Council on Children & Families

A Research Brief on Child Well-being

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Adverse Childhood Experiences among New York's Adults

Introduction

A key factor associated with optimal child well-being is our ability to provide children with safe, nurturing, stable environments that support their development of sound cognitive, emotional and social skills. It is well established that children tend to thrive and become healthy, productive adults when they are provided with these types of environments. Conversely, the

healthy well-being of children and adults can be jeopardized when individuals are exposed to adverse childhood experiences (ACEs). ¹

ACEs are identified broadly as incidents of childhood abuse and household dysfunction. Childhood abuse tends to include experiences of verbal aggression, as well as emotional, physical and sexual abuse while household dysfunction can involve having household members with a substance abuse problem or mental illness, an incarcerated household member, the witnessing of domestic violence or having parents who are separated or divorced. Exposure to neighborhood violence is another dimension of childhood adversity that is not typically included when we consider adverse childhood events. Often, since a safe distance between children and their environment is implied, given that

Incidents Identified as Adverse Childhood Experiences

- Physical abuse
- Sexual abuse
- Emotional abuse
- Verbal abuse
- Household member with mental illness
- Household member with substance abuse problem
- Household member who is incarcerated
- Witnessing domestic violence
- Separation or divorce of parents
- Exposure to neighborhood violence

Exposure to neighborhood violence was not included as one of the original ACEs in the CDC study.

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¹ Nine adverse childhood experiences (ACEs) were identified in a research collaboration between the Centers for Disease Control and Prevention (CDC) and the Kaiser Permanente Health Appraisal Clinic. The study examined the relationship between negative circumstances experienced in childhood to one's health status in adulthood.

children are not necessarily the direct victim or participant in such events. Yet, exposure to neighborhood violence can play a critical role in children's development and has been shown to have a detrimental impact on their well-being (1-6).

Adverse childhood experiences and child well-being

Numerous research studies underscore the impact of child abuse and household dysfunction on children's social, emotional, and cognitive development. In particular, child abuse has been shown to influence children's development of social-emotional skills and their ability to interact with peers. It has been noted that the experience of abuse impairs children's ability to develop relationships with adults, which can subsequently influence their ability to interact with peers (7). When the social networks of abused children are compared with non-abused peers, results indicate children who have experienced abuse have a lower degree of status among their peers and are rated by their peers as being more aggressive and less cooperative. Additionally, children who have been abused tend to have social networks that are more insular and show more negativity (8). Although negative outcomes are not a certainty for children who experience abuse or neglect, they are more likely than their peers to be arrested for violent crimes, either as juveniles or adults (9).

The psychological impact of abuse is not limited to physical maltreatment and neglect. In fact, children exposed to parental verbal aggression also experience psychosocial problems (10). This is observed in higher rates of physical aggression, delinquency, and interpersonal problems among children who experience frequent verbal aggression compared to children without this experience (11). This form of abuse is also related to psychiatric symptoms in adulthood (10, 12).

Children can be affected by violence when they are the observer rather than victim of that violence. As such, children's exposure to parental conflict has been shown to be associated with emotional, behavioral, cognitive, and general health functioning, as well, as poor academic performance (13-16). Witnessing violence in one's neighborhood rather than one's home can also be detrimental to children's functioning. Youth exposed to neighborhood violence report higher rates of truancy and increased conflict with peers (17). Additionally, there is a strong relationship between exposure to neighborhood violence, and poor academic performance. For instance, youth exposed to neighborhood violence score lower on math and verbal tests and report negative interactions with their teachers (4). Furthermore, living in a community with high levels of violence has been identified as a risk factor for later gang involvement (3). The cumulative exposure to violence that children experience through bullying, witnessing gun violence or perceptions of school safety has been shown to be related to poor self-rated health in adolescence and young adulthood (1).

