Children Exposed to Violence: Current Status, Gaps, and Research Priorities

WASHINGTON, D.C. JULY 24-26, 2002

Workshop Summary

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CHILDREN EXPOSED TO VIOLENCE: CURRENT STATUS, GAPS, AND RESEARCH PRIORITIES

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I. INTRODUCTION

This workshop brought together researchers, practitioners, and policymakers to provide perspectives on the current state of knowledge regarding children exposed to violence, and to identify research gaps and promising avenues for future research. Three main areas of violence were addressed:

- 1. Children exposed to domestic violence;
- 2. Children exposed to community violence, including school violence; and
- 3. Children exposed to war and terrorism.

There were also additional, overarching presentations addressing definitional and measurement issues, services and interventions, as well as legal and policy issues.

The workshop was jointly sponsored by the National Institute of Child Health and Human Development (NICHD), the National Institute on Drug Abuse (NIDA), the National Institute of Mental Health (NIMH), the Fogarty International Center (FIC), and the Office of Behavioral and Social Sciences Research (OBSSR) at the National Institutes of Health (NIH); the Office of the Assistant Secretary for Planning and Evaluation (ASPE); the Centers for Disease Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA) in the Department of Health and Human Services (DHHS); the National Institute of Justice (NIJ) in the Department of Justice; and the Office of Special Education Programs (OSEP) in the Department of Education. The involvement and commitment of such a multitude and diversity of Federal agencies attests to the rising public interest in children exposed to violence. In her opening remarks, Dr. Margaret Feerick described the pivotal influence of September 11 on the workshop agenda, transforming the initial focus on children exposed to domestic and community violence to a broader focus encompassing the effects on children of exposure to war and terrorism. While the many components of NIH have supported some research in this area, there is a need for more targeted attention on the topic, particularly with regard to measurement, sampling, and intervention/services.

The workshop planners were most interested in obtaining focused recommendations to guide the development of a national research agenda. The first part of the workshop consisted of formal sessions that attempted to document what is known for each of the three main topic areas in terms of prevalence, consequences, protective factors, mediators/moderators, and social and cultural factors, and the current state of definitions and measurement, services, and interventions. Each session was followed by a discussion period that allowed participants to ask questions and exchange ideas. The second part of the workshop consisted of four breakout groups that sought to identify critical research gaps and future research directions in their respective topic areas: Domestic violence; community and school violence; terrorism/war; and services and interventions/policy issues. The closing session was devoted to key research needs and next steps in building a research agenda.

II. SETTING THE CONTEXT: DEFINITIONAL AND MEASUREMENT ISSUES

Moderator: Ileana Arias, Centers for Disease Control and Prevention

A. Defining and Conceptualizing Children's Exposure to Violence

Penelope K. Trickett, Ph.D., University of Southern California

Drawing upon 20 years of experience examining definitional issues in the field of child abuse and neglect research, Dr. Trickett summarized the critical issues for studying children exposed to violence. First, better definitions are needed to facilitate communication in this complex research area. At the same time, better definitions will enable scientific progress through better understanding of the independent variables, as well as the components of treatment that "make the difference." It is also important to sort out the contextual factors that may affect children such as poverty, the family environment, neighborhood violence, and whether these children experience other forms of victimization. Children in child abuse and neglect studies frequently experience more than one form of abuse, with 90 percent of the subjects in one study experiencing more than one form of abuse and neglect (McGee, et al. 1995). In addition, community violence may affect rates of child abuse since violent neighborhoods tend to have higher rates of physical child abuse. These factors should be considered when conducting a study.

Dr. Trickett presented data on the characteristics of sexual abuse trauma and their impact on girls' development to demonstrate the use of a conceptual model for understanding the possible independent variables. For the sample of victims studied, a number of factors must be considered as independent variables, including severity of abuse, age of onset, duration, relationship to perpetrator, and whether there were multiple perpetrators. These factors are interrelated and can make a "difference" in how one child reacts to abuse compared to another. Data on the onset and duration of abuse for different perpetrator categories also illustrate the variability of experiences of abuse that must be considered.

There is also a need to better assess the reliability and validity of reporters. In comparing the reliability of parents and children as reporters of abuse, children are more consistent. Studies on domestic violence have shown a lack of concurrence between parents and children about the child's exposure to violence, often because the parent is involved in the violence and may underreport it. Therefore, it is important to consider other sources of information such as police records or neighbors. Finally, researchers need to look at children's exposure to violence from a multidimensional perspective that considers variables such as the severity of violence (e.g., watching a drug deal versus watching a neighbor get shot and killed), its dangerousness and proximity, the frequency, duration, and timing of the violence, the relationship of the child to the perpetrator or victim, and the context in which the violence occurs.

B. Differentiating Exposure to Violence and Child Abuse

George W. Holden, Ph.D., University of Texas at Austin

Despite the increasing frequency of publications on children exposed to violence, the literature suffers from a lack of common terminology and definitions. For example, when researchers talk about children exposed to domestic violence, many studies have lumped together children across too large an age range, which may obfuscate some of the effects. There have also been inconsistencies in defining the term "domestic violence," which has been used interchangeably with such terms as "partner violence," "marital violence," and "interpersonal violence." The problem is in adequately conceptualizing the violence in terms of type of violence (physical, psychological), specific acts, severity, type of perpetrator, frequency and timing. Another issue is how to best assess how a child exposed to violence perceives it. Current definitions of violence are mostly centered on adult perceptions. Another issue that has not been

examined is how the perpetrator's resolution to the violence (i.e., whether they accept blame or deny it) impacts the child's reaction to the violence.

Defining children's *exposure* to domestic violence is also problematic. There are many types of exposure that have not been systematically examined, including the child as an eyewitness, the child who has been coerced to be involved in the violence, the child who overhears the violence, or the child who hears about it from someone else. A child may experience one or more of these types of exposure for each violent incident, but researchers may not differentiate between these distinctions and probe deeper to find out how they might affect child outcomes. One also needs to recognize key timing variables, such as the child's age when exposure began, the frequency with which it occurs, and the child's age when it last occurred. A small number of studies have asked about mothers' perceptions about their children's awareness of violence, with a wide range of awareness reported. However, this valuable information has been used only for descriptive purposes and not as a covariate. It is possible that the mother's reports are not accurate. Therefore, a fundamental problem is that the independent variable we are studying—exposure to domestic violence—is a complex set of experiences that have not been adequately assessed. Creating neat factorial groups of children who share the same quantity and type of exposure is difficult, if not impossible.

While not all exposures lead to negative outcomes, children's exposure to violence has been associated with a range of behavior problems. Even though it is currently not included as a form of child maltreatment, Dr. Holden provided two reasons why one might categorize exposure to domestic violence as abuse: (1) Children exposed to domestic violence are psychologically abused by living in that situation; and (2) Children exposed to domestic violence are often physically or sexually abused themselves, indicating a pattern of co-occurring abuse. Exposure to a parent being verbally or physically assaulted is physiologically arousing, emotionally distressing, and often trauma-inducing. Children exposed to domestic violence of psychological maltreatment such as rejection, isolation, lack of emotional responsiveness from the caregiver, and neglect. In a literature review of over 30 studies, Dr. Holden reported that the co-occurrence of domestic violence and child abuse/neglect in a majority of studies ranged from 30 to 60 percent of families (Appel and Holden, 1998; Edleson, 1999). In addition to co-occurring violence, these children may also face other serious adversities, including community violence, substance abuse, nutritional neglect, high stress levels, and mental health problems in parents.

How do we disentangle the problem of co-occurring violence? First, we need to comprehensively assess the characteristics of domestic violence, children's exposure to it, and comorbidity. Given the difficulty in collecting data from these complex samples, it is important to seek out data from multiple locations and sources, including fathers, and then pool those data. Second, instead of searching for pure cases of children exposed to violence, which is unrealistic, researchers need to use statistical strategies to understand how differing experiences are impacting children. Finally, there should be more focus on family dynamics, the context, and the mechanisms, not simply correlations and associations.

C. Measuring Violence Exposure

Lewis Leavitt, M.D., University of Wisconsin

Since multiple perspectives are often involved in defining violence, Dr. Leavitt emphasized that the research community needs to find a reasonably small number of variables that explain *a lot* of the variance. It is also important to *talk to children* and to find the best ways to interact with them. Children may be the best informants regarding their own experiences and parents may be unaware of children's exposure to violence. Parents may not be motivated to report their children's experiences accurately and may also have different ideas compared to their children about what constitutes violence.

When developing scales to measure children's exposure to violence, researchers should have a conceptual model in mind. The research community needs to address the type of exposure in context, in terms of community, home, school, or media, and then choose instruments that can best measure this. Within that framework, it is essential to look at the proximity of the violence, its intensity and frequency, and the relationship between the perpetrator and victim. Generally, exposure to violence is measured in yearly or lifetime increments. For instance, most questionnaires look at a child's yearly exposure to violence but it is important to look at exposure to violence in context: 2 years to a 5-year old is different from 2 years to a 16-year old in terms of lifetime exposure. Tools such as interviews or questionnaires to measure exposure should be developmentally sensitive, and take into account the child's cognitive, memory, and reading levels. Researchers should also consider the reliability (test-retest) and validity of the survey instruments, develop consistent questions, and validate the child's responses from other sources.

In terms of surveys, there is a need for a national snapshot of children's exposure to violence, and for researchers to replicate previous surveys for reliability and validity. While studies of children's exposure to violence have become more prevalent in the last 5 years, a great deal of research is needed on younger children, who can not read and express themselves as easily as older children. Dr. Leavitt discussed his work with the use of cartoon questionnaires as an effective tool for interacting with young children in a developmentally appropriate way. It is also important to measure peer victimization (or "bullying") since children have reported that they see this as a real danger in their lives. Finally, researchers must recognize that institutional review board (IRB) approval and education as well as informed consent for parents and children are critical to the success of these studies.

D. Responses

Barbara L. Bonner, Ph.D., University of Oklahoma

Dr. Bonner's perspective of children exposed to violence stems from her experience working with children after the Oklahoma City bombing, victims of terrorism and natural disasters, and adolescent sex offenders who had prolonged exposure to domestic violence. She stated that in 1962, a seminal article emerged on child maltreatment (Kempe et al., 1962), and yet in 2002 we still do not have a standard set of definitions. Definitions, however, "drive the field" and enable researchers to conceptualize the problem, as well as incidence, prevalence, and prevention strategies. Meanwhile, researchers have jumped ahead with treatment interventions without the benefit of adequate definitions.

It is also important to accurately understand the complexity of the child's experience, the child's perceptions and attributions, and those factors that foster resilience. In terms of children exposed to domestic violence, researchers need to employ standard definitions in order to know what it means to be exposed and how children define the perpetrator. For instance, what does "father figure" mean? It could be the biological father or a man who has lived in the home for 3 years. Echoing previous speakers, Dr. Bonner agreed that it is necessary to focus on a small number of variables and to work from a conceptual model. There is also a need to develop treatment protocols that can be replicated and to assess the efficacy and impact of different interventions. Child protective service agencies should also be included as a key component of intervention research studies.

Lourdes Oriana Linares, Ph.D., New York University

Dr. Linares emphasized that researchers must be precise in identifying and defining independent variables but at the same time, must think broadly because of the overlap in categories of violence. She encouraged the cross-fertilization of ideas among researchers, particularly with respect to child maltreatment research informing community violence studies. There is also a need to better define "community" and the perpetrator for community studies. In one study in Boston, residents defined community differently from the researchers, and some did not know what the neighborhood boundaries were. In community violence, it is difficult to define the perpetrator. The majority of perpetrators of community violence are not always strangers so a broad range of witnesses and social networks must be examined. In summary, standard measurements are critical for community violence studies, especially since many investigators tend to develop their own scales.

E. Discussion

There was a great deal of discussion on the issue of whether all children show harm from physical or sexual abuse. Dr. Holden noted that the issue of harm refers to a legal issue, but we must be careful not to make blanket statements about the harmful effects of domestic violence on children, particularly if it occurs outside the home or if the child is not aware of it. Many participants felt that the focus should be on the act of violence rather than the consequences since research shows these acts overwhelmingly affect children. Others contended that it was important to focus on effects. For instance, Dr. Fantuzzo pointed out that having a resilient child subjected to violence does not nullify the act and the impact of the act on the child. Others noted that there are also delayed effects that are not immediately observable. For instance, sexual abuse as a child might affect adult sexual life. The effects of domestic abuse may also be indirect, for example, affecting a parent's ability to positively care for the child. Dr. Trickett emphasized that having a specific focus is important. In other words, one should not be focused on whether exposure to violence affects children, but rather, what types of violence affects what kind of children in what manner? Better definitions will allow the field to examine these subtle effects.

There was also significant discussion on the question of whether exposure to violence is a form of child maltreatment. Some contended that not all child maltreatment rises to the level of needing protection, while others suggested that we must consider the child's subjective assessment, particularly over the long term. One participant noted that we must also consider how parents explain the abuse to children and how it subsequently affects them.

Other questions were raised about the utility of current measures. One participant pointed out that most studies are done with children who receive services after a violent act, yet the majority of parents and children experiencing violence do not receive services. Thus, we have only a very narrow basic understanding of child witnesses to violence, and this understanding does not adequately capture what is actually happening. Referring back to his presentation on measurement, Dr. Leavitt noted that while there are many problems with current instruments and their ability to measure the variables of interest, we should not be paralyzed by this fact. Regardless of the form of violence we are studying, it needs to be looked at in context so that researchers can identify the "sentinel act" that makes the difference.

F. Definitional and Measurement Issues: Summary of Recommendations

The lack of common terminology, definitions, and conceptual models has been a major stumbling block to scientific progress in the area of children's exposure to violence. It is important to sort out the contextual factors that may affect children such as poverty, the family environment, neighborhood violence, and whether these children experience other forms of victimization. It is essential to examine the proximity of the violence, its intensity and frequency, and the relationship between perpetrator and victim.

Another issue that deserves examination is how the perpetrator's resolution to the violence (i.e., whether they accept blame or deny it) impacts the child's reaction to the violence. Disentangling the problem of co-occurring violence requires that we comprehensively assess the characteristics of violence, children's exposure to it, and comorbidity.

