.43	5.83	3.33
PSEQ ^b Responsivity and Empathy	29.69	5.79	32.52	5.21
PSEQ Punishment	39.83	7.88	42.63	6.12
PSEQ Abuse and Neglect	16.48	2.47	17.43	2.23
PSEQ Authoritarian	14.09	2.70	14.89	2.81

Note: ** $p < 0.01$. ^a Child Abuse Potential Inventory. ^b Parenting Style Expectations Questionnaire. Higher scores on CAPI represent poorer parenting, whereas higher scores on the PSEQ represent more positive parenting.

Table 2 (continued). Descriptives of Parenting at Six Months Postpartum as a Function of Type of Mother.

	Higher Education Adult (n = 127)		Total (n = 684)		F-value
	M	SD	M	SD	
CAPI ^a Total	5.75	3.21	8.58	4.22	25.18**
CAPI Unhappiness	1.98	1.50	2.94	2.07	11.83**
CAPI Rigidity	3.80	2.55	5.60	3.37	16.29**
PSEQ ^b Responsivity and Empathy	35.02	4.02	31.40	5.75	33.25**
PSEQ Punishment	43.17	7.08	41.14	7.50	8.73**
PSEQ Abuse and Neglect	18.37	2.05	17.08	2.45	21.38**
PSEQ Authoritarian	16.59	2.08	14.77	2.78	28.27**

Note: ** $p < 0.01$. ^a Child Abuse Potential Inventory. ^b Parenting Style Expectations Questionnaire. Higher scores on CAPI represent poorer parenting, whereas higher scores on the PSEQ represent more positive parenting.

ferences were documented when comparing each type of mother with one another. In general, teen mothers were less likely to be responsive and display empathy towards their children, followed by lower education adult, and higher education adult mothers. In addition, teen mothers were more likely to endorse abusive and neglectful parenting, as well as authoritarian parenting, followed lower education adult, and higher education adult mothers. Post hoc contrasts also found that the mean Punishment subscale score for teen mothers was significantly different from those of lower education and higher education adult mothers, such that teen mothers were significantly more likely to endorse the use of punishment as compared to their adult counterparts.

Maternal History of Abuse and Its Relationship to Parenting

Table 3 presents bivariate correlations among maternal history of abuse and six month parenting. An

examination of the intercorrelations among all variables used in subsequent analyses demonstrates that there were significant relationships documented between maternal reports of exposure to abuse and parenting six months postpartum. Increases in maternal reports of abuse were associated with increased potential to engage in child abuse ($r(684)=0.28$, $p < 0.05$) and unhappiness ($r(684)=0.48$, $p < 0.01$) with her parenting role at six months. In addition, as reports of abuse increased, mother's responsivity and empathy ($r(684)=-0.12$, $p < 0.05$) decreased whereas her endorsement of abuse and neglect ($r(684)=0.15$, $p < 0.01$) and authoritarian parenting ($r(684)=0.22$, $p < 0.05$) increased. Maternal exposure to abuse was not significantly related to rigidity or use of punishment.

It was also of interest to the investigators to documents associations between specific abuse items and each measure of parenting. Mothers who were hit or physically

Table 3. Bivariate Correlations among Maternal History of Abuse of Six Month Parenting.

	CAPI	CAPI-U	CAPI-R	PSEQ-RE
History of Abuse	0.28*	0.45**	0.06	-0.12*
Has anyone hit you or physically hurt you in the past year?	0.27*	0.47**	0.06	-0.13
Have you hit or physically hurt anyone in the past year?	0.44**	0.43**	0.25*	-0.12*
Have you been seriously threatened by anyone in the past year?	0.18	0.35**	0.02	-0.03
When you were growing up, would you say that you experienced any physical abuse?	0.06	0.16	0.06	-0.12*
When you were growing up, did you experience any sexual abuse?	-0.07	-0.05	-0.06	-0.08
When you were growing up, did you see physical abuse of other people in your family or house?	0.01	0.11*	-0.04	-0.10*

	PSEQ-P	PSEQ-AN	PSEQ-A
History of Abuse	0.20	0.15**	0.22*
Has anyone hit you or physically hurt you in the past year?	0.09	0.11*	0.23*
Have you hit or physically hurt anyone in the past year?	0.12	0.18**	0.25*
Have you been seriously threatened by anyone in the past year?	0.08	0.01	0.20
When you were growing up, would you say that you experienced any physical abuse?	0.12	0.00	0.07
When you were growing up, did you experience any sexual abuse?	0.09	0.02	0.00
When you were growing up, did you see physical abuse of other people in your family or house?	0.17	0.11*	0.05

Note: ** $p < 0.01$, * $p < 0.05$.