Youth exposed to adverse experiences tend to engage in health risk behaviors, such as early sexual intercourse, and alcohol use at a higher rate than their peers who do not have these experiences. In particular, there is a strong, incremental relationship between the number of adverse experiences encountered and adolescent pregnancy (18). Also, individuals who experienced adverse events in their childhood are more likely than individuals without these experiences to report they abused alcohol and drank to cope during their first year of alcohol use (19, 20).

Adverse childhood experiences and adult well-being

The health risk behaviors observed among adolescents also are evident among adults who experienced adverse childhood events. Adults who had multiple adverse experiences during childhood are more likely to engage in health risk behaviors, such as alcohol or drug dependency, smoking, promiscuity, and overeating (20, 21). These behaviors, often viewed as negative coping mechanisms used to alleviate trauma, have been linked to premature mortality. In fact, individuals with six or more adverse childhood experiences die approximately 20 years earlier than individuals who do not have such circumstances (22). Negative health outcomes also have been noted among adults who experienced childhood adversity but do not engage in risk behavior as adults. It has been shown that the traumatic stress experienced in early life from adverse events is related to autoimmune diseases in later life (23).

The psychological toll of child abuse and household dysfunction is linked with the development of anxiety disorders, major depressive disorders, antisocial personality disorders, and substance dependence in adulthood (24-26). The impact of these difficult events are manifested in poor physical health outcomes that include an increased likelihood of lung cancer, chronic obstructive pulmonary disease, heart disease, and perceived poor quality of health (27-30).

Service utilization among individuals with ACEs

The long-term consequences of adverse childhood experiences are evident in increased use of healthcare services. Studies have shown that individuals who are exposed to abuse and household dysfunction during childhood tend to have an increased use of psychiatric services, medical services, and prescription drugs as adults when compared to individuals who did not have these experiences (31-35). Furthermore, the experience of child abuse is associated with more physician visits, surgeries, hospitalizations, and higher annual health care costs in adulthood (31).

Most studies of service utilization focus on traditional medical services, such as use of mental health and substance abuse treatments provided through inpatient and outpatient programs for individuals with healthcare insurance. However, peer recovery is a well-established means of support for individuals who have experienced family members with a substance abuse or may have a substance abuse problem themselves. Furthermore, peer recovery is increasingly recognized as an important form of support among individuals diagnosed with a mental illness. Yet, little is known about the extent individuals with various adverse childhood experiences utilize peer recovery alone or in combination with other medical services despite the fact that this form of service support can often augment the contribution of traditional medical services. The following study was conducted to gain a better understanding of the types of adverse childhood events experienced by adults in New York state and the extent those experiences influence the type of service supports they seek, including traditional medical services provided through inpatient and outpatient programs, as well as peer recovery supports.

Method

Telephone interviews of adults in New York state were conducted using an omnibus survey. Omnibus surveys are a cost-saving means of data collection that are often used in marketing research. Typically, the survey used to gather information is the result of multiple researchers combining proprietary questions of interest. As a result, the final survey instrument addresses a wide variety of subjects. Contributing researchers receive responses to their proprietary questions while sharing responses to common questions such as demographic information.

The proprietary questions for this omnibus survey included the 10 survey items that were used in the original ACE survey conducted by the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente. Additionally, a question related to an individuals' exposure to neighborhood violence during childhood was included. This question was added to the survey due to an ever growing body of research literature that indicates children are negatively impacted by experiences of violence, regardless of whether they or family members are the direct target of that violence (1, 6). The exposure to violence survey item was drawn from the questionnaire My Child's Exposure to Violence, version 3—a data collection instrument used for the Project on Human Development in Chicago Neighborhoods (36). Three questions identified as resiliency assets also were included, given the extensive literature that highlights these assets as counters to adverse experiences (37-40). Additionally, since the experience of an adverse event in childhood can lead to health risk behaviors, it was important to determine the extent individuals were exposed to and learned positive coping mechanisms during childhood. Finally, questions regarding support service utilization were added (i.e., use of self-help and traditional medical services) in an effort to examine the relationship of adverse experiences and resiliency assets on one's use of inpatient, outpatient, and self-help services for assistance with mental health or substance abuse issues.