There is a need to better assess the reliability and validity of reporters of violence and abuse, and incorporate information from disinterested informants in addition to the child or parent. When children are questioned, the instruments used to measure exposure to violence should be developmentally sensitive, and take into account the child's cognitive ability, memory, and reading level. There is a particular dearth of information about younger children.

It is important to utilize data from multiple sources, including fathers, and consider pooling of data to increase sample size or coverage. In terms of surveys, there is a need for a national snapshot of children's exposure to violence, and for researchers to replicate previous surveys for reliability and validity.

III. DOMESTIC VIOLENCE

Moderator: Susan Solomon, Office of Behavioral and Social Sciences Research, NIH

A. Prevalence

John Fantuzzo, Ph.D., University of Pennsylvania

Dr. Fantuzzo discussed research on the prevalence of children exposed to domestic violence, opening his presentation with the following question: "We see through the glass dimly and is the glass half empty or half full?" In doing so, he was referring to the substantial amount of information lacking in the field, particularly regarding violence prevention and intervention. He cautioned, however, that we should not try to obtain data too quickly, explaining that this can lead to tensions among researchers, advocates, and practitioners, and ultimately leave the field with no standard definitions, no systematic way of substantiating violence or exposure, no organized network of sentinels, and no national prevalence data.

Despite the challenges of conducting population-based inquiry, several national reports and databases are attempting to address the data inadequacy problem. These resources include National Crime Reports (uniform crime reports and national incidents-based reporting system), population-based surveys (e.g., National Family Violence Survey and National Crime Victimization Survey, both telephone based), and secondary analyses of cross-city experiments. Each of these sources has their strengths and weaknesses, and point to areas where there is room for improvement. For instance, police departments nationally use the uniform crime reports on investigated and substantiated crime. However, there is no standard code for domestic violence and no information on the persons exposed to the violent incident. The Spouse Abuse Replication Project, a data collection partnership between police and researchers, reported important information about children in the domestic violence setting and associated risk factors. Unfortunately, it was not a national study and was limited to misdemeanor assaults. In addition, there were missing data on child characteristics and no details confirming the types of sensory exposure to the violence. Considering the limitations of past surveys, direct investigation offers the best hope for defining and substantiating children's exposure to domestic violence and assessing risks and impacts over time. However, it must begin with standard definitions and data collection, and then assess additional risks and history, short and long-term impacts, and connections to services and follow-up. Population-based surveillance systems that have standard protocols and take a developmental and cultural approach are critical. Future research directions should involve building a rigorous scientific capacity in partnership with strategic sentinels across municipalities. Researchers cannot adequately assess the impact of violence, obtain quality information, or develop research-based interventions without building capacity through partnerships.

B. Consequences

David Wolfe, Ph.D., The University of Western Ontario

Dr. Wolfe began his discussion on the consequences of domestic violence by discussing the "children's paradox." Children are often torn between a sense of loyalty to their parents and a sense of fear and apprehension in the face of domestic violence. They want to stop the violence but they also want to belong to a family; affection and attention may coexist with violence and abuse. Ironically, children often perceive abuse as a short-term act but the intensity of violence tends to increase over time.

There are a number of consequences for children exposed to domestic violence. Unfortunately, most of what is known comes from children in shelters, thus limiting our ability to generalize. Reactions to domestic violence vary and change over the developmental life course. For instance, infants and toddlers may experience listlessness, failure to thrive, and problems with trust while preschool children may react through behaviors such as aggression, cruelty to animals, or clinging. For elementary school-aged children, it is a critical time for learning how to relate to women. Thus, witnessing abuse during this time can foster disrespect for females and reinforce sex role stereotypes. Experiencing domestic violence in adolescence may not only influence school achievement and self-esteem, but also provide the example for dating violence.

The effect of domestic violence on children can differ by gender. A man's history of violence is a more powerful predictor of a violent relationship than is a woman's childhood history of witnessing violence. Girls appear to be more able to avoid the domestic violence experienced by their mothers, but if they do end up in such a relationship, they are more likely to tolerate it. Factors contributing to resilience include a strong relationship with a positive, caring adult, community safe havens, and certain characteristics of the child including intelligence, self-esteem, and access to resources.

C. Responses

Laura McCloskey, Ph.D., Harvard University

Dr. McCloskey commended Dr. Fantuzzo's five-city study for its usefulness in understanding epidemiological problems that need to be investigated further and for setting future priorities. She then discussed a number of research gaps, noting that not enough research has focused on preschool children. Despite the challenges of working with this age group, this is an important area to develop. Referring to the work of her colleagues, Dr. McCloskey also talked about the impact of domestic violence on mothers. Many studies have shown that abuse over time causes maternal depression leading to child and parenting problems. In addition, if the perpetrator is the father, and he is chronically violent, children miss out on child support and paternal investment. Thus, it is important to assess the long-term economic and psychological impact on the father-child relationship and the child's perception of the father.

Conceptual models appropriate for different development stages are also needed. Children under 5 require particular attention and we need to know more about emotional regulation at this stage. Children who have been exposed to domestic violence may undergo extreme stress that can have potentially serious impacts on brain development. In one study where women were asked about their long-term history of having violent partners, it was possible to identify periods in the child's life when they were exposed to domestic violence. Researchers found that children exposed to violence before age six were more aggressive than those exposed in middle childhood. This suggests that there is a critical period in terms of developmental psychopathology. Clinical symptoms in middle childhood could serve as potential entry points for adolescent and young adult risk for domestic violence, beginning a potential "cycle of violence."

In adolescence, behaviors such as peer aggression and dating violence may surface in response to violence. This is another critical time to intervene, considering that aggressive behavior can deteriorate into long-term intimate partner violence in adults. Referring to Dr. Wolfe's presentation, Dr. McCloskey

agreed that domestic violence affects boys and girls differently. Boys tend to exhibit aggression while girls tend to respond more with psychopathology and depression. If girls respond with low self-esteem and depression, which many do in childhood, they are more likely to enter abusive relationships. Girls have more opportunities to enter more serious, sexually intense relationships with older men. Finally, Dr. McCloskey pointed out that there is an inequity in access to services for troubled boys and girls that must be addressed.

Jacquelyn Campbell, Ph.D., R.N., Johns Hopkins University

Dr. Campbell began her presentation by noting that little attention has been given to the physical effects of children exposed to intimate partner violence. There have been some hints in previous clinical studies that show exacerbation of asthma, eating disorders, and other stress-related problems (Kerouac et al., 1986). There have been a few studies on the long-term adult effects of witnessing violence and child physical and sexual abuse on physical health, including mortality as well as morbidity (Felitti et al. 1998; McCauley et al.1997; and Feerick and Haguaard 2002). However, in general, there has been limited research on the physical health effects of domestic violence, such as immune system effects, stress, and depression. For instance, are colds and flu in children in shelters due to immune system suppression? Do sleep disorders in children result from being kept awake by fighting or waiting for fighting?

There are other consequences of intimate partner violence that merit further research. There is little information on how children respond to the severest forms of violence such as homicide and suicide. We also need to know about the physiological effects of abuse during pregnancy, as well as how domestic violence affects parenting behavior. Another important question to address is how intimate partner violence affects family coping styles and seeking of mental health resources. In terms of policies, we need to determine what are the unintended consequences of legally defining exposure to violence as child abuse and how that ultimately affects the child in terms of protective services. It is also important to consider cultural issues, such as the individual effects of neighborhoods, ethnicity, culture, immigration status, and poverty on exposure to violence, and to what extent witnessing violence contributes to known health disparities.

Research in this area presents a number of challenges including ascertaining the effects of violence on very young children, developing measurement instruments that are ethnically and culturally appropriate, identifying appropriate comparison groups, and separating out other traumatic influences such as marital dissolution, community violence, and other stressors. Suggestions for future research include adding intimate partner violence to parent measures in existing research programs and to other studies involving children, using school health records as a source of data, and combining the resources of research/practitioner teams.

D. Discussion

There were a number of varied comments raised in response to the domestic violence presentations. For instance, Dr. Groves commented on the limitations of police data, noting that in some communities people do not see police as helpful. Dr. Fantuzzo commented that community partnerships are important for changing how cultures view police and pointed out that in Philadelphia, African Americans are more likely to call 911.

Other comments focused on the need for good measures of parenting styles, particularly in families with low incomes. Others emphasized the need to consider the developmental perspective of children exposed to violence. Dr. Margolin noted that children who have problems in childhood might not have problems later, while others who are showing no effects now may have problems later. Participants also pointed to the need for strategies to intervene in the stress response in childhood.

Discussions during the breakout session focused on major research gaps and what needs to be done to address them, based on what participants believe most needs to be funded. (See Appendix A for the summary and recommendations presented by the breakout group chairpersons). A wide range of specific study topics formed the base of discussion.

Participants believed that the taxonomy of domestic violence experiences should be broader and reflect a more inclusive definition of violence. The timing and patterns of domestic violence exposure, the effects of other forms of violence, and the effects of other forms of adversity (e.g., poverty, parental mental illness, parental substance abuse, displacement from home, unhealthy peer relations, natural disasters) are components of the taxonomy.

It is crucial that all effects on children be assessed across age groups ranging from early childhood through the teenage years. There is a basic need to first understand children's perspectives, attributions, and the meanings they ascribe to domestic violence before looking at effects or attempting to measure outcomes. Also of importance is the need to measure a child's degree of involvement in domestic violence, the type and intensity of exposure, and the type of sensory input (e.g., directly see, hear from another room, hear about it from someone else, see evidence of domestic violence). Other measurement issues involve how the meaning of domestic violence changes across childhood development, and children's reactions to domestic violence, particularly when they witness or hear an incident (e.g., they may try to physically intervene, call police or contact another adult, leave home, protect siblings, or hide in a closet). Of special interest are outcomes such as homicide or suicide that derive from domestic violence.

In assessing the affects of domestic violence on children, participants noted two essential areas of study: The effects of domestic violence on children and the effects of domestic violence on family functioning as it relates to the well-being of children.

Discussion of the effects of domestic violence on children addressed several behavioral and developmental outcomes. The cumulative effects of combined multiple, co-occurring, or sequential types of violence (e.g., school, community, and domestic violence; terrorism, etc.) are important. Examination of children's resilience factors is a research issue. Short-term and long-term mental and physical health effects are critical issues for study, including issues such as overall physical health disparities (as measured by recognized health/medical standards), neuro-physiological effects of and reactions to domestic violence, and the impact of substance abuse. Any research on substance abuse effects should include effects relating to parental substance abuse (e.g., care or protection of children, as an adjunct to increased incidence of domestic violence, and as a factor in parenting overall) and those effects leading to a child's substance abuse. The effects of children witnessing domestic violence on teen relationships, pregnancies, and subsequent marriages also are of interest, along with research on the parenting abilities of children who have witnessed domestic violence.

The group's discussion of the effects of domestic violence on family functioning looked at family as a system and at parenting practices of victims and perpetrators. Some of the family functioning sub-issues included:

- The effects on family organization and structure (e.g., roles, sibling relationships, overall stability, and the ability to handle ongoing basic needs [regular meals, clean clothes, school supplies, medication, etc.]);
- The effects on family interaction, such as a child's perception of hostility vs. warmth and whether or not the family is thought of as a safe place;
- The effects on relationships with extended family members (involved vs. isolated);
- The impact on a teen's decision to leave home and/or cut-off relations with the family;

• The impact of family violence on poverty and on other life stresses.

Parenting issues/problems stemming from the effects of domestic violence on parenting were of great concern to the participants. Parenting should be addressed as a global issue and expanded to include the exploration of a variety of related/intervening issues. Numerous issues are a part of this broad category, so there is a need to look at the following aspects of parenting practices involving both the victims and the perpetrators of domestic violence:

- How does domestic violence change male and female parents? Are there patterns of competent and compromised parenting styles among victims and perpetrators?
- How does domestic violence affect/influence the protective role and other aspects of parenting?
- How does domestic violence affect parenting children of different ages (prenatal care and protection of the fetus; parenting the preschool child -- meeting the child's high need for engagement and supervision; parenting the school-age child -- parents as the link to the outside world; monitoring activities and friendships; facilitating a child's emerging competencies; parenting the adolescent -- continuing to keep open communication channels while tolerating adolescent's separation from family)
- What are the effects of domestic violence on behavioral correction and the creation of behavioral change in children?
- How do parental coping styles affect parenting practices?
- How do we work with and/or enhance the parenting skills of domestic violence victims?
- How does parenting of female vs. male children differ in families experiencing domestic violence?
- How does domestic violence affect the perception of parents as role models for male and female behavior?

Another important research issue is the impact of community/societal systems (relatives, neighbors, schools, child protective and other social services, criminal justice, healthcare, etc.) on domestic violence issues. Of equal importance are the intended and unintended effects of domestic violence on those community/societal systems. Areas of interest include staff training needs, giving greater attention to referral diversity and referral follow-up, increasing inter-agency collaboration, and the development of domestic violence education and intervention programs.

Participants proposed that future research focus on some of the topics suggested and that more detail related to the use of qualitative and quantitative measures and uniform instrumentation should be included. Of particular concern is the need for projects to include multiple competencies, address multiple problems, serve to move the field forward, and address what other work needs to be done. As with other fields of study, cultural/ethnic practices and beliefs are known to have an immense effect on what is considered as the norm. The group believed that all projects should examine culture/ethnicity as a critical variable, an integral part of each study, and a factor that affects measurement. The group also emphasized that research in the area of children exposed to domestic violence will require expertise from a wide range of subject areas; linkages between and across disciplines will enhance study outcomes.

E. Domestic Violence: Summary of Recommendations

Considering the limitations of existing surveys, direct investigation offers the best hope for defining, substantiating, and understanding children's exposure to domestic violence and assessing risks and impacts over time. However, as echoed elsewhere, future progress is predicated on standard definitions and data collection, with broader and more inclusive definitions of violence, assessments of risks and history, short- and long-term impacts, and connections to services and follow-up. Population-based

surveillance systems that have standard protocols and take a developmental and cultural approach are critical. Too much of what is known comes from children in shelters, thus limiting our ability to generalize. Future research directions should include building a rigorous scientific capacity in partnership with strategic sentinels across municipalities. Researchers cannot adequately assess the impact of violence, including domestic violence, obtain quality information, or develop research-based interventions without building capacity through partnerships.