CAPI-U= Child Abuse Potential Inventory Unhappiness.

CAPI-R= Child Abuse Potential Inventory Rigidity.

PSEQ-RE= Parenting Style Expectations Questionnaire Responsivity and Empathy.

PSEQ-P= Parenting Style Expectations Questionnaire Punishment.

PSEQ-AN= Parenting Style Expectations Questionnaire Abuse and Neglect.

PSEQ-A= Parenting Style Expectations Questionnaire Authoritarian.

hurt within the past year were more likely to abuse their children ($r(684)=0.27, p<0.05$), report being unhappy with their parenting role ($r(684)=0.47, p<0.01$), engage in abuse and neglect ($r(684)=0.11, p<0.05$), and endorse the use of authoritarian parenting ($r(684)=0.23, p<0.05$). Conversely, mothers who perpetuated physical abuse within the past year were more likely to display abuse potential towards their children ($r(684)=0.44, p<0.01$), report being unhappy ($r(684)=0.43, p<0.01$) and rigid within their parenting role ($r(684)=0.25, p<0.05$), display less responsivity and empathy towards their children ($r(684)=-0.12, p<0.05$), as well as endorse the use of abuse and neglect ($r(684)=0.18, p<0.01$) and authoritarian parenting ($r(684)=0.25, p<0.05$). A positive significant association was documented between being seriously threatened in the past year and mother's unhappiness ($r(684)=0.35, p<0.01$). Whereas a negative significant association was documented between childhood exposure to physical abuse and responsivity and empathy ($r(684)=-0.12, p<0.05$). Of particular interest, witnessing physical abuse of others was positively associated with six month unhappiness ($r(684)=0.11, p<0.05$) and abuse and neglect ($r(684)=0.11, p<0.05$), and negatively associated with responsivity and empathy ($r(684)=-0.10, p<0.05$).

Moreover, significant associations were documented between each measure of six-month parenting not shown in Table 3) with r values ranging from 0.16-0.88. Outcomes

were significantly related to one another in expected directions. For example, as child abuse potential increased, maternal unhappiness ($r(684)=0.62, p<0.01$), and rigidity ($r(684)=0.88, p<0.01$), as well as her endorsement of punishment ($r(684)=0.47, p<0.01$), abuse and neglect ($r(684)=0.43, p<0.01$), and authoritarianism ($r(684)=0.54, p<0.01$) increased. In contrast, as child abuse potential increased, maternal responsiveness and empathy ($r(684)=-0.48, p<0.05$) decreased. Overall, significant associations were documented between the predictor variable and outcomes, as well as among the measures of parenting practices and behaviors at six months postpartum.

Maternal Exposure to Abuse and its Transmission to Parenting

Our main research objective was to examine the effects of maternal exposure to abuse on subsequent parenting six months after the birth of their first child. Table 4 presents the results of regressing six month parenting outcomes on exposure to abuse for the total sample, as well as separately for each type of mother. As shown in the table, exposure to abuse did not predict parenting practices and behaviors for the subsample of teen mothers and only accounted for 5% of the variance in PSEQ responsivity and empathy scores for lower educational adult mothers ($\beta=-0.23, p<0.05$). However, exposure to abuse did serve as a significant predictor of outcomes for higher education adult mothers as well as for the total sample. In reference to higher education adult mothers, expo-

Table 4. Results of Regressing Parenting at Six Months Postpartum on Maternal History of Abuse as a Function of Type of Mother (Controlling for Race).