A list-assisted method of random-digit-dialing (RDD) was used to obtain phone numbers. Numbers were purchased from Genesys Inc. (Marketing Systems Group). Under the list-assisted sampling method, random samples of telephone numbers were selected from blocks of 100 telephone numbers that are known to contain at least one listed residential telephone number. These blocks with at least one residential telephone number are referred to as "1-plus" working blocks. According to Survey Sampling Inc. roughly 40 percent of telephone numbers in 1-plus working blocks are residences, although percentages are as high as 54 percent when the blocks are screened for non-working and business numbers.

The sample selection method used for this survey guarantees the inclusion of a representative group of households that accurately reflects the state's geographic, economic and racial/ethnic diversity. The survey was conducted during October 2009. Interviewers conducted interviews until a total of 807 complete surveys were gathered.

Adverse childhood experiences

Average number of ACEs encountered

About six in 10 respondents (59.3%) reported they experienced at least one of the adverse events identified in the original ACE study. This percentage is similar to a five-state report of ACES and somewhat higher than findings of a national sample where 52 percent of individuals reported similar experiences (44, 45).

When respondents were asked to report whether they experienced exposure to violence, the number of individuals experiencing an ACE increased to seven in 10 (69.1%). The average number of ACEs experienced by respondents was 1.8 events and this tended to be similar for males and females with no significant difference between the two groups (1.9 and 1.8 respectively). Similarly, no significant differences were noted when the average number of adverse childhood experiences was examined by age group. The number of ACEs one had was moderately associated with service use.

Types of ACEs encountered

Approximately four in 10 (38.0%) adults reported they were exposed to neighborhood violence prior to their 18th birthday (Figure 1). This was the most frequently cited ACE followed by separation or divorce of parents (25.4%) and having had someone in the household with a substance or alcohol problem (21.4%).

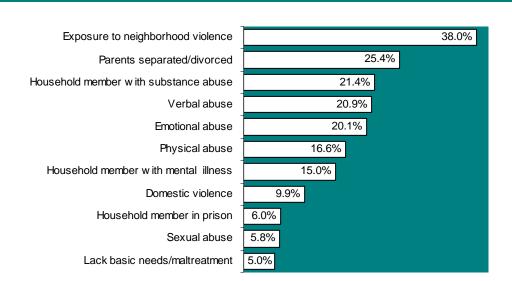


Figure 1. Percent of respondents reporting an adverse childhood experience

A high percentage of individuals who reported experiencing verbal aggression also often reported experiencing physical and emotional abuse (60.0% and 45.3% respectively). This is consistent with other research that found psychological abuse to be a component in forms of child abuse and domestic violence (41-43). Individuals who had a family member with a substance abuse problem often reported experiencing neighborhood violence (55.8%).

An examination of ACEs by gender indicated females were 2.5 times more likely to report being sexually abused compared to their male counterparts. They also were more likely to report

having a household member with a mental illness. Males were 1.7 times as likely as females to report being exposed to neighborhood violence or having a household member in prison. Additionally, males had a household member with a substance abuse problem more often than females. The ACEs that reflected statistical differences by gender are presented in Table 1.

Table 1. Adverse Childhood Experience by Gender *					
Adverse Childhood Experience	Females	Males			
Sexual abuse	8.2%	3.2%			
Household member with mental illness	17.7%	11.9%			
Exposure to neighborhood violence	27.6%	49.3%			
Household member in prison	4.3%	8.0%			
Household member with substance abuse	18.5%	24.7%			
		*p<.05			

While the average number of ACEs one had did not differ by age group, some age differences were noted by the type of ACE one had. For example, adults in older age categories were up to 3 times more likely than younger adults to report experiencing neglect and maltreatment while younger adults were more likely to report experiencing parental divorce, neighborhood violence, and have incarcerated household members. Specifically, individuals 18 to 24 years old were 2.2 times more likely to experience divorce and 1.7 times more likely to be exposed to neighborhood violence than individuals 55 years or older (Table 2).