Conceptual models are needed that are appropriate for different developmental stages and that consider differences in effects by gender and culture. Much more attention needs to be given to preschool children. Another critical time to intervene is during adolescence, when behaviors such as peer aggression and dating violence may surface in response to domestic violence, and when aggressive behavior can develop into a pattern of violent behavior as adults. The inequity in access to services for troubled boys and girls must also be addressed. More research is also needed on neuro-physiological effects of domestic violence, such as immune system effects, stress, and depression.

In addition to studying the effects of domestic violence on children, research needs to focus on the effects of domestic violence on family functioning, particularly as it relates to the well-being of children. Family organization and structure, family interaction, parenting behaviors, coping styles, and practices, involving both the victims and the perpetrators of domestic violence, need to be considered. It is also important to assess the long-term economic and psychological impact on the father-child relationship and the child's perception of the father.

Another important research issue is the interface of domestic violence with other systems, such as the healthcare system, mental health system, educational system, justice system, and community and societal systems.

A systematic program of research could help accelerate progress in this field by calling attention to the need for more research to better understand, respond more effectively, and ultimately to prevent children's exposure to domestic violence. Such research should include multiple competencies and address multiple problems, should examine the implications of culture/ethnicity on measurement, and should be multidisciplinary.

IV. COMMUNITY AND SCHOOL VIOLENCE

Moderator: Tom V. Hanley, Ed.D., Office of Special Education Programs, DOE

Dr. Hanley began this segment of the conference by discussing the waxing and waning of the public and political attention spans. For instance, over the past few years, there has been increased attention on shooting in schools, yet schools are still overwhelmingly safe. He also referred to and circulated two documents produced as a result of the shootings that he hoped would switch the focus away from violence to public health.

A. Prevalence

Bradley D. Stein, M.D., MPH, RAND and University of Southern California

Dr. Stein's presentation focused on four main themes underlying community violence prevalence: (1) Types of exposure to violence; (2) predictors of exposure; (3) exposure in different contexts; and (4) relative gaps in our knowledge. Community violence can be described in terms of direct and indirect exposure as well as the nature of the violence (weapon-related, criminal, and physical). There are substantial variations in estimates of weapon-related, criminal, and physical violence in the literature, and

very little data, except for the National Longitudinal Study of Adolescent Health (AddHealth), on children's exposure to violence in the general population. Most data reports come from children in high-risk areas. Despite these inconsistencies, the general predictors of violence exposure include being male, being an older child, being an ethnic minority, living in urban areas, low socioeconomic status (SES), and early conduct problems.

There is also a lot of misinformation about violence exposure in schools. For instance, single victim homicides are declining while multivictim homicides are increasing. Overall, the numbers are small but draw a lot of attention. Witnessing and being a victim of threats and physical violence are quite common in schools. However, this must be placed in context. Children spend more time in school and thus may be more likely to experience violence in school. However, little is known about violence exposure in schools, particularly for U.S. communities and compared to other countries.

Some of the key knowledge gaps in community violence include variations in prevalence estimates due to differences in sample characteristics, measures of what constitutes violence, and reporting methods. We also need to know how often violence is occurring, whether exposure to violence is changing over time, and longitudinal studies to measure the chronicity of violence exposure. Characteristics of violence are seldom reported in the literature in terms of the relationship to the perpetrator and the social context. In addition, most reports are of at-risk populations.

Finally, it is important to distinguish between bullying and other types of violence. Children think about bullying more than other types of violence. We also need to look at the relationship between community violence exposure and other health risk behaviors.

B. Consequences

Michael Lynch, Ph.D, State University of New York at Geneseo

Dr. Lynch began his discussion by presenting the challenges of community violence research, which include dealing with co-occurring risk factors and clarifying how community violence is operationalized. He then outlined the direct effects, mediating variables, moderating factors, and resilience issues involved in children's exposure to community violence.

One direct effect is post-traumatic stress disorder (PTSD), which has been reported in a number of studies. There are also psychobiological effects that manifest through alterations in physiological arousal. This can result in lower baseline heart rates (hypoarousal) or high blood pressure, epinephrine secretion, and cortisol production (hyperarousal). Previous studies have shown that children exposed to violence may also externalize their pain through antisocial behavior, violence, aggression, substance abuse, and other behavior problems. Recent studies have indicated that there are developmental differences in this externalizing behavior, and that there may be a "feedback loop" predicting subsequent exposure. Children exposed to violence may also internalize their pain. Internalizing problems can result in anxiety and depression, lower self-esteem, separation anxiety, and feelings of insecurity. A number of studies have also reported that children exposed to violence may experience problems in peer relations, educational achievement, and with the juvenile justice system.

The effects of community violence can vary, however, based on certain mediating variables. One category of mediating variables can be described as "factors within the child," such as emotional regulation, social information processing, and perceptions of exposure. Other mediating variables occur in the social environment, including family systems. This underscores the need to assess the potentially protective nature of family systems. Factors that may moderate (or lessen) the impact of community violence have also been reported in the last decade. They include characteristics of the child

(temperament, gender, and ethnicity); characteristics of exposure (chronicity, proximity, and familiarity); and characteristics of the social environment (supportive relationships, parental monitoring, extent of family conflict). Support from parents, the school environment, and peers all play a role in helping children overcome adversity in their world.

C. Responses

Kathy Sanders-Phillips, Ph.D., Howard University

Dr. Phillips came to the discussion of community violence from the perspective of a drug abuse researcher, and as a public health researcher in general. She is interested in the impact of exposure to community violence on risk behaviors such as substance abuse, particularly among minority adolescent populations. She discussed her work examining the impact of community violence on HIV infection and other risk behaviors linked to health disparities in South African adolescent girls.

Dr. Phillips then discussed theoretical models and the importance of modifying those models as research yields new information. The first critical theoretical model to consider is that children and families are embedded in social and cultural systems. We cannot understand the development of behaviors or responses without reference to the social system in which children live and grow. Therefore, we must examine these systems, as well as race and ethnicity, and incorporate them into our theoretical models. Referring to Dr. McCloskey's presentation, Dr. Phillips mentioned the disparate identification of males for intervention services to illustrate the plight of African-American boys. The literature suggests that adolescent male victims, if African American, are more likely to be identified by the juvenile justice system and incarcerated. By contrast, white adolescent males are more likely to be identified by the mental health system. There are cumulative effects from multiple experiences of poverty, violence, racism, and oppression, and other forms of abuse. These experiences reinforce alienation from society, and feelings of helplessness and powerlessness. Therefore, it is important to examine how the experiences of children of color impact their responses to violence.

It is also critical to understand the mechanisms by which exposure to violence impacts psychological dysfunction. More research is needed on the psychological, physical, and social mechanisms in children, as well as the impacts on parental behaviors, social norms, cultural norms, and how these multiple levels of experiences interact to foster dysfunction. We need to incorporate our theoretical findings into interventions and consider the multiple avenues where intervention can take place. It is also important to train health care personnel on how to assess and treat exposure to violence, and to develop strategies to help schools protect children.

Gregory A. Thomas, M.S., New York City Board of Education

Mr. Thomas prefaced his remarks by describing the New York City school system, which has over one million children in over one thousand schools. Schools are generally safe but what happens on weekends carries over into the schools. His goal is trying to reduce violence in New York City schools and the surrounding community. He emphasized that we must be careful about how we define violence, because perceptions vary for urban and suburban areas. What is normal for one community may seem violent to another community. In addition, tolerance of violence in urban communities may lead to lower incidence of reporting in these areas. The more children see violence and get used to it, the less likely they are to report it.

Mr. Thomas also discussed the "No Child Left Behind Law," which allows parents to transfer children from persistently dangerous schools (those schools deemed dangerous for 2 concurrent years). One measure of how dangerous schools are is the number of weapons identified in the schools. However,

while weapon scanning can identify weapons in schools that have these devices, not all schools have scanning systems. Mr. Thomas also referred to an article on the World Trade Center attacks and the impact on schools. A number of schools were in the proximity of the World Trade Center attacks, and a number of students lost parents or knew people killed in the attacks. This attack was seen as a violent episode in the minds of children, and had a devastating impact. Thus, researchers should consider the long-term effects of this act in future studies.

D. Discussion

There was a significant discussion about how gang violence is conceptualized, which has not been consistently addressed in the literature. Dr. Lynch noted that gang violence is often subsumed under school violence, while Dr. Phillips noted that in some areas, community violence is defined by gang violence. In addition, many gang members see the gang as part of their family system, which can further complicate outsiders' perspectives of the issue. Dr. Stein cautioned, however, that we are creating somewhat artificial categories to group sexual, community, domestic, and school violence. We must consider the complexity of these issues and the relationships between these forms of violence.

There was also some discussion about the use of high-risk samples to inform community violence research. For instance, Dr. Fantuzzo suggested that high-risk samples may compromise the content validity of surveys. Dr. Stein agreed that this is a problem, and that there are few studies of the general population to give us a broader perspective on the prevalence of violence. Dr. Hill added that we need to look beyond paper and pencil instruments and ask the community to help interpret answers in their social context. This will allow researchers to construct studies that can yield more relevant data.

Other participants urged the research community to consider the neurological pathways resulting from exposure to violence, particularly how they affect impulse control and aggressive behavior. There was also discussion about the need to separate out pre-existing mental health conditions and behavior tendencies when considering the effects of violence. Dr. Lynch suggested that a possible solution to this is to start early identifying impacts and precursors of violence. In real life there are millions of things that account for all the variances.

Dr. Leavitt concluded the discussion by reminding the group to look at its ultimate goals: Fostering resilience, determining the underlying pathways that lead to problems in children exposed to violence, and developing interventions. Dr. Stein agreed that the goal is interventions that will have a greater likelihood of actually being used in communities. We have to understand the different communities to help different children.

During the breakout group discussion, the group posed the concept that the community is not just the location of the violence or a set of people, houses, and apartments. (See Appendix B for the summary and recommendations presented by the breakout group chairpersons). The community is a set of interconnecting relationships. The group also made the assumption that violence in schools often stems from the community, and that the school can be viewed as an integral part of the community; therefore, it does not make sense to distinguish between school violence and community violence, except in unique issues such as bullying. We also need to understand school violence in terms of chronic conditions, not just acute events like Columbine. Participants discussed research needed to inform policymakers about best practices, including on the relationship between witnessing violence and violent behavior, the psychological and physiological mechanisms linking the two, whether and how violence may exacerbate health disparities between racial and ethnic groups, and the physical effects of living in a violent community.

Additional research on how schools influence occurrence and consequences of neighborhood or schoolrelated violence is also needed. Specifically, how does violence within a school setting impede educational achievement and ultimate escape from the community? What are the educational outcomes associated with community violence? What is the role of schools in mediating violence? If you reduce family and community violence, does it change how children behave in schools? How do you link government and education to improve the community? What are the effects of bullying, particularly at younger ages?

Participants also discussed the importance of developing interventions directed not just at the individual child, but at the community as well to help foster resilience. As part of this discussion, participants raised a number of research questions, including:

- How does violence affect the social contract within the community?
- How do different groups define community, family, and neighborhood?
- How is the community affected by violence?
- What is the role of the community as a potential buffer for violence and for how its people react to that violence?
- How does community reaction to violence affect children, their reactions, and their development?
- How does violence in the community affect the overall area, not just individuals?
- Is there a relationship between community violence and a violent community?
- What are the effects of *direct* and *indirect* exposure to community violence? How do the two compare?

Further discussion focused on identifying the mechanism that occurs between witnessing violence and violent behavior to understand the biological and psychological pathways. In particular, researchers should examine:

- How violence affects children at different developmental stages;
- The underlying mechanisms leading to violence that can inform interventions;
- The impact of direct or indirect exposure to violence on outcomes such as behaviors and feelings;
- Younger children's constructions of community;
- How poverty, culture, and ethnicity mediate exposure to violence and outcomes, including the causes for feelings of alienation and hopelessness within groups;
- Protective factors, assets, etc. in a community that foster resilience to violence;
- Specific outcomes of children exposed to dual violence (e.g., domestic and community);
- Gun control policies internationally and their effects on community violence.

E. Community and School Violence: Summary of Recommendations

Some of the key issues in community violence research include variations in prevalence estimates due to differences in sample characteristics, measures of what constitutes violence, and reporting methods. We need to know how often violence is occurring, whether exposure to violence is changing over time, and we need longitudinal studies to measure the chronicity of violence exposure. As community violence research relies primarily on high-risk samples, general population studies of violence are sorely needed to provide a broader perspective on the prevalence of violence.

It is important to examine how community violence affects risk behaviors, and, in turn, health disparities. It is also important to look at the cumulative experiences of children of color, including multiple experiences of poverty, violence, racism, and oppression, and other forms of abuse, and how these experiences reinforce alienation from society and feelings of helplessness and powerlessness, and how they impact their behaviors and responses to violence. Also important are the neurological pathways resulting from violence, particularly how violence affects impulse control and aggressive behavior.

There is a need for theoretical models concerning how community violence impacts development. It is critical to understand the psychological, physical, and social mechanisms by which exposure to violence impacts psychological dysfunction, as well the impacts on parental behaviors, social norms, cultural norms, and how these multiple levels of experiences interact to foster dysfunction. We need to incorporate our theoretical findings into interventions and consider the multiple avenues where intervention can take place. It is also important to train health care personnel on how to assess and treat exposure to violence, and to develop strategies to help schools protect children.

The attack on the World Trade Center was seen as a violent episode in the minds of children, and had a devastating impact. However, the episode provides an opportunity to study the long-term effects of an attack of such far-reaching proportions.

Participants also recommended that future research examine the relationship between witnessing violence and violent behavior, the psychological and physiological mechanisms linking the two, whether and how violence may exacerbate health disparities between racial and ethnic groups, and the physical effects of living in a violent community. Research on how schools influence occurrence and consequences of neighborhood or school-related violence is also needed. Interventions should be directed not just at the individual child, but at the community as well to help foster resilience.