	Teen (n=389)		Lower Education Adult (n=168)	
	β	R^2	<i>B</i>	R^2
CAPI ^a Total	0.01	0.02	-0.02	0.03
CAPI Unhappiness	0.12†	0.04	-0.08	0.01
CAPI Rigidity	-0.07	0.01	0.02	0.02
PSEQ ^b Responsivity and Empathy	-0.02	0.00	-0.23*	0.05
PSEQ Punishment	0.06	0.02	0.15	0.04
PSEQ Abuse and Neglect	0.07	0.05	0.13	0.07
PSEQ Authoritarian	0.08	0.01	0.01	0.03

	Higher Education Adult (n=127)		Total (n=684)	
	β	R^2	<i>B</i>	R^2
CAPI ^a Total	0.27**	0.08	0.09†	0.03
CAPI Unhappiness	0.45**	0.21	0.16**	0.04
CAPI Rigidity	0.06	0.01	0.02	0.01
PSEQ ^b Responsivity and Empathy	-0.11	0.04	-0.15**	0.02
PSEQ Punishment	0.19*	0.05	0.05	0.02
PSEQ Abuse and Neglect	0.15	0.06	0.15**	0.07
PSEQ Authoritarian	0.21*	0.09	0.05	0.00

Note: ** $p < 0.01$, * $p < 0.05$, † $p < 0.10$. ^a Child Abuse Potential Inventory. ^b Parenting Style Expectations Questionnaire. To aid with interpretation, PSEQ scores were taken back to their original state such that higher scores represent poorer parenting.

sure to abuse accounted for 8% of the variance found among their CAPI Total scores ($\beta=0.27$, $p < 0.05$), 21% of the variance found among their CAPI Unhappiness subscale scores ($\beta=0.45$, $p < 0.01$), 5% of the variance found among their PSEQ Punishment subscale scores ($\beta=0.19$, $p < 0.05$), and 9% of the variance found among their PSEQ Authoritarian subscale scores ($\beta=0.21$, $p < 0.05$). As exposure to abuse increased, maternal propensi-

ties for abusive behavior, unhappiness, punishment, and authoritarian parenting increased.

Analyses conducted for the total sample of first-time mothers (controlling for type of mother) found that exposure to emotional abuse accounted for a significant proportion of the variance found among their CAPI Unhappiness subscale scores (4%, $\beta=0.16$, $p < 0.01$), 2% of the variance found among their PSEQ Responsivity

and Empathy subscale scores ($\beta = -0.15, p < 0.01$), and 7% of the variance found among their PSEQ Abuse and Neglect subscale scores ($\beta = 0.15, p < 0.01$). Although moderately significant, exposure to abuse accounted for 3% of the variance found among CAPI Total scores ($\beta = 0.09, p < 0.10$). For the total sample of mothers, as exposure to abuse increased, child abuse potential, unhappiness, and abuse and neglect increased, whereas maternal responsiveness and empathy towards her child decreased.

DISCUSSION

Findings from the present study confirm the overarching hypothesis that teen mothers would report a higher frequency of exposure to and engagement in abuse than their adult counterparts, and that history of abuse would be related to future parenting practices overall. This intergenerational transmission of abuse is especially concerning given the long-term consequences of experiencing abuse and neglect on the child's physical, psychological, and behavioral outcomes. As with previous research (cf. Bert, Guner, and Lanzi 2009), it was found that being abused as a child is predictive of becoming a teen mother later in life. Further compounding the developmental impact is that teen mothers were more likely to engage in abusive type parenting behaviors and were less likely to be responsive and display empathy towards their six-month-old baby than both lower education and higher education adult mothers. This is es-

pecially troublesome since a critical time point in a baby's development was examined. More specifically, during the first six months of life, when early child maltreatment can truly alter the child's developmental trajectory not only emotionally but in terms of their brain functioning, physical health, and behavior.