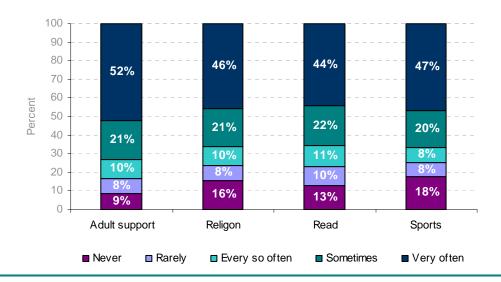
Table 2. Adverse Childhood Experiences by Age Groups					
	18 to 24 years	25 to 34 years	35 to 54 years	55 years & older	
Basic needs not met/maltreatment	3.3%	2.6%	3.7%	9.1%	
Parents divorced/ separated	36.4%	28.7%	26.2%	16.0%	
Violence in neighborhood	52.1%	26.3%	44.4%	29.9%	
Household member in prison	10.9%	6.0%	3.7%	7.0%	

Resiliency assets

The resiliency assets included in the omnibus survey were drawn from protective factors identified by the Search Institute and primarily represent external factors (i.e., adult support, religiosity, involvement in youth programs) with one internal factor (i.e., read for pleasure) (37). These assets are positive forms of coping strategies that play a critical role in healthy development. Resiliency assets, such as positive adult relationships and engagement in sport activities, have been shown to mediate negative outcomes for children who have experienced abuse (39).

The average number of resiliency assets reported by all respondents was 3.3 assets. Almost two in three respondents (64%) reported they had the benefit of all four resiliency assets to varying degrees (Figure 2) and the average number of resiliency assets experienced by individuals with one or more ACE was the same as those who did not experience adverse events (3.40 and 3.37 respectively).

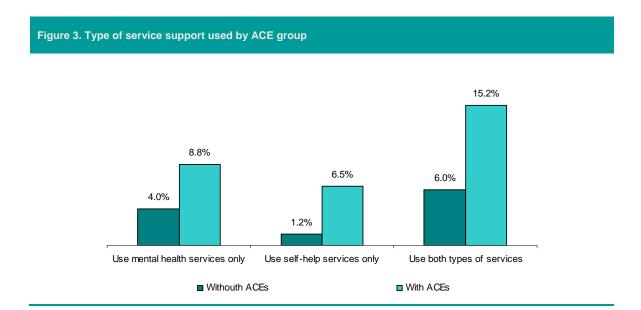
Figure 2. Percent of respondents that report having resiliency asset during childhood



The average number of resiliency assets experienced by males was similar to females (3.3 and 3.5 respectively). The average number of resiliency assets experienced also tended to be similar across age groups, with no meaningful or statistically significant differences observed.

Increased use of support services among adults with adverse childhood experiences

Most respondents (75.4%) report they never used any inpatient, outpatient or peer recovery services related to substance abuse and mental health issues. However, among individuals using these services, utilization is higher for those who experienced an adverse event during childhood than individuals who did not face that challenge and may be seeking support services for an event during their adulthood. Among individuals using services, adults who experienced had an ACE more likely than adults without an ACE to access peer recovery support services. In fact, they were about twice as likely as those without such experiences to use only mental health services, 5.4 times as likely to use only peer recovery support services and 2.5 as likely to use both forms of support (Figure 3).



Summary

Many of the adverse events associated with child abuse and household dysfunction go undetected during childhood. Yet, the residual effects contribute to the use of support services well into adulthood. This has been noted in previous research and is substantiated here. This underscores the need for service providers to be sensitive to the lingering effects of ACEs so they are better able to detect and refer individuals to valuable supports. Additionally, the findings suggest that peer recovery supports, which have been used effectively to address highly stigmatizing issues (e.g., substance abuse, sexual abuse, mental illness) can be beneficial to those with other types of adverse events that may be equally stigmatizing but are not traditionally linked with peer recovery (e.g., family member in prison).