V. TERRORISM AND WAR

Moderator: Farris Tuma, NIMH

A. Prevalence

Robert Pynoos, M.D., M.P.H., University of California at Los Angeles

Dr. Pynoos presented an ecological model on the determinants of long-term postwar adjustment in Bosnian youths and discussed the prewar, wartime, and postwar factors that impact adjustment. He presented a postwar adversities scale that illustrated how the family may be traumatized by the effects of war. This scale illustrates that traumatic events may also occur *after* the war, while some traumatic events, such as the disappearance of a loved one or the confirmed death of a loved one, may be caused *by* the war. There are also postwar traumas such as accidents or crime that are not war-related that may affect the family. Together, these events comprise a "postwar trauma variable."

PTSD, depression, and grief can often co-occur after a traumatic event. Dr. Pynoos used these findings to create a general psychological distress factor in his structural model. Postwar trauma reminders, including sudden loud noises, destroyed or damaged buildings, and hearing news of political instability, can have an ongoing impact on a person's psyche and strongly predict long-term adjustment in adolescents, more so than family environment and refugee experiences. These results suggest that assessment and treatment efforts should address reminders. Studies have found that exposure to traumatic events is also mediated by parenting practices. Lessons from developmental psychopathology suggest that therapeutic approaches should target prewar trauma, trauma exposure, postwar trauma reminders, postwar family adversities, psychological distress, and developmental impact.

Turning to terrorism, Dr. Pynoos discussed the impacts of several high profile events on children. One study of Oklahoma and Nairobi showed that the repercussions of loss were much more devastating than PTSD. In the Three Mile Island incident, pregnant women and their offspring associated with a government zone of evacuation showed higher anxiety levels even though the zone had no correlation to radiation. Eleven percent of children in New York City had a family member or friend exposed to the World Trade Center terrorist attacks. Two-thirds of these children had been exposed to a traumatic event prior to the attack. A high incidence of agoraphobia was reported after the attacks.

Dr. Pynoos concluded with a brief discussion of the National Child Traumatic Stress Network, funded by SAMHSA. The mission of the network is to raise the standard of care and improve access to services for traumatized children, their families, and communities throughout the United States. The Intervention Development and Evaluation Program of the network is primarily responsible for developing, delivering, and evaluating improved treatment approaches and service delivery models, which are then implemented through the Community Treatment and Service Programs.

B. Consequences

Jon A. Shaw, M.D., University of Miami

It is estimated over the last decade that two million children have been killed due to war related injuries, four million have been disabled, one million orphaned, and twelve million dislocated from their homes. Yet there are relatively few studies of the effects of war and terrorism on children. There are a number of generally accepted but perhaps questionable truths about the effects of war and terrorism on children. For example, some say children's responses to stressful conditions are often less intense than might be anticipated.

Unlike other forms of violence, there are specific situations associated with war such as torture, bioterrorism, refugee status, pupils of war (children socialized to violence), and distant trauma (experiencing a horrifying event from a relatively remote and safe distance). There have been some studies of children captured and tortured in Mozambique that found that while some children identified with the soldier. There have also been studies in Bosnia and Cambodia on the impact of refugee status on the child.

War can produce a variety of consequences in the child. Biological effects can include malnutrition, starvation, disease, and war-related injuries. There can also be emotional, behavioral, or mental effects, ranging from little or no reaction, to immediate effects such as PTSD, mood disorders, and externalizing behavior. Long-term effects can also result. Developmental effects can appear in the form of decreased academic performance, difficulty concentrating, cognitive impairment, structural changes in the central nervous system, and changes in personality structure.

These effects can be heightened or lessened by a variety of mediating variables, which can be categorized by: (1) Levels of exposure, (2) disruption in the family system, (3) disruptions in the social support system, (4) child-specific variables, such as developmental age and gender, and (5) cultural factors, including religion. Known protective factors include family and social supports, cultural and religious values, strengths intrinsic in the child, leadership, and anticipatory preparation.

There are a number of research gaps in this area of study including determining the most effective treatments for war-exposed children, developing empirically based interventions for children and families experiencing grief, and designing training modules to help non-mental health providers intervene in psychological crises. There is also a need for studies of resilience, determining which acute physiological responses predict long-term consequences, assessing the impact of early parent death on children,

examining the role of culture and values as protective factors, and assessing the use of pharmacological treatments in children with PTSD.

C. Respondent

Paramjit T. Joshi, M.D., Children's National Medical Center

War and terrorism are abnormal events that occur in usually normal populations, causing acute stress reactions. Irrational fear leads to group compulsion to eliminate neighbors or potential enemies, setting up a cascade of events across the world. This pattern is repeated over and over again in different parts of the world through different generations.

In terms of the children affected by these acts, Dr. Joshi agreed with Dr. Shaw's assertion that we need to know more about "pupils of war." How do young children get recruited to be soldiers? Dr. Joshi suggested that the developmental trajectory goes off track seeing the death of loved ones. When support mechanisms such as family, community, and religion are gradually taken away, children are increasingly vulnerable to outside influences.

Children can be affected by repeated acts of war or terrorism. Retraumatization has cumulative effects, enhancing the intensity and duration of response, and lengthening the recovery period. There are also social effects. For instance, family role reversal may occur. Demoralized fathers may return from war only to find their wives, formerly submissive, assuming the more dominant role. Terrifying experiences can also cause defects in gene regulation. In addition, functional magnetic resonance imaging of people's brains when they are observing violent scenes may also help us understand whether stress contributes to a constant state of brain activation. We need research to answer this question. On the subject of desensitization, rates of aggression, violence, truancy, and substance use in Israeli youth have implications for inner city youth here. In the United States, the need for appreciation, to be wanted, and to have a purpose in life can often draw children into violent groups. This theory can also apply to motivations of suicide bombers. Tragically, there are lost generations due to the effects of war. Our challenge in the event of war or a terrorist act is how to prioritize and go about developing large-scale interventions that can provide support, outreach, and education, and identify those at greatest risk.

D. Discussion

There was significant discussion on the subject of ideology. One participant suggested considering the role of ideology, religion, and related forms of thought to distinguish between war and community violence. For example, whereas war typically develops results from differences in ideology, community violence is often the result of multiple more proximal causes such as poverty and housing conditions. There was also discussion about whether having a group ideology was positive or negative for children. Dr. Levy noted that children from refugee camps sometimes fared better if they had a strong ideological orientation. Dr. Pynoos noted that the study of ideology is not so straightforward and that it is hard to know what this means in terms of long-term pyschological and physiological effects. Dr. Phillips noted that war and terrorism may not be so different from community violence as one might think and that considering them as having common causes and consequences will move us forward in the research in these areas. Dr. McCloskey agreed with this point, and added that the effect of community violence on black men in the United States could be compared to war considering that one in four black men are in prison by age 25.

The breakout group framed their discussion and recommendations by first defining war and terrorism. (See Appendix C for the summary and recommendations presented by the breakout group chairperson).

The group used existing Department of Defense (DOD) and Federal Bureau of Investigation (FBI) definitions and then added their own thoughts. Terrorism is the "Unlawful use of threat or force against an individual/government for political or other end with the intent/purpose of imposing one's will (DOD)." It can also be construed as the "Illegitimate use of force to achieve political, social, or religious objectives, when innocent people are targeted (FBI)." Terrorism is usually played out before a larger audience, is marked by unexpected, recurrent attacks, and is carried out by groups who do not have other means to get their message across. Civilians are often a major target of these attacks. By contrast, war is planned and executed, usually by governments against governments perhaps in self-defense or revenge, and has a defined beginning and end. Civilians are usually secondary targets.

The main research gap in the area of children exposed to war/terrorism is in understanding the different consequences of exposure to war versus terrorism. This issue entails differences in acute, unexpected (terror) versus chronic, expected (war) exposure. A related issue is that the effects from exposure to terrorism may be different than those from other forms of violence in many ways. For example, geographically, people who are distant from a terrorist incident still suffer psychological trauma. Can anticipatory preparedness reduce the level of anxiety? What are the effects of anticipating incidents without being prepared?

There is a need to contrast the prevalence of problems associated with war versus terrorism. A comprehensive, three-dimensional matrix is needed, comparing war and terrorism across variables such as interventions and type of phenomena and across various individual risk factors. The cells of such a matrix need to be filled in with research from many studies. One large, all-encompassing study is not recommended.

A number of characteristics (besides type of trauma) are important to consider in terms of the research on mechanisms and consequences of exposure to war/terrorism. Consequences need to be considered more broadly, and secondary consequences need to be considered. Terror can influence other behaviors (e.g., if adolescents stop going to malls, the economy can be affected). Studies are needed on the psychological effects of bioterrorism on children and families and on the psychological effects of activities aimed at disaster preparedness on children (e.g., some private schools now do mock school shootings). We need to consider effects from the biological (genetics) to the existential, from neurons to neighborhoods. Another intriguing area for future research is the impact of chronic stress, especially the impact on children, including prenatal effects.

There is a need to consider research and models from other fields. A public health (not just mental health) model is needed. Ideally, a modular model would be developed to give to communities. Modular intervention is needed in schools since immediate responses can take place in schools. Various responses need to be tried to see which work better. Medical outcomes such as immune disorders, somatic disorders, and disease need to be examined, as well as the influence of ethnicity and culture.

To inform intervention strategies, participants discussed the need to understand the longitudinal course of the evolution of psychological morbidity, and the developmental stages and development of psychological neuropsychiatric symptoms. For example, is depression related to maternal response to trauma? What are the effects of early parent death, considering variables such as age and gender?

Research on measuring and examining resilience first demands answers to the following questions: How can we define resilience? How do we build resilience? What are the coping and adapting strategies that contribute to resilience? There is a need for long-term studies and intergenerational studies (e.g., the effects of loss of fathers on families). Empowerment issues also need to be studied (e.g., confidence that one will prevail and a feeling of control over a situation).

Researchers' challenges need to be considered, such as the ethical dilemmas of doing research on the battlefield (international sphere). How does one remain neutral but empathetic?

To prevent or treat long-term negative emotional consequences of witnessing war and/or terrorism, research is needed on:

- Crisis intervention, including the best types;
- The potential harm and benefit from traumatic reminders of past violence, such as memorials;
- Social communication, for example, addressing what to say to children on TV about attacks;
- Individual reactions and helping to reprogram through possible training;
- Identification of our target audience—should we be training the helpers, such as teachers, religious figures, parents, social workers, etc.? What do the children think would be helpful?
- Types of therapy that might be effective and their possible outcomes;
- First responders and their families;
- Effects of parental factors on children's symptoms, including intervention strategies for single parents and remaining survivors' strategies.

In discussing the type of research needed in the area of preventive interventions models targeted toward at-risk individuals or families, participants believed that analogues for intervention models already exist in other fields (i.e., infectious disease, natural disasters). Rather than reinventing the wheel, attention should focus on effectiveness studies of models for individuals, families, and groups—we especially need to focus on children. Studies are needed on how children respond in relation to their own aggression, including the risk factors for becoming future terrorists. For example, what effect does the parental political belief system have on a child? What are the psychological and other effects of quarantine on children and families? What type of anticipatory preparedness is best?

E. Terrorism and War: Summary of Recommendations

The main research gaps in the area of children exposed to war and terrorism is in determining the most effective treatments for these children, and in understanding the different consequences of exposure to war versus terrorism. A number of characteristics (besides type of trauma) are important to consider in terms of the research on mechanisms and consequences of exposure to war/terrorism. Consequences need to be considered more broadly, and secondary behavioral consequences need to be considered. Studies are needed on the psychological effects of bioterrorism on children and families and on the psychological effects of activities aimed at disaster preparedness on children. Additionally, we need to consider effects from the biological (genetics) to the existential, from neurons to neighborhoods. Another intriguing area for future research is the impact of chronic stress, especially the impact on children, including prenatal effects.

It is important to develop empirically-based interventions for children and families experiencing grief and training modules to help non-mental health providers intervene in psychological crises. Research and models from other fields should be considered. A public health (not just mental health) model is needed that includes medical outcomes such as immune disorders, somatic disorders, and disease, as well as the influence of ethnicity and culture. Long-term and intergenerational studies (e.g., the effects of loss of fathers on families) should be considered.

There is also a need for studies of resilience, determining which acute physiological responses predict long-term consequences, assessing the impact of early parent death on children, examining the role of culture and values as protective factors, and assessing the use of pharmacological treatments in children with PTSD. Research on measuring and examining resilience first requires attention to definitional issues, and then the factors that contribute to resilience, including empowerment issues.

Studies are needed on how children respond in relation to their own aggression, including the risk factors for becoming future terrorists. To prevent or treat long-term negative emotional consequences of witnessing war and/or terrorism, research is needed on crisis intervention, the impact of traumatic reminders of past violence, types of therapy that might be more effective and their possible outcomes, first responders and their families, and the effects of parental factors on children's symptoms, including intervention strategies for single parents and remaining survivors' strategies.

VI. SERVICES AND INTERVENTIONS FOR CHILDREN EXPOSED TO VIOLENCE

Moderator: Jerry Silverman, ASPE

A. Domestic Violence

Honore M. Hughes, Ph.D., Saint Louis University

Dr. Hughes began her presentation with an overview of the literature on the scope and variety of domestic violence interventions. The early eighties were marked by the beginning of published studies in this area while the nineties were marked by more studies on pre-post designs and follow-up studies. She also presented an overview of the variety of programs targeting children exposed to domestic violence. These programs can vary based on their approach, setting, target populations, outcomes, funding sources, and intensity of services.

She then posed the question about whether domestic violence can serve as a gateway to services. Overall, many children are not identified and few mothers seek services, but much depends on the training of workers. The current knowledge base on the needs and services for this population is very limited and it likely that needs are not being met by current services. A few exemplary studies on this topic do exist. For instance, the Kids' Club is a low-intensity intervention that compared a children-only intervention to one involving both mothers and children. The study found that the mother-child group was more effective. Another program, the Learning Club, reduced child abuse and exposure to domestic violence, and increased child self-competence through pyschoeducational groups for children and home interventions.

These studies show that children's attitudes, distress levels, and behavior can be changed along with their mother's skills. They also emphasize the importance of mother involvement. However, while there is high quality research out there in the field, we need to do more. Different types of problems require different types of intensity, and research is needed to inform interventions.