For the total sample of mothers, regardless of age or education level of the mother, history of abuse overall and by type of abuse was consistently positively associated with the Child Abuse Potential Inventory Total score and Unhappiness subscale score, Parenting Styles Expectations Questionnaire's Abuse and Neglect subscale and Authoritarian Parenting subscale; whereas it was negatively associated with *Parenting Styles Expectations Questionnaire's* Responsivity and Empathy subscale. Interestingly, maternal history of abuse rarely predicted the *Parenting Styles Expectations Questionnaire's* Rigidity or Punishment subscales. Relative to prediction of parenting, history of abuse was a significant predictor for the total sample of adolescent and adult mothers and for the subsample of higher education adult mothers in terms of Total CAPI score and the CAPI Unhappiness subscale. For higher education adult mothers, their history of abuse was particularly salient for their unhappiness scores. This may indicate that they may be internalizing more of their issues with previous maltreatment and having greater difficulty emotionally dealing with their history. This also may be a function of teen and lower education

mothers being more likely to receive support services; particularly for parenting, than higher education/resource mothers.

Taken together, these findings elucidate the urgent need to stop the cycle of violence and abuse. Astounding numbers of children today are being abused and neglected with clear signs that their children will grow up to experience many developmental consequences and exhibit the same abusive and neglecting parenting philosophies, styles, and behaviors. Although child abuse and neglect most often occurs within the family, the effect continues outside the home (Lanzi et al. 2008). The societal implications are many and far-reaching in terms of direct and indirect costs and consequences. The total annual direct and indirect costs of child maltreatment is estimated to be \$103.8 billion in 2007 value, with \$33.1 billion in direct costs and \$70.6 billion in indirect costs (Prevent Child Abuse America 2007). The direct costs include those related to sustaining a child protective service system to investigate and respond to reports of child maltreatment, as well as the costs expended by the judicial system, law enforcement, mental health and health care system. The indirect costs relate to the long-term economic consequences of child abuse and neglect including hiring and supporting professionals from and agencies of child protective service, special education, juvenile delinquency, adult criminal justice, mental illness, substance abuse, and domestic violence. The loss of productivity to

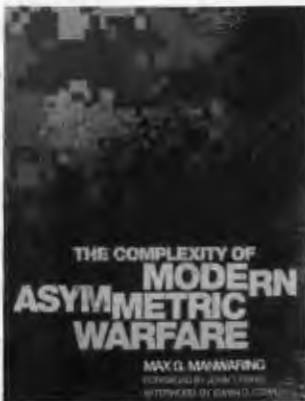
society due to unemployment, special education, and increased use of the health care system is included in indirect cost estimates. Clearly, it is time that we must work together as a society to support our young and old and everyone in between to ensure that the devastating effects of child maltreatment ends.

References

- Bavolek, S.J. (1984). Handbook for the Adult-Teen Parenting Inventory. Schaumburg: Family Development Associates.
- Bert, S.C., B.M. Guner, and R.G. Lanzi (2009). The Influence of Maternal History of Abuse on Parenting Knowledge and Behavior. Family Relations, 58(2):176-187.
- Centers for Prevention of Child Neglect (2002). <http://cpcn.nd.edu>.
- Children's Defense Fund (2011). Moments in America 2009. New York, NY. Retrieved from <http://www.childrensdefense.org/child-research-data-publications/moment-s-in-america-for-children.html>.
- Colman, R. and C. Widom (2004). Childhood Abuse and Neglect and Adult Intimate Relationships: A Prospective Study. Child Abuse and Neglect, 28(11):1133-1151.
- Cronbach, L.J. (1951). Coefficient Alpha and the Internal Structure of Tests. Psychometrika, 16, 297-334.