While services received in adulthood may be beneficial, priority should be directed toward helping children sooner by providing needed services during childhood. Early detection of ACEs, possibly through pediatric screenings and heightened awareness among educators, may reduce the likelihood children are exposed to an adverse event or multiple events, as was the case for a substantial portion of respondents of this survey. Nurse-Family Partnership programs and the Positive Parenting Program (Triple P) are examples of early intervention approaches that promote positive parent-child interactions and reduce household dysfunction.

Lastly, our ultimate goal is the prevention of ACEs and this requires approaches that support families, schools and communities in the development of safe, stable environments. Even when children have healthy families, unsafe communities that expose children to violence can have a detrimental effect. Findings from this survey indicate exposure to violence was the most commonly reported event with almost four in ten respondents experiencing it and this increased to five in ten among young respondents. Neighborhood-based approaches that integrate human services at the community level can be beneficial to families as well as the entire community. An example of this approach is the Promise Neighborhoods. Promise Neighborhoods is modeled after the Harlem Children's Zone -- an integrated education and human service network for approximately 10,000 children in New York City. The Wisconsin Initiative for Neighborhoods and Schools is another example of a community-wide effort that promotes safe environments and promotes positive child well-being.

Given the complex, long-term impact of adverse childhood events, a multi-dimensional approach that emphasizes prevention and early detection as well as access to diverse support resources is warranted.

References

- 1. Boynton-Jarrett, R., Ryan, L.M., Berkman, L.F., & Wright, R.J. (2008). Cumulative violence exposure and self-rated health: Longitudinal study of adolescents in the United States. *Pediatrics*, 122 (5), 961-970.
- 2. Dube, S.R., Anda, R.F., Whitfield, C.L, Brown, D.W., Felitti, V.J., Dong, M. & Giles, W.H. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine*, 28 (5), 430-438.
- 3. Glesmann, C. (2009). Youth in gangs: Who is at risk? Oakland, CA: National Council on Crime and Delinquency. Accessed online March, 2010 at: http://nccd-crc.org/nccd/pdf/Youth_gangs_final.pdf
- 4. Kurtz, P.D., Gaudin, J.M., Wodarski, J.S., & Howing, P.T. (1993). Maltreatment and the schoolaged chid: School performance consequences. *Child Abuse and Neglect*, 17, 581-589.
- 5. MacMillian, H.L., Fleming, J.E., Streiner, D.L., & Lin, E. (2001). Childhood abuse and lifetime psychopathology in a community sample. *American Journal of Psychiatry*, 158 (11), 1878-1883.
- 6. Vuong, L,M., Silva, F. & Marchionna, S. (August, 2009). Children exposed to violence. FOCUS: Views from the National Council on Crime and Delinquency. Accessed on line March 2010 at: www.nccd-crc.org/nccd/dnld/Home/focus0809.pdf
- 7. Dodge, K.A., Pettit, G.S., Gates, J.E. (1994). Effects of physical maltreatment on the development of peer relations. Development and Psychopathology, 6, 43-55.