B. Community Violence and Terrorism/War

Steven J. Berkowitz, M.D., Yale University

Dr. Berkowitz began his presentation by stressing that while war tends to be episodic, terrorism and community violence can be continual. Therefore, we need different responses for different events. In war and terrorism, which involve larger numbers, the government has an important role in coordinating services and restoring social order. With regard to community violence, there is a need for increased focus on developmental perspectives and including primary caretakers in interventions. When parents receive support, the effects on children diminish.

There is no empirical data on the best time to intervene although the general belief is that earlier is better. The advantages of early intervention include the potential to decrease immediate suffering, to recognize and respond to environmental issues, to assess the ongoing threat, and to track the trajectory of traumatic response from the baseline. There are also disadvantages such as use of limited clinical resources prior to demonstrated need and unclear treatment parameters. We must also consider when the family is likely to take advantage of the intervention, and how cases are referred to professionals. Cases are found through both traditional (parents, schools, courts) and nontraditional (outreach, police, emergency medical systems, community organizations) sources.

We also know that interventions can occur in a variety of settings with a wide range and level of expertise in the provision of interventions. Interventions can be defined in multiple ways. They can be either collaborative or individual, can be led by different providers, and have more or less emphasis on diagnosis and developmental issues. In terms of what interventions provide, however, there are few studies on children and fewer still on immediate and early interventions. The best empirical evidence available involves sexually abused children. We also know that psychoeducation for parents and older children is very useful.

To move the field forward, we need studies addressing the best time to intervene, which interventions work best, studies of early markers for high-risk behaviors, and studies of the best techniques for intervening with children exposed to violence. The challenge for researchers is the difficulty in following up subjects, characterizing the intervention, and the complex number and definition of variables that must be analyzed.

C. Desired Outcomes and Evaluation of Programs

Hope M. Hill, Ph.D., Howard University

Dr. Hill discussed the lessons she had learned from intervening in the lives of children exposed to domestic and community violence, both in the United States and internationally. It is important to have experts from the participant community construct the intervention. At the same time, researchers need to take seriously the study of the social and cultural context to insure the integrity of the work; they should make no assumptions. They should intervene simultaneously in all levels of the child's ecology, and appreciate the grinding effects of poverty on all aspects of the intervention and act accordingly. Once highly stressed, low resource families trust the intervention, they will still need support after the intervention is "officially" over.

She discussed previous evaluations of interventions for children exposed to domestic and community violence, and their relative strengths and weaknesses. Overall, programs have been successful in reaching goals such as reducing children's anxiety, reducing aggression, and improving social skills. However, most programs do not specify the extent to which the child has been abused in addition to witnessing abuse. Furthermore, few evaluation studies incorporate existing theory in their design, and most are small samples of convenience.

We can also learn from analyses of which programs work and which do not. Examples of effective primary prevention strategies are programs aimed to prevent the onset of youth violence through skills training, behavior monitoring and reinforcement, as well as building school capacity and youth development programs. There are a number of effective secondary prevention strategies including parent training, home visitation, and social problem solving. Exemplary tertiary prevention strategies include those involving social role taking, clinical marital and family therapy, and wraparound services. Overall, the Blueprints model for Violence Prevention was lauded as a model approach. Ineffective strategies include peer counseling (when used alone), gun buyback programs, boot camps, waivers to adult court,

and residential programs. Dr. Hill also emphasized the importance of cost-benefit estimates. Previous studies by Greenwood (1996, 1998) suggest interventions targeting problem youth are more cost effective than those targeting the general population.

Suggested next steps include long-term intervention studies, inclusion of strong resilience paradigms, studies of culture as a protective process, model interventions that mimic real world situations, and prospective, community-wide interventions that blend key areas of the child and family ecology, including school, law enforcement, church, and businesses.

Dr. Hill also added a final note about working with South African youngsters to see how they have coped during apartheid. She is working with over one thousand secondary school students in South Africa, and comparing them to students in Washington D.C. schools. Students in D.C. are more concerned about serious injury in school than those in South Africa. Protective factors such as prayer and family seem to work for both sets of students. However, African-American men tend to isolate themselves to insulate themselves from a violent community, while South African men tend to rely on friends. Likewise, African-American women use prayer first and then isolation as coping mechanisms, while South African women rely on relatives.

D. Responses

Judith A. Cohen, M.D., M.C.P., Hahnemann University

Dr. Cohen discussed the need for randomized, controlled studies of community interventions and outlined some of the key elements those studies should include. First, it is important to document treatment protocols. If researchers are unable to accurately describe the treatment, clinicians will not be able to implement it. In addition, if therapists help develop treatment models, they will be more likely to buy into them. Involving consumers in treatment design and getting feedback is also critical. People do not want to be guinea pigs so it is important to inform them that a systematically evaluated treatment may be better than what they are currently receiving. Dr. Cohen also emphasized the importance of integrating developmental and cultural perspectives in treatment models.

In terms of what to measure and how to measure it, it is important to ask children about their symptoms and their ability to function. Research is also needed to understand more about functional impairments and parent functioning. It is important to look beyond just what works and examine the target audience for specific interventions, the proper dosage, intensity, etc. Finally, it is important to ensure that care is rendered by trained professionals, and to make an effort to provide care for patients who may not fit the study criteria. This fosters trust and allows patients to return for support and follow-up.

Betsy McAllister-Groves, M.S.W., L.I.C.S.W., Boston University

Dr. Groves reinforced the sentiment of previous speakers that we need to think of cultural and geographic context when designing interventions. The definition of violence differs in rural versus urban areas. In addition, we need to think about how to deliver interventions to geographically dispersed populations. When examining culture, it is important that interventions match the beliefs of the target population. It is also important to look at what interventions work for young children—group interventions. From the policy perspective, we need to reexamine how we identify children who need services. We need to consider the feasibility of conducting universal screening in a pediatric environment, including whether we ask children for information and how that may involve protective services. Finally, we need to consider how to translate research findings into information useful for a broad range of caregivers, particularly for preschool teachers and day care providers, as well as children.

E. Discussion

Participants raised a number of issues dealing with research in health care settings including the importance of using the collaborative approach with underserved communities, and ensuring that medical and community "systems" that control resources are involved. It was also noted that school-based interventions are powerful, and that school nurses are important first counselors for children.

Debate on early intervention centered on whether this approach is effective or not. Participants felt that there were not enough good studies on the subject, but noted that even if you do not intervene early, it is important to let people know support is available as soon as possible.

There was discussion about the extraordinary impact of media, radio, and Internet penetration on child perception. It was noted that we have a lot to learn from research on media exposure. While television exposure correlates with exposure to violence, media can also be a positive mechanism, particularly when parents serve as a mediating factor.

Participants in the breakout group sought to answer the question: What are the research needs and the gaps in scientific knowledge related to services and interventions? (See Appendix D for the summary and recommendations presented by the breakout group chairperson). The group encouraged more exploration of nontraditional/indigenous protective processes (e.g., spirituality, and early introduction to cultural norms and values) to understand factors that contribute to resilience in children. We need to cast our net wider than the "big three" protective factors, one participant said.

Discussion also focused on specific aspects of interventions, for example,

- The effect of the timing of interventions—is there a best time to intervene?
- The mode of delivery—can we dispense therapy other than through a therapist?
- The dosage of therapy—are children receiving too much therapy? Is it effective? Is too much harmful?
- The timing of interventions—when are people most receptive (i.e., available psychologically and physically) to intervention, immediately after the violent/traumatic event, or at onset of symptoms? What motivates people to change?

The types of intervention studies that are needed should apply a home-based model (versus bringing people to clinics, schools, or other institutions), should focus more on evaluating shelter programs, and should favor multisite studies. The latter are difficult but feasible with the use of modern technology.

Participants suggested a number of avenues for research on intervention approaches for different types of trauma and for children of different ages. Among those mentioned:

- Studies of effective domestic violence prevention programs. For instance, programs teaching at-risk youth about healthy relationships;
- Identification of the needs of children who have been exposed to violence but who are not symptomatic—i.e., they have no psychiatric symptoms. Current research focuses on symptomatic children;
- Research on the differential impact of various types of violence/trauma. It is important to control for the different types of violence for which therapy is being provided;
- Research on and programs for very young children and older children (ages 16-21). While studies on the very young are difficult, they are feasible. And while we talk a lot about *early* intervention, we do not do enough work with older children who may have been victims, witnesses, or perpetrators.

One participant observed that there are exposure data on older children, but not much research on effective interventions;

- Studies on the effects of stress inoculation. Does providing a plan of action in anticipation of a traumatic event (e.g., terrorist attack) decrease anxiety? One participant suggested providing schools with a modular toolkit that would help them get the children through the first 1 to 2 hours following such an event;
- Approaches to terrorism. For instance, how do you best serve the individuals who were not at the site of the terrorist attack but who nonetheless suffer psychological symptoms?

In terms of preventive intervention models targeted toward at-risk individuals or families, participants recognized the needs of the nation's fast-growing Hispanic communities—including this community's language needs. Intervention development should involve the subjects or target community, and should be ethnically and culturally appropriate for minority populations.

Additional discussion focused on the need to evaluate the cost effectiveness of different intervention approaches. More research in this area would help in the formulation of powerful policy arguments about the relative importance of certain types of projects. Research on workforce issues (e.g., who is delivering the services and what training they need) also impact on cost effectiveness. Even when we know what works, we cannot rely on the workforce to deliver the "gold standard." Replication, said one participant, needs to be practical given the system realities.

A number of suggestions were proposed for research directions to elucidate how interventions for parents may affect the development of their children. Among them:

- Research on the psychoeducational impact of parenting interventions/training;
- Research on teaching parenting skills to divorced parents with a history of domestic violence, and research on custody management. We often think of parenting as the mother's responsibility, but we need to encourage discussion about the positive role that the father can play in cases of divorce;
- Identification (screening and assessment) of domestic violence by health care practitioners—tools, safety issues;
- Research on the impact of substance abuse treatment and mental health treatment on children's outcomes. To what extent and for what aged children does treating parents help children?
- Research on how to involve parents in middle and high school interventions with children. Most community violence prevention is school-based and does not involve the parent, possibly because this requires another level of coordination. How can we get parents to the schools? Is the school the best venue for the intervention?
- Research on parenting approaches across the developmental spectrum—especially with older children (16 and older);
- Research on how to teach parenting using alternative tools—e.g., video, CD-ROM, written self-study.

The group also discussed needed research on outcomes for children and parents, including studies capturing:

- Functional outcomes, such as school attendance, performance, health, use of emergency room services, days lost at work, productivity, sense of future;
- Court costs, police, service utilization, substance abuse;
- Social-interpersonal relations; and

• Quality of life for both parents and children.

An underlying theme throughout the discussion was the need to better understand the limitations of existing data sources and to improve research designs. Research is too reliant on multidata sources, especially given the variability of what is accessible. It is difficult to obtain and make sense of case records, which are not always well coordinated and not always computerized. Further, self-reports are not always consistent with earlier records. Partnerships between researchers and health insurers, which have large data sources, should be considered, as should greater support for prospective studies. Longitudinal studies that follow the family over time are needed to prevent or treat long-term emotional consequences of witnessing violence in the family or community. Longitudinal studies would help us understand what happens to parents and children long after exposure to violence/trauma. At the same time, we need to better understand how to study families with whom we have only short-term access. Participants agreed that IRBs need to be educated on the conduct of research on violence, child abuse, range of risk, and related topics to allow the science to move forward.

F. Services and Interventions: Summary of Recommendations

Future research needs to focus particularly on improving our understanding of factors that contribute to resilience in children, and the effect of timing, dosage, and receptivity of interventions on short- and long-term outcomes. The types of intervention studies that are needed should apply a home-based model (versus bringing people to clinics, schools, or other institutions) should focus more on evaluating shelter programs, and should favor multisite studies.

Study design issues are paramount. We need to better understand the limitations of existing data sources and improve research designs. Longitudinal studies are needed to help us understand what happens to parents and children long after exposure to violence and trauma. The subjects or target community should collaborate in the construction of intervention programs, which would make those programs more culturally grounded and appropriate. Partnerships between researchers and health insurers, which have large data sources, can also prove advantageous, as would greater support for prospective studies. Studies need to capture data on functional outcomes, such as school attendance, performance, health, use of emergency room services, days lost at work, productivity, sense of future; court costs, policy, service utilization, and substance abuse; social-interpersonal relations; and quality of life for both parents and children. At the same time, we need to better understand how to study families with whom we have only short-term access. Participants expected DHHS to take a leadership role in looking at possible IRB barriers to research.

A number of avenues for research on intervention approaches exist for different types of trauma and for children of different ages. These include studies of effective domestic violence prevention programs, children exposed to violence but who display no psychiatric symptoms, differential impact of various types of violence/trauma, programs for very young and older children, the effects of stress inoculation, and peripheral effects of terrorism.

Intervention development should involve the subjects or target community, and interventions should be ethnically and culturally appropriate for the population studied.

More research should focus on evaluating the cost-effectiveness of different intervention approaches. A side benefit of this would be in facilitating the formulation of powerful policy arguments in support of specific interventions.

More research is needed on how interventions for parents affect the development of their children. Specifically, future research foci should include the psycho-educational impact of parenting interventions/training, the role of the father, the impact of parental substance abuse treatment and mental health treatment, parenting approaches across the developmental spectrum, especially with older children (aged 16+), involvement of parents in different settings (including home and school) and alternative tools to reach parents.

VII. LEGAL AND POLICY ISSUES

Moderator: Shelly Jackson, Ph.D., National Institute of Justice

A. Intended Goals, Outcomes, and Effectiveness

Peter Jaffe, Ph.D., University of Western Ontario

Dr. Jaffe prefaced his talk by noting that the response to domestic violence is becoming integrated at all levels in Canada—through legislation, training, community collaboration, and though public and schoolbased prevention programs. He then reviewed some of the state-level legislative penalties throughout the U.S. for adults who expose children to domestic violence, noting that legislation can often be seen as a quick fix. Some of the benefits of new criminal laws include access to victim compensation funds, education for law enforcement, and referrals to Child Protective Services where appropriate. Legislation also makes a public statement about the issue. Some of the unintended, negative effects are that "victims" end up being charged, children have to testify in court, and laws may prevent victims and their children from disclosing their situation.