- Dallam, S.J. (2001). The Long-term Medical Consequences of Childhood Maltreatment. In: K. Franey, R. Geffner, Falconer Reditors. The Cost of Child Maltreatment: Who Pays? We All Do. San Diego, CA: Family Violence & Sexual Assault Institute.
- Danese A., T.E. Moffitt, H. Harrington, B.J. Milne, G. Polanczyk, C.M. Pariante, et al. (2009). Adverse Childhood Experiences and Adult Risk Factors for Age-related Disease. Archives of Pediatrics and Adolescent Medicine, 163(12): 1135-1143.
- Department of Health and Human Services (DHHS), Administration on Children, Youth, and Families. (2001). Understanding the Effects of Maltreatment on Early Brain Development. Washington, D.C.: Government Printing Office. (<http://www.childwelfare.gov/pubs/focus/earlybrain/earlybrain.pdf>).
- Finkelhor, D., R. Ormrod, H. Turner, and S. Hamby (2005). The Victimization of Children and Youth: A Comprehensive National Survey. Child Maltreatment, 10(1): 5-25.
- Kelley, B.T., T.P. Thornberry, C.A. Smith (1997). In the Wake of Childhood Maltreatment. Washington, D.C.: National Institute of Justice.
- Langsford, J.E., S. Miller-Johnson, L.J. Berlin, K.A. Dodge, J.E. Bates, and G.S. Pettit (2007). Early Physical Abuse and Later Violent Delinquency: A Prospective Longitudinal Study. Child Maltreatment, 12(3): 233-245.
- Lanzi, R.G., S.C. Bert, B.R. Keltner, and the Centers for the Prevention of Child Neglect (2009). Depression among a Sample of First-time Adolescent and Adult Mothers. Journal of Child and Adolescent Psychiatric Nursing, 22(4), 194-202.
- Lanzi, R.G., C. Guttentag, K. Baggett, C Willard-Noria, and the Centers for the Prevention of Child Neglect (2008). Addressing Ethical and Clinical Issues in Child Maltreatment Prevention Research. In D. Daro (Ed.). World Perspectives on Child Abuse: Eighth Edition (pp. 104-106). West Chicago, IL: The International Society for the Prevention of Child Abuse and Neglect.
- Milner, J.S. (1986). The Child Abuse Potential Inventory: Manual (2nd ed.) Webster, NC: Psytec.
- Perry, B.D. (2001). The Neurodevelopmental Impact of Violence in Childhood. In: D. Schetky and E. Benedek, (Eds.). Textbook of Child and Adolescent Forensic Psychiatry. Washington, D.C.: American Psychiatric Press, p. 221-238.
- Prevent Child Abuse New York (2003). The Costs of Child Abuse and the Urgent Need for Prevention. Retrieved July 11, 2011, from <http://www.preventchildabuseny.org/files/6213/0392/2130/costs.pdf>.
- Ramey, C.T., S.L. Ramey, and R.G. Lanzi (2006). Children's Health and Education. In I. Sigel and A. Renninger (Eds.). The Handbook of Child Psychology: Vol. 4 (pp. 864-892). Hoboken, NJ: Wiley & Sons.

- Runyan, D., C. Wattam, R. Ikeda, F. Hassan, and L. Ramiro (2002). *Child Abuse and Neglect by Parents and Other Caregivers*. In E. Krug, L.L. Dahlberg, J.A. Mercy, A.B. Zwi, and R. Lozano (Eds). World Report on Violence and Health. Geneva, Switzerland: World Health Organization. p. 59-86.
- Silverman, A.B., H.Z. Reinherz, and R.M. Giaconia (1996). The Long-term Sequelae of Child and Adolescent Abuse: A Longitudinal Community Study. Child Abuse and Neglect, 20(8):709-723.
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2010). *Child Maltreatment 2009*. (http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can).
- Wang, C. and J. Holton (2007). Total Estimated Cost of Child Abuse and Neglect in the United States. Prevent Child Abuse America. Retrieved July 11, 2001 from http://member.preventchildabuse.org/site/DocServer/cost_analysis.pdf?docID=144.
- Watts-English, T., B.L. Fortson, N. Gibler, S.R. Hooper, and M. De Bellis (2006). The Psychobiology of Maltreatment in Childhood. Journal of Social Sciences, 62(4), 717-736.
- Whitman, T.L., J.G. Borkowski, D. Keogh, and K. Weed (2001). Interwoven Lives: Adolescent Mothers and Their Children. Hillsdale, NJ: Erlbaum.
- Widom, C.S., and M.G. Maxfield (2001). *An Update on the "Cycle of Violence."* Washington, D.C.: National Institute of Justice, 2001.



The Complexity of Modern Asymmetric Warfare (ISBN: 9780806142654)

By: Max G. Manwaring

Manwaring's multidimensional paradigm offers military and civilian leaders a much needed blueprint for achieving strategic victories and ensuring global security now and in the future. It combines military and police efforts with politics, diplomacy, economics, psychology, and ethics. The challenge he presents to civilian and military leaders is to take probable enemy perspectives into consideration, and turn resultant conceptions into strategic victories.