- 8. Salzinger, S. Feldman, R.S., Hammer, M., & Rosario, M. (1993). The effects of physical abuse on children's social relationships. *Child Development*, 64, 169-187.
- 9. Widom & Maxfield
- Johnson, J.G., Cohen, P., Smailes, E.M., Skodol, A.E., Brown, J., & Oldham, J.M. (2001).
 Childhood verbal abuse and risk for personality disorder during adolescence and early adulthood. *Comprehensive Psychiatry*, 42, 16-23.
- 11. Vissing, Y.M. & Straus, M.A. (1991). Verbal aggression by parents and psychosocial problems of children. *Child Abuse and Neglect*, 15 (3), 223-238.
- 12. Teicher, M.H., Samson, J.A., Polcari, A. & McGreenery, C.E. (2006). Sticks, stones, and hurtful words: Relative effects of various forms of childhood maltreatment. *American Journal of Psychiatry*, 163 (6), 993-1000.
- 13. Kitzmann, K.M., Gaylord, N.K., Holt, A.R., & Kenny, E.D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 71 (2), 339-352.
- 14. Onyskiw, J.E. (2003). Domestic violence and children's adjustment: A review of research. *Journal of Emotional Abuse*, 3, 11-46.
- 15. Wolfe, D.A., Crooks, C.V., Lee, V., McIntyre-Smith, A. & Jaffe, P.G. (2003). The effects of children's exposure to domestic violence: A meta-analysis and critique. *Clinical Child and Family Psychology Review*, 6 (3), 171-187.
- 16. Mezzacappa, E., Kindlon, D. & Earls, F. (2001). Child abuse and performance task assessments of executive functions in boys. *Journal of Child Psychology and Psychiatry*, 42 (8), 1041-1048.
- 17. Rigby, K. (2000). Effects of peer victimization in schools and perceived social support on adolescent well-being. *Journal of Adolescence*, 23 (1), 57-68.
- 18. Hillis, S.D, Anda, R.F., Dube, S.R., Felitti, V.J., Marchbanks, P.A., & Marks, J.S. (2004). The association between adverse childhood experiences and adolescent pregnancy, long-term psychological consequences, and fetal death. *Pediatrics*, 113 (2), 320-327.
- 19. Rothman, E.F., Edwards, E.M., Heeren, T., & Hingson, R.W. (2008). Adverse childhood experiences predict earlier age of drinking onset: Results from a representative US sample of current or former drinkers. *Pediatrics*, 122 (2), e298-e304.
- 20. Anda, R.F., Whitfield, C.L., Felitti, V.J., Chapman, D., Edwards, V.J., Dube, S.R., & Williamson, D.F. (2002). Adverse childhood experiences, alcoholic parents, and later risk of alcoholism and depression. *Psychiatric Services*, 53 (8), 1001-1009.
- 21. Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & Marks, J.S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, 14 (4), 245-258.
- Brown, D.W., Anda, R.F., Tiemeier, H., Felitti, V.J., Edwards, V.J., Croft, J.B., & Giles, W.H. (2009). Adverse childhood experiences and the risk of premature mortality. *American Journal of Preventive Medicine*, 37 (5), 389-396.
- 23. Dube, S.R., Fairweather, D., Pearson, W.S., Felitti, V.J., Anda, R.F., & Croft, J.B. (2009). Cumulative childhood stress and autoimmune diseases in adults. *Psychosomatic Medicine*, 71, 243-250.
- 24. Arnow, B.A., (2004). Relationships between childhood maltreatment, adult health, and psychiatric outcomes and medical utilization. *Journal of Clinical Psychiatry*, 65, suppl12, 10-15.
- 25. Chapman, D.P., Whitfield, C.L., Felitti, V.J., Dube, S.R., Edwards, V.J., & Anda, R.F. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. *Journal of Affective Disorders*, 82, 217-225.
- 26. Sartor, C.E., Lynskey, M.T., Bucholz, K.K., McCutcheon, V.V., Nelson, E.C., Waldron, M., & Heath, A.C. (2007). Childhood sexual abuse and the course of alcohol dependence