Another legislative issue is whether children exposed to domestic violence should be deemed in need of protection by the law. On the one hand, it provides help for vulnerable children and sends a clear message to the public about the government's position on this issue. It also promotes consistency in the handling of cases. On the other hand, Child Protective Services may not be able to handle the increased workload. Moreover, not all children exposed to domestic violence have problems, and mothers are placed in the position of losing their children if they disclose their abusive situation to the authorities.

Domestic violence is often a critical factor in deciding child custody disputes. It is important for judges to consider the effects of domestic violence, because abuse does not end with separation, and in extreme cases homicide and abductions can result. In addition, domestic violence often coexists with child abuse. Judges need to also consider that children living with an abusive parent are exposed to an inappropriate role model, and that new relationships formed by that parent are also potentially violent. Unfortunately, recent child custody legislation has fostered greater skepticism in judges and lawyers about domestic violence allegations, delayed court proceedings, and increased pressure to settle cases without regard to child safety.

Future research priorities should include collection of baseline data on victims, perpetrators and their children, and their court experiences. There is also a need to comprehensively evaluate the positive and negative impact of legislation and policy on these persons. We need to understand the interplay of all involved sectors, including courts, police, and community services.

B. Gaps, Unintended Consequences, and International Issues

Sheldon Levy, Ph.D., M.P.H., Brown University

Children living in high crime areas are at increased risk for behavior problems. There is considerable research on how such factors as the characteristics of the child, frequency, severity, and chronicity of

violence, and how the quality of the family and social relationships moderate the impact of domestic violence and abuse on the child. However, there is a paucity of research on whether these factors also moderate children's response to community violence. One study found that the level of maternal distress and her socioeconomic status mediated how community violence impacted her child's behavior. This suggests that programs and resources that support mothers and alleviate their distress can have positive effects on their child's coping.

Often adults, however, minimize or deny the presence of children at crime scenes. Because of this, both the National Institute of Justice and the International Association of Chiefs of Police have recommended specific training for police and other first responders such as firemen, emergency medical technicians, teachers, religious leaders, and health care providers. It may also be worth considering Victims of Crime legislation to cover child witnesses as potential victims of crime. Current laws generally only address adults. Extending victim services to children who experience violent events may help many children obtain immediate help.

Since September 11, one study found that children's perceptions of death risk were dramatically higher compared to one year before. While agencies like the CDC are reviewing their policies about how to deal with bioterrorist attacks, such as anthrax, no decisions have been made about how to handle unaccompanied children in potential quarantine situations, and there are no specific laws about responding to the psychological needs of these children or how to insure contact with family. We do not know how prolonged family separation due to quarantine will affect children, or how to best design such facilities to minimize stressful effects. While one follow-up study has been published on the impact of children exposed to the Oklahoma City bombing, it would be useful to conduct follow-up research on children who were in the geographic region of the World Trade Tower attacks of 1993 and 2001, or the sarin gas attack in Tokyo. We could also look at syntheses of existing research on children separated from parents due to isolation in infectious disease units.

In terms of war and terrorism in other countries, the Convention on the Rights of the Child, adopted by the United Nations in General Assembly in 1989, provides clear standards on the protection of children from violence. However, as of July 2002, the United States had not ratified it, making it one of only two countries not to have done so. In addition, current U.S. refugee policy requires that children who are refugees, adoptees, or immigrants have medical screenings prior to coming to the United States; however, the required mental status component is not consistently done. This is true even for children known to have been exposed to armed conflict or terrorism. Given the known impact of war and terrorism on children who eventually are referred for services, it would seem reasonable to identify these children early to address the short- and long-term impact of the trauma. There are also a number of epidemiological and health services research studies that can help inform policies on refugee children exposed to armed conflict.

Legal and policy responses to help children better cope with community violence, war, and terrorism require thoughtful research. Ultimately, political consensus will be necessary to make decisions about the allocation of resources regardless of what scientific research may reveal. In the final analysis, however, what will be in the best interest of children will be to reduce the factors that contribute to community violence and find less violent ways to resolve the social, political, cultural, and economic conflicts that lead to war and terrorism.

C. Response

Patricia M. Sullivan, Ph.D., Creighton University

Dr. Sullivan commented on the issue of violence in all segments of U.S. society. In terms of school violence, she noted that corporal punishment still exists in some schools, reinforcing the culture of violence. We need to look at the rising occurrence of relational aggression among girls. Violence also exists in the media, and we need to examine the increasing sensitization of youth to violence, as well as violence outcomes stemming from the early sexualization of girls. Violence is also a component of religion. For instance, many wars are predicated on the debate over whose god is better. Systemic violence also occurs in institutions, for instance residential schools for the disabled. We need to take a closer look at restraints, seclusion, and medications used as punishment. Overall, however, it is important to consider whether taking children out of the home is improving or worsening lives.

There is much pending legislation that has implications for children exposed to violence. Congress has a strong interest in this area, although no consensus exists at the federal level about best approaches. There is also legislation aimed at addressing violence against persons with disabilities. Researchers and policymakers need to look at the unintended consequences of already enacted legislation such as Megan's Law, and the Health Insurance Portability and Accountability Act, which have implications for children exposed to violence.

Future research efforts should focus on including child disability status in violence research, epidemiologic research on disability and violence, and surveillance research related to violence and disability. We also need to take a public health approach, integrate evolutionary biology, educate IRBs regarding violence and disabilities, have disability review teams, and evaluate legislative and workshop outcomes.

D. Discussion

The legal and policy issues discussion yielded brief but important points on recognizing the impact of institutionalization on violence, the need for culturally sensitive studies of violence, and reporting problems for researchers conducting domestic violence research.

It was also noted that, in general, policymakers do not wait for performance research to implement legislation. Researchers need to be aware of pending policies and legislation, and respond accordingly. Participants advocated rapid funding mechanisms, like those implemented in response to the terrorism initiative, as possible solutions.

E. Summary of Recommendations

Future research priorities should include collection of baseline data on victims, perpetrators and their children, and their court experiences. There is also a need to comprehensively evaluate the positive and negative impact of legislation and policy on these persons. We need to understand the interplay of all involved sectors, including courts, police, and community services.

It is also important to explore whether factors such as characteristics of the child, frequency, severity, and chronicity of violence, and quality of the family and social relationships moderate or mediate children's response to violence.

VIII. SUMMARY AND NEXT STEPS

A wealth of recommendations for future research directions emerged from the Workshop on Children Exposed to Violence. One of the key themes was a call for more attention to definitional and measurement issues, to help us understand how different people define violence, community, exposure, abuse, and other key terms. Consistent definitions enable researchers to conceptualize and systematically study the problem. Another key theme was the need for better data and more attention to improving study designs, including longitudinal and intergenerational studies. Common themes included the need to consider unique social, cultural, and developmental perspectives of different children, to improve our understanding of the factors that foster resilience, and to focus on empirically based interventions.

In her concluding remarks, Dr. Feerick suggested that the next step is to figure out the best way to implement the recommendations arising from this meeting. She indicated that there would be follow-up work to these presentations and a possible special journal issue on this topic.

Participants noted that poverty is a complex issue that is difficult to change given the political and legislative issues, but many felt that we must continue to keep it on the nation's research agenda, particularly when assessing its relationship to violence and human capital. There were also suggestions concerning looking at other micro- and macro-system variables that may contribute to violence, particularly for some sub-groups that are at particularly high-risk for domestic and community violence (e.g., poor communities). We also need to look at how terrorism incites aggression and racial prejudice. Some suggested that community be viewed in terms of social relationships rather than geographic area, and to look to findings from sociology, urban anthropology, and urban planning to understand how historical isolation contributes to violence. In terms of final thoughts regarding services and interventions, participants endorsed approaches that involved children with disabilities, and parent education and interventions for "resistant families." Another suggestion was to consider the extent to which cultural variables such as "family friendliness" in societies help to promote policies likely to mitigate children's exposure to violence. Researchers strive to remain neutral but empathetic. Researchers' challenges need to be considered, such as the ethical dilemmas of doing research in the field, both in domestic and international venues.

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APPENDIX A.

DOMESTIC VIOLENCE: SUMMARY AND RECOMMENDATIONS OF BREAKOUT GROUP

Chairs: Gayla Margolin and Martin Teicher

Children's Exposure to Marital Violence

Basic Question: What scientific developments are needed for us to understand better, to respond more effectively, and ultimately to prevent children's exposure to domestic violence (DV)?

- Strategies
- Topics
- Repeating themes

Strategies

- Broaden the scope of independent and dependent variables
- Enhance the depth and precision of processes and mechanisms through both descriptive and theory-driven designs
 - examine pathways; examine iterative cycles;
 - examine protective factors as well as risk factors
- Measure stability vs. change over time/longitudinal designs
- Monitor outcomes of naturally occurring and experimental interventions

Topics for Further Study

- The nature of exposure to domestic violence
- The impact of domestic violence on family functioning
- The impact of domestic violence on child functioning
- The interface with other systems

Repeating Themes

Research needs to be. . .

- Culturally sensitive
- Developmentally sensitive
- Gender sensitive

Understanding the Nature of Exposure

- 1. Broader/more inclusive definitions of violence
 - Range of intensity (e.g., verbal aggression through homicide)
 - Range of behaviors (e.g., psychological control, threat of violence, coercion, etc.)
 - Develop a common language/common measurement across researchers
- 2. Timing and patterning of exposure (e.g., age of onset, frequency of exposure, single episode vs. multiple episode vs. chronic, coincidence with important developmental transitions)
- 3. Multiple reporters (moms, dads, children, other family members, first line responders such as police, health care workers)
 - For purposes of corroboration
 - For purposes of different perspectives
- 4. Understand children's perspectives, attributions and meanings ascribed to DV
 - How does the meaning of DV (understanding of danger) change across development?
 - What explanations have the parents given to the child regarding the DV?
- 5. Measure child's degree of involvement in DV
 - Type of sensory input (e.g., directly see, hear from another room, hear about DV from someone else, see evidence of DV such as mother's bruise)
 - Child's reaction, particularly when directly see or hear (try to physically intervene, call police or contact another adult, leave home, protect sibling, hide in closet)
- 6. Measure DV within an Overall Context
 - Place in context of other forms of violence (e.g., direct victimization through child abuse, sibling abuse, community violence, terrorism)
 - Place in context of other adversities (e.g., poverty, parental mental illness, parental substance abuse, displacement from home, unhealthy peer relations, natural disasters)
 - Whether co-occurring or sequential, consider cumulative effects--To what extent does DV lead to unique variance in child outcomes?
- 7. Cultural Definitions and Understanding of Violence
 - Sample populations that differ on SES, cultural background, ethnicity, immigrant status, etc.
 - Understand the meaning of DV from different cultural perspectives
 - Apply theoretically driven approaches to cultural questions (e.g., cultural views on malefemale roles, on hierarchies in family, on permeability of family boundaries to outside influences; cultural identity as a strength)

Impact of Domestic Violence on Family Functioning

- 1. Impact of DV on family as a system
 - Effect on family organization and structure (e.g., role reversal vis a vis parents and siblings; chaos and unpredictability vs. overly rigid; providing for child's needs in terms of regular meals, clean clothes, school supplies, medication, etc.)
 - Effect on family interaction--hostility vs. warmth; family as a safe place
 - Relations with extended family--involved vs. isolated
 - Impact on teen's decision to leave home and/or cut-off relations with family
 - Impact of family violence on poverty and life stress
- 2. Impact of DV on Parenting
 - Need focus on competent parenting as well as compromised parenting
 - What do mothers do to protect their children?
 - How does a mother's style of coping with trauma affect her parenting?
 - Need focus on fathers as well as on mothers
 - What is the father's commitment/involvement with child?
 - Is contact with the father helpful vs. harmful?
 - How DV affects parenting children of different ages
 - Prenatal care and protection of the fetus
 - Parenting the preschool child--meeting the child's high need for engagement and supervision
 - Parenting the school-age child--parent as link to the outside world such as school system; monitoring activities and friendships; facilitating child's emerging competencies
 - Parenting the adolescent; continuing to keep open communication channels while tolerating adolescent's separation from family
 - Ethnic differences in parenting and how they relate to DV
 - Authoritarian vs. authoritative parenting
 - Closeness vs. distance--exaggerated with DV?
 - Parenting of female vs. male children in families with DV (and with respect to ethnicity)
 - Parents as role models for male and female behavior

Consequences for the Child

There is a pressing need for research that broadens and expands our understanding of the effects of exposure to DV on children.

Research has largely focused on outcome in terms of psychiatric symptoms or psychopathology in school age children.

Much more research is needed to better understand outcomes or consequences from a comprehensive perspective (biopsychosocial, developmental).

What are the neurobiological consequences of exposure to DV? What brain regions/systems are vulnerable? How is vulnerability affected by age and duration of exposure? How is vulnerability affected by gender? How enduring are the consequences, and how are they affected by treatment? How does plasticity and recuperative ability change with age and duration of exposure?

What are the neurophysiological consequences of exposure to DV? What are the short-term and long-term consequences on measures of arousal, sympathetic and parasympathetic function, functional brain activity? Are there enduring effects of exposure to domestic violence on neuroendocrine regulation? What are the mediating effects of sleep impairments?

What are the neuromaturational consequences of exposure to DV? Are their alterations in the time course and development of startle inhibition, attentional capacity, regulation of affect, stress reactivity, control of motor activity, executive functions, linguistic and cognitive capabilities?

What are the medical / health consequences of exposure to DV? Are there alterations in immune system function that affect vulnerability to infections or increase risk for autoimmune disorders? Are there particular medical / health problems that occur with unusual frequency in children exposed to DV? How is this affected by gender, age and duration of exposure?

What are the functional consequences of exposure to DV? How does exposure to DV impact school readiness, school performance, degree of educational achievement, work abilities, job performance?

What are the consequences of exposure to DV on the ability to form and maintain relationships? How does exposure to DV affect peer interactions, dating behaviors, attitudes toward the opposite gender, intimate relationships? What factors explain why some males exposed to DV engage in violence as adults while others do not?

What are the consequences of exposure to DV on moral development and social responsibility? What is the relationship between exposure to DV and juvenile crime?