- development: Findings from a female twin sample. *Drug and Alcohol Dependence*, 89 (2-3), 139-144
- 27. Brown D.W., Anda R.F., Felitti V.J., Edwards V.J., Malarcher A.M., Croft J.B. & Giles W.H. (2010) Adverse childhood experiences and the risk of lung cancer. *BMC Public Health*, 10:20. Accessed online March, 2010 at: www.biomedcentral.com/1471-2458/10/20
- 28. Dong M., Giles W.H., Felitti V.J., Dube, S.R., Williams J.E., Chapman D.P. & Anda R.F. Insights into causal pathways for ischemic heart disease: Adverse childhood experiences study. *Circulation*, 2004;110: 1761–1766.
- 29. Corso, P.S., Edwards, V.J., Fang, X. & Mercy, J.A. Health-related quality of life among adults who experienced maltreatment during childhood. *American Journal of Public Health*, 2008;98:1094-1100
- 30. Anda R.F., Brown D.W., Dube S.R., Bremner J.D., Felitti V.J. & Giles W.H. Adverse childhood experiences and chronic obstructive pulmonary disease in adults. (2008). *American Journal of Preventive Medicine*, 34(5), 396-403
- 31. Anda, R.F., Brown, D.W., Felitti, V.J., Dube, S.R., & Giles, W.H. (2008). Adverse childhood experiences and prescription drug use in a cohort study of adult HMO patients. *BMC Public Health*, 8, 198. Accessed on line March 2010 at: www.biomedcentral.com/1471-2458/8/198
- 32. Bonomi, A.E., Anderson, M.L., Rivara, F.P., Cannon, E.A., Fishman, P.A., Carrell, D., Reid, R.J., Thompson, R.S. (2008). Health care utilization and costs associated with childhood abuse. *Journal of General Internal Medicine*, 23 (3), 294-299.
- 33. Chartier, M.J., Walker, J.R. & Naimark, B. (2007). Childhood abuse, adult health and healthcare utilization: Results from a representative community sample. *American Journal of Epidemiology*, 165 (9), 1031-1038.
- 34. Smith, C.O., Thompson, M.P., Johnson, K., Nitsche, A.M., & Kaslow, N.J. (2009). Service utilization patterns of maltreated and nonmaltreated children from low-income, African-American families. *Psychiatric Services*, 60 (10), 1386-1389.
- 35. Newman, M.G., Clayton, L, & Auellig, A. (2000). The relationship of childhood sexual abuse and depression with somatic symptoms and medical utilization. *Psychological Medicine*, 30, 1067-1077.
- 36. Buka, S.L., Selner-O'Hagan, M.B., Kindlon, D.J. & Earls, F.J. (1997) *My child's exposure to violence: Parent report version*. Project on Human Development in Chicago Neighborhoods.
- 37. Benson, S.P., Galbraith, P.L, & Espeland, P. (1998). What kids need to succeed: *Proven, practical ways to raise good kids*. Minneapolis, MN: Free Spirit Publishing.
- 38. Jessor, R., Van Den Bos, J., Vanderryn, J., Costa, F.M., & Turbin, M.S. (1995). Protective factors in adolescent problem behavior: Moderator effects and developmental change. *Developmental Psychology* 31(6) 923-933.
- 39. Romans, S.E., Martin, J.L., Anderson, J.C., O'Shea, M.L, & Mullen, P.E. Factors that mediate between child sexual abuse and adult psychological outcome. *Psychological Medicine*, 25, 127-142.
- 40. Smith, C., & Carlson, B.E. (1997). Stress, coping and resilience in children and youth. *The Social Service Review*, 71 (2), 231-256. Accessed online March, 2010 at: www.adfvc.unsw.edu.au/RTFFiles/Stakeholderpaper-4.rtf
- 41. Chamberland, C., Laporte, L., Lavergne, C., Tourigny, M., Mayer, M., Wright, J., Helie, S. & Malo, C. (2005). Psychological maltreatment of children reported to youth protection services: a situation of grave concern. *Journal of Emotional Abuse*, 5, 65-94.
- 42. Hennig, K. & Klesges, L.M. (2003). Prevalence and characteristics of psychological abuse reported by court-involved battered women. *Journal of Interpersonal Violence*, 18, 857-871.

- 43. MacKinnon, L. Hurting without hitting: Non-physical contact forms of abuse. *Australian Domestic and Family Violence Clearinghouse*. Accessed on line March 2010 at: www.adfvc.unsw.edu.au/RTF Files/Stakeholderpaper 4.rtf
- 44. Bynum, L., Griffin, T., Ridings, D.L., Wynkoop, K.S., Anda, R.F., Edwards, V.J., Liu, Y., McKnight-Eily, L.R., & Croft, J.B. (2010). Adverse childhood experiences reported by adults Five states, 2009. *Morbidity and Mortality Weekly Report*, 59 (49): 1609-1613.
- 45. Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & Marks, J.S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Prevention Medicine*, 14 (4), 245-258.

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