What are the consequences of exposure to DV on risk for substance or alcohol abuse? How is this affected by age and duration of exposure, gender? How does exposure to DV interact with genetic/familial risk factors?

Research is needed that identifies outcome at each developmental stage. There is a particular need for research that identifies consequences of exposure to DV on very young children (preschool children).

Careful methodological research is needed that specifically identifies the effects of exposure to DV, recognizing that children exposed to DV are often exposed to other forms of violence, and multiple forms of stress and adversity. What are the additive, synergistic or cumulative effects of exposure to multiple forms of violence?

What are the consequences of chronic exposure to relatively low levels of DV (e.g., verbal abuse of a partner)?

What are the consequences of exposure to the most extreme forms of DV (homicide, homicide - suicide)?

There is a need for theory-guided research on gender differences in the consequences of exposure to DV that provides a meaningful understanding of gender differences in response.

There is a need for theory-guided research on factors that help to protect children from the consequences of exposure to DV. It is important to distinguish protective factors from the absence of risk factors.

There is a need for theory-guided research on the mediating or moderating effects that culture and socioeconomic status exert on the consequences of exposure to DV.

There is a need for further research on resilience to understand intrinsic factors that lead to healthier outcomes in children exposed to DV.

There is a need for better instruments that provide a broader degree of assessment and measurement of the consequences of exposure to DV.

There is a need for qualitative research studies in all domains to provide more detailed and meaningful characterization of the consequences of exposure to DV, and which also guides and informs quantitative research on protective factors and aspects of resilience.

Systems Interface

Children exposed to DV often come into contact with many different systems, such as the healthcare system, mental health system, educational system, and justice system. They can come into contact with police officers, child protective services, shelters, foster care placements, Department of Youth Services facilities, and even *researchers*.

Children exposed to DV often interact with a variety of informal systems that include: relatives, neighbors, friends, religious groups, community groups.

There is a need for research that delineates the natural course of contact that children exposed to DV have with these formal and informal systems. There is a need for research to understand the pipeline of system services.

There is a need for research that identifies for children exposed to DV the consequence of their interaction with these different formal systems. How is a child's outcome affected by the pipeline of services that the child is exposed to?

There is a need for research that delineates for children and parents the effects of contact with various informal systems. How does exposure to these informal systems affect outcome?

There is a need for research that rapidly identifies the consequences of new legislation designed to better protect or to help victims of DV and their children. What is the impact of the legislation? Are there unintended consequences of the legislation?

There is a need for research that examines the impact and consequences of media campaigns or educational efforts that are designed to increase awareness about DV. What types of campaigns are successful, and how can success be measured in creative and meaningful ways?

There is a need for research that evaluates the impact and success of educational programs designed to increase awareness and understanding of DV of key sentinels (e.g., police, ER personnel, teachers, school nurses, guidance counselors, judges).

There is a need for research that enhances the ability of agencies or sentinels to identify children in need of services, and which guide them to making effective decisions for referral or services.

APPENDIX B.

COMMUNITY AND SCHOOL VIOLENCE: SUMMARY AND RECOMMENDATIONS OF BREAKOUT GROUP

Chairs: John Bolland and Gregory Thomas

The group posed the concept that the community is not just the location of the violence or a set of people, houses, and apartments. The community is a set of interconnecting relationships. Since violence in schools often stems from the community, the school can be viewed as an integral part of the community; therefore, it does not make sense to distinguish between school violence and community violence, except in unique issues such as bullying. We also need to understand school violence in terms of a chronic condition, not just acute incidents like Columbine. Research is needed to inform policymakers about best practices. Given this we need to know more about the following.

Definitional and Measurement Issues

- Is exposure to violence the same as witnessing violence?
- How does being a victim differ from being in a violent environment?
- How do we define the term "violent" and what it means to individual students and individual communities? How children perceive violence whether they see it or not?
- How do different racial, ethnic, cultural groups define "community," "family," and "neighborhood?"
- How do you define who is the "perpetrator" and who is the "victim?" Is that perceived differently in different communities? For instance, police may be considered the savior in one community and the bad guy in another.

Effects of Violence on the Community

- We know less about how violence exerts its influence on communities and families.
- How does violence affect the community? How does the community buffer violence in its response to it?
- What does the community reaction to violence do to children? Their reactions? Their development?
- What are the specific outcomes of children exposed to dual violence (for example, domestic and community violence)? Do the effects differ for domestic violence compared to community violence? What are the implications for interventions?
- What are the physical outcomes (health, trauma, disease) of community violence?

Theoretical Studies

- How do children develop values in terms of whom to trust and whom not to trust?
- What are the key underlying pathways/mechanisms between being exposed to violence and the outcome of violence? This can be examined through longitudinal studies on the mediators of violence

Developmental Perspectives

- How does exposure to violence affect each stage of a child's development? How does violence affect the child at different stages of cognitive development?
- There is very little known about how younger children (3-5) perceive and define their community. We need instruments that can better measure young children's perception of their communities and neighborhoods.

Ethnic/Cultural Perspectives

- What is the impact of exposure to violence on other risk behaviors and ultimately health disparities?
- Currently, much of the community violence research is being conducted in communities of color. How is exposure to violence impacted by ethnicity?
- What causes feelings of alienation and hopelessness across ethnicity?
- How do you disentangle the specific and individual effects of SES, ethnicity, and culture on community violence? Studies are needed that can provide that information.

School Violence

Participants noted that school violence should not be equated to Columbine, and that concentrating on school violence as an "island," separate from community violence, is wrong.

- What are the effects of chronic exposure to school violence on children in terms of normal development and educational outcomes?
- What role can schools play in mediating school violence?
- Some social problems are solvable. If you reduce family and community violence, does it change how children behave in schools?
- How can you link government and education systems to improve the community?
- Studies are needed to examine the effects of bullying in schools, particularly at younger ages.
- Better instruments need to be developed to capture the qualities that describe the culture of a school.

Moderators and Mediators

- What are the protective factors, assets, etc. in a community that foster resilience to violence?
- Does faith/religion modify an individual, family, and community response to violence?
- How do substance abuse and the juvenile justice system contribute to community violence?

Interventions

We need more interventions directed at the community level compared to just individual only interventions.

Policy and Legislation

Studies of international gun control policies and their effects on community violence would be particularly useful.

APPENDIX C.

TERRORISM/WAR: SUMMARY AND RECOMMENDATIONS OF BREAKOUT GROUP Chair: Paramiit Jashi

Chair: Paramjit Joshi

Gaps in Research

Definitions:

Terrorism:

- Unlawful use of threat or force against an individual/government for political or other end with the intent/purpose of imposing ones will (DOD).
- Illegitimate use of force to achieve political, social or religious objectives, when innocent people are targeted (FBI).
 - Played out before a larger audience
 - Non-war atmosphere, unexpected, occurs in a safe place
 - Asymmetrical warfare, recurrent attacks
 - Groups who don't have other means to get their message across
 - Usually many more civilians involved

War:

- Planned and executed usually by governments against other governments or countries in self defense or revenge
- Usually have a beginning and an end
- Civilians affected secondarily (collateral damage, not primary target)

QUESTIONS:

- Is there a difference in the psychological consequences in a war situation versus a terrorist attack?
- Is there a difference in emotional consequences if attack occurs when children are in a safe place

War & Terrorism

Peace interrupted by war, or war interrupted by peace (e.g., Middle East)

QUESTIONS:

- Chronic vs Acute: are the consequences different?
- What is the role of anticipatory preparedness? Does it help or harm?
- What are the effects of "chronic preparedness," whether violent acts happen or not?

Prevalence and Nature of Emotional Consequences

QUESTIONS:

- What does the prevalence of harmful consequences depend on?
- What are the risk and protective factors?
- Should we develop a "Risk Model" or "Vulnerability Scale?
- What does the phenotype look like?
- What are the various variables that affect the phenotype
 - Culture
 - Religious belief systems
 - Developmental stages of the child
 - Societal status of the victims

3 - D MATRIX: Cells need to be completed

	Prevalence of Pathology	Risk Factors	Phenomenology	Risk Communication	Interventions
Terror					
War					

Third dimension: Proximity/Loss/Poverty

Secondary Effects of Terrorism

Teenagers not going to mall

Ripple effect

Cyber-terrorism

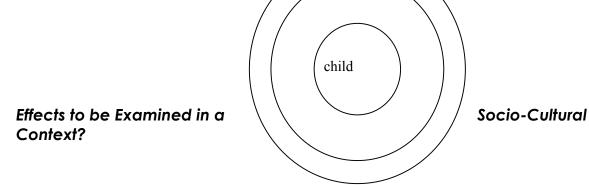
Effect on the economy

Parents losing their jobs

QUESTION: Need to think about it as a public health crisis and respond accordingly?

In What Domains Do We Need To Examine The Effects?

Neurons to neighborhoods



When does adaptation to a stress become maladaptive? Allostatic load?

- Physiological
- Neurobiological
- Psychosomatic (immune system, diseases etc.)
- Psychological
- Impairment of functioning in the absence of a Diagnostic and Statistical Manual (DSM) diagnosis
 - Changes in behavior
 - Family interactions and structure
 - Societal interactions
 - Effects on learning
 - Neonatal and peri-natal impact on the child

Developmental Approach to Understanding?

Need to take a developmental approach - neuro-cognitive changes at different ages and the relationship on the development of neuro-psychiatric symptoms

Are their gender differences?

Effects of bereavement - early parent death and the effects depending on age (e.g., Stolz has shown that bonding of the father with a child born while the father is away at war is different than the bonding he has with his other children)

Cultural Differences

"It is meant to be"

"It is Karma"

"God wanted it this way"

QUESTION: When does this type of coping become unhelpful and maladpative? Does it work in the short run?

Longitudinal Course of the Evolution of Psychiatric Morbidity and Co-Morbidity?

Is depression always preceded by anxiety?

If intervention is done in a timely fashion, can one postpone or even prevent the development of depression?

Is depression related to the maternal response to trauma?

Other Factors to Consider

Refugee or not? Leaves the situation or not? Split families? Immigration?

Public Health Model

Large majority need reassurance

Interventions get more specific and intense as one moves up to the tip

How does one identify those at greatest risk when an entire population is affected?

Interventions - What Works?

Available models of interventions following disasters generally don't focus on children What are the effects of activities aimed at disaster preparedness in children?

- Psychological/behavioral
- Learning
- Phsysiological/neurobiological

Understanding coping and adaptation skills and strategies

How does one define resilience and how do we promote it?

What should the content of intervention modules be?

Do we want to think about the modules that have already been developed to help youngsters after a natural disaster?

Do Modular Interventions in School Work?

Immediate response that can take place in the schools

Should schools be closed?

Prepositioned supplies or resources for the first 24 to 48 hrs. in school (Level of preparedness).

The National Education Association (NEA) has developed intervention models for the immediate response

SHOULD RESEARCH INITIATIVES BE DEVELOPED THAT FORCE COLLABORATION BETWEEN THE SCHOOLS, MENTAL HEALTH & OTHER FIRST RESPONDERS?

Value of a Demonstration Project?

What Works?

Family interventions? Extended family involvement? Parenting techniques? Single interventions strategies vs. ongoing? School interventions?

Traumatic Reminders?

Do we need to have anniversaries? What helps? What hurts even more? Should there be memorials?

Challenges Faced by Researchers

Need empathy but neutrality at the same time Expectations of the "subject" International research during war or an act of terrorism presents other ethical dilemmas

Helping the Helpers

Effect on children of helpers Effect of "helpers" on their own children. Are they at more risk? Evidence of increased levels of substance abuse, domestic violence and suicide

Intergenerational Violence

How do we study it and are there prevention strategies?

Preventive Preparedenss

Gives people a sense of control vs. worrying them without giving them a way to prepare and react What effect does this have on society, parents, and children?

Quarantine?

What are the effects of quarantine on children and their families in a situation of bioterrorism? What are the psychological risks and benefits of such an approach?

APPENDIX D.

SERVICES AND INTERVENTIONS/LEGAL & POLICY: SUMMARY AND RECOMMENDATIONS OF BREAKOUT GROUP

Chair: Barbara Bonner

Principles

- Learn from past mistakes in research lumping effect
- John Fantuzzo approach fewer variables that account for more of the variance
- Ecological/developmental approach

Immediate Research Recommendation

- Evaluate current shelter programs for batterers, spouses, and children (process and outcome program evaluation)
- Replicate promising programs

Recommend Intervention Research

Longitudinal Prospective Multi-site Multi agency

Culturally specific Adjusted for specific disabilities (hearing impaired)

Incorporates current research findings Includes young children and older adolescents

Involves community participants in designing intervention

Broad referral base

Methods to reduce attrition (e.g., provide transportation, use of incentives)

Multiple data sources

Evaluate timing of interventions

- Immediate
- Onset of symptoms
- Onset of disorders

Differential effects of forms of violence Effects of substance use Effects of service site (e.g., clinic, in-home) Dosage effects Needs of children who do not present with symptoms Factors contributing to resilience for children and parents Father/child relationships Functional outcomes of children

- Biological factors contributing to violence
- Degree of collaboration among agencies

Problems

Availability of personnel to serve minority populations

IRB approval

- Need education on violence, child abuse and neglect
- DHHS needs to take leadership role on IRB barriers to research

Work force

- Who is delivering services?
- What training do they need?

Sustaining financing for services

Effects of HIPPA

• Replicate current promising programs

Other Testable Ideas

Parenting for divorced parents with DV history regarding custody, parenting

Parenting approach for parents with teens

Teach parenting using alternative tools (e.g., video, CD Rom, written self-study)

Involve health insurance companies to decrease medical costs

APPENDIX E. FINAL AGENDA

CHILDREN EXPOSED TO VIOLENCE: CURRENT STATUS, GAPS, AND RESEARCH PRIORITIES

JULY 24-26, 2002

Georgetown Holiday Inn

2101 Wisconsin Avenue, NW

Washington, DC 20007

Day One	
8:00am – 8:30am	CONTINENTAL BREAKFAST
8:30am 8:45am	 Welcome/Overview-Purpose of the Workshop ♦ Margaret Feerick, NICHD
8:45am – 9:45am	 Setting the Context: Definitional and Measurement Issues Moderator Ileana Arias, CDC Penny Trickett [8:45am- 9:05am] Defining and conceptualizing children's exposure to violence (domestic and community violence and war/terrorism) Reliable and valid definitions George Holden [9:05am - 9:25am] Exposure to violence (domestic) as constituting child abuse What we know/where we are now? Disentangling incidence and effects of witnessing violence from actual abuse or victimization Lewis Leavitt [9:25am - 9:45am] Measuring Violence Exposure: State-of-the-art measurement tools
9:45am – 10:05am	Panel of Respondents ◆ Oriana Linares ◆ Barbara Bonner
10:05am – 10:35am	Open Discussion
10:35am - 10:50am	BREAK
10:50am – 11:30am	 Domestic Violence ModeratorSusan Solomon, OBSSR ♦ John Fantuzzo > Prevalence [10:50am - 11:10am] • What do we know about the prevalence of exposure to domestic violence? • Social contexts: How does exposure to violence differ in different social contexts? • Chronic exposure to violence

- Cross-culturally and around the world
- ✤ David Wolfe
 - ➤ Consequences [11:10am 11:30am]
 - Emotional, behavioral, and mental health effects
 - Developmental differences (in the effects of exposure)
 - Child resilience: protective or buffering factors
 - Juvenile justice and education outcomes

11:30am - 11:50am 11:50am - 12:20pm	Panel of Respondents ◆ Laura McCloskey ◆ Jacquelyn Campbell Open Discussion
12:20pm 1:30pm	LUNCH
1:30pm 2:10pm	 Community and School Violence ModeratorTom Hanley, OSEP ♦ Bradley Stein > Prevalence [1:30pm - 1:50pm] • What do we know about the prevalence of exposure to community and school violence? • Social contexts: how does exposure to violence differ in different social contexts (including schools)? • Chronic exposure to violence • Cross-culturally and around the world ♦ Michael Lynch > Consequences [1:50pm - 2:10pm] • Emotional, behavioral, and mental health effects • Developmental differences (in the effects of exposure) • Child resilience: protective or buffering factors • Juvenile justice and education outcomes
2:10pm 2:30pm	Panel of Respondents ◆ Kathy Sanders-Phillips ◆ Gregory Thomas
2:30pm 3:00pm	Open Discussion
3:00pm 3:15pm	BREAK
3:15pm – 3:55pm	 Terrorism/War ModeratorFarris Tuma, NIMH ♦ Robert Pynoos Prevalence [3:15pm – 3:35pm] What do we know about the prevalence of exposure to war/terrorism? Social contexts: how does exposure to war/terrorism differ in different social contexts? Chronic exposure to violence Cross-culturally and around the world ♦ Jon Shaw Consequences [3:35pm – 3:55pm] Emotional, behavioral, and mental health effects Developmental differences (in the effects of exposure) Child resilience: protective or buffering factors Juvenile justice and education outcomes
3:55pm 4:15pm	Respondent ♦ Paramjit Joshi
4:15pm 4:45pm	Open Discussion
4:45pm 5:15pm 5:15pm	Q & A and Open Discussion of the Day's Topics ADJOURN

CHILDREN EXPOSED TO VIOLENCE: CURRENT STATUS, GAPS, AND RESEARCH PRIORITIES

JULY 24-26, 2002 Georgetown Holiday Inn 2101 Wisconsin Avenue, NW Washington, DC 20007

Day Two

8:30am – 9:00am	CONTINENTAL BREAKFAST
9:00am – 10:00am	Services and Interventions for Children Exposed to Violence
	Moderator – Jerry Silverman, ASPE
	✤ Honore Hughes [9:00am-9:20am]
	Overview of the scope and variety of interventions for children exposed to domestic violence
	Exposure to domestic violence as a gateway to service
	Services and the needs of children exposed to domestic violence
	 Steven Marans and Steven Berkowitz [9:20am-9:40am]
	 Overview of the scope and variety of interventions for children exposed to community violence and war/terrorism
	Exposure to community violence as a gateway to service
	Services and the needs of children exposed to community
	violence and war/terrorism
	Hope Hill [9:40am-10:00am]
	 The desired outcomes of intervention programs Evaluation of the success of programs
	 Evaluation of the success of programs Domestic and international issues; developing countries
10:00am – 10:20am	
10.00aiii - 10.20aiii	Panel of Respondents ✤ Judith Cohen
	 Betsy McAlister Groves
10:20am – 10:50am	Open Discussion
10:50am – 11:05am	BREAK
11:05am – 11:45am	Legal and Policy Issues
	Moderator – Shelly Jackson, NIJ
	✤ Peter Jaffe [11:05am – 11:25am]
	Laws and policies addressing the needs of children exposed to violence
	Intended goals and outcomes of policies and programs
	Effectiveness of programs
	Sheldon Levy [11:25am – 11:45am]
	Gaps and research needed to inform the development of laws and policies
	The unintended consequences of laws and policies

> Domestic and international issues; developing countries

11:45am – 12:05pm	Respondent ✤ Patricia Sullivan
12:05pm – 12:35pm	Open Discussion
12:35pm – 1:45pm 1:45pm – 2:00pm	LUNCH Charge to Break-out Groups Margaret Feerick, NICHD
2:00pm - 4:30pm	Breakout Groups: Research Gaps in Each of the Areas (Focus on Child health outcomes, mechanisms, research needed for interventions)
	 Domestic Violence GroupModerator: Coryl Jones, NIDA Chairs: Gayla Margolin and Martin Teicher Questions to be addressed: What are the main research gaps/needs in the area of children exposed to domestic violence? What research is needed in terms of prevalence, consequences, causal risk factors, and mechanisms? How should research take into account developmental stages of children and youth exposed to domestic violence? What research is needed on how different ways of coping (both positive and negative) by battered women affect their children? What characteristics (besides type of trauma) are important to consider in terms of the research on mechanisms and consequences of exposure to domestic violence? How should the research on outcomes be expanded (e.g., should medical outcomes be examined)? What research is needed in terms of time phase of symptoms and behavioral reactions in order to inform interventions trategies? What research is needed in the area of interventions to prevent or treat long-term negative emotional consequences of witnessing family violence? What research is needed in the area of preventive intervention models targeted toward at-risk individuals or families? What research is needed in the area of definitions/measurement? What research is needed in order to inform services and policies in this area?
	• What are the main research gaps/needs in the area of children
	 exposed to community and school violence? What research is needed in terms of prevalence, consequences, causal risk factors, and mechanisms?
	• What characteristics (besides type of trauma) are important to consider in terms of the research on mechanisms and consequences of exposure to community and school violence?
	• How should the research on outcomes be expanded (e.g., should medical outcomes be examined)?

- What research is needed to address how schools or neighborhoods influence occurrence and consequences of neighborhood or school-related violence?
- What research is needed in terms of time phase of symptoms and behavioral reactions in order to inform intervention strategies?
- What research is needed in the area of definitions/measurement?
- What research is needed regarding measuring and examining resilience?
- What research is needed in order to inform services and policies in this area?
- What research is needed in the area of interventions to prevent or treat long-term negative emotional consequences of witnessing community or school violence?
- What research is needed in the area of preventive intervention models targeted toward at-risk individuals or families?

Terrorism/ War Group--Moderator: LeShawndra Price, NIMH

Chair: Paramjit Joshi

Questions to be addressed:

- What are the main research gaps/needs in the area of children exposed to terrorism/war violence?
- What research is needed in terms of prevalence, consequences, causal risk factors, and mechanisms?
- What characteristics (besides type of trauma) are important to consider in terms of the research on mechanisms and consequences of exposure to war/terrorism?
- How should the research on outcomes be expanded (e.g., should medical outcomes be examined?)
- What research is needed in terms of time phase of symptoms and behavioral reactions in order to inform intervention strategies?
- What research is needed in the area of definitions/measurement?
- What research is needed regarding measuring and examining resilience?
- What research is needed in order to inform services and policies in this area?
- What research is needed in the area of interventions to prevent or treat long-term negative emotional consequences of witnessing family violence?
- What research is needed in the area of preventive interventios models targeted toward at-risk individuals or families?

Services and Interventions/Legal & Policy Issues Group-Moderator: Sharon Amatteti, SAMHSA

Chair : Barbara Bonner

Questions to be addressed:

- What are the limitations of current research and the scientific knowledge base on services and interventions? What gaps exist and what new research is needed?
- What are the intended and desired outcomes of interventions and what are the strengths and limitations of existing indicators and data sources commonly used to evaluate and monitor the success of these programs?
- What are the limitations of methods typically used to evaluate these programs?

- What research is needed in order to develop and evaluate effective interventions (including research on content, duration, number of sessions, timing, inclusion criteria, and symptom threshold for interventions)?
- What research is needed on how services/interventions impact on children and families?
- What research is needed on intervention approaches for different types of trauma and for children of different ages?
- What research is needed in the area of interventions to prevent or treat longterm emotional consequences of witnessing violence in the family or community?
- What research is needed in the area of preventive intervention models targeted toward at-risk individuals or families?
- What research is needed on how services/policies impact children and families?
- What research is needed to evaluate the cost-effectiveness of different intervention approaches?
- What research is needed to assess the effectiveness of various collaborative approaches to addressing issues of exposure?
- What research is needed on how interventions for parents affect the development of their children?

4:30pm ADJOURN

CHILDREN EXPOSED TO VIOLENCE: CURRENT STATUS, GAPS, AND RESEARCH PRIORITIES

JULY 24-26, 2002 Georgetown Holiday Inn 2101 Wisconsin Avenue, NW Washington, DC 20007

DAY THREE

8:30am – 9:00am	CONTINENTAL BREAKFAST
9:00am – 9:15am	Definitions and Overview of Discussion of Summary and Recommendations
9:15am – 9:45am	 Domestic Violence: Summary and Recommendations <i>Gayla Margolin and Martin Teicher</i>
9:45am – 10:15am	Community and School Violence: Summary and Recommendations <i>Solution Solution Statements Summary Thomas</i>
10:15am – 10:45am	Terrorism/War: Summary and Recommendations
10:45am – 11:15am	Services and Interventions/Legal & Policy Issues: Summary and Recommendations
11:15am – 12:00pm	Discussion: Summary and Next Steps
12:00pm	ADJOURN

APPENDIX F. BIOGRAPHICAL SKETCHES OF PRESENTERS

Steven J. Berkowitz, M.D. is the Medical Director of the National Center for Children Exposed to Violence (NCCEV) and an Assistant Professor of Child and Adolescent Psychiatry at the Yale University School of Medicine's Child Study Center. Dr. Berkowitz has been one of the primary developers and proponents of the Child Development-Community Policing Program, a nationally replicated program between law enforcement and child mental health professionals. This program is the core intervention project of the NCCE and provides immediate and follow up collaborative mental health and law enforcement intervention for children who witness and are victimized by violence in their homes, schools and communities. Dr. Berkowitz has helped develop several other community based initiatives for children and families that are at high risk for poor developmental and psychiatric outcomes. He is a founder and Medical Director of the Intensive In-home Child and Adolescent Psychiatry Service (IICAPS). A model of intensive home and community based treatment that has recently become a core service for disadvantaged children and their families in the State of Connecticut. The majority of children served by the IICAPS have histories of violence exposure.

John M. Bolland, Ph.D. is a Senior Research Scientist at the University of Alabama and Director of its Institute for Social Science Research. His Ph.D. is in Political Science from The Ohio State University, and he taught for six years at the University of Kansas before moving to the University of Alabama. Dr. Bolland's long-term research interests have addressed urban issues, and he has published a book (with Lawrence J.R. Herson) on urban politics, policy, and theory. During the past ten years, his research has concentrated on inner-city poverty and its impact on children and families. Specific research studies conducted during this period include assessments of homelessness in two Alabama cities; the design, implementation, and evaluation of a community development program to reduce risk behaviors among adolescents living in public housing developments in Huntsville, AL; an ongoing longitudinal survey of adolescents living in low-income neighborhoods in Mobile, AL; and an evaluation of a maternal and child health program for low-income adolescents and their babies in Mobile, AL.

Barbara L. Bonner, Ph.D., a Clinical Child Psychologist, is a Professor and the CMRI/Jean Gumerson Endowed Chair, Director of the Center on Child Abuse and Neglect, and Associate Director of the Child Study Center in the Department of Pediatrics at the University of Oklahoma Health Sciences Center. Her clinical and research interests include the assessment and treatment of abused children, treatment outcome and program effectiveness, prevention of child fatalities, and treatment of children and adolescents with inappropriate or illegal sexual behavior. Dr. Bonner established a treatment program for adolescent sex offenders in 1986 and has presented seminars on the program throughout the United States and in several foreign countries. She has completed a five-year research project funded by the National Center on Child Abuse and Neglect to compare two approaches to treatment for children with sexual behavior problems. Dr. Bonner is President-Elect of the Board of Councilors of the International Society to Prevent Child Abuse and is Past President of the American Professional Society on the Abuse of Children (APSAC). She has also served on the Executive Committee of Division 37, Children, Youth and Families, of the American Psychological Association.

Jacquelyn C. Campbell, Ph.D., R.N. is the Anna D. Wolf Endowed Professor and Associate Dean of the Ph.D. Program and Research in the Johns Hopkins University School of Nursing with a joint appointment in the Bloomberg School of Public Health. Her B.S.N., M.S.N. and Ph.D. are from Duke University, Wright State University and the University of Rochester Schools of Nursing. She has been conducting advocacy policy work and research in the area of domestic violence since 1980. Dr. Campbell has been the Principal Investigator on nine major NIH, NIJ or CDC research grants and published more than 100 articles and five books on this subject. She is an elected member of the Institute of Medicine and the

American Academy of Nursing, a member of the Congressionally appointed US Department of Defense Task Force on Domestic Violence, and on the Board of Directors of the Family Violence Defense Fund and the House of Ruth Battered Women's Shelter.

Judith A. Cohen, M.D. is a Board Certified Child and Adolescent Psychiatrist, Professor of Psychiatry at MCP Hahnemann University School of Medicine, and Medical Director of the Center for Traumatic Stress in Children and Adolescents at Allegheny General Hospital in Pittsburgh. She and her colleagues have developed treatment models for children exposed to traumatic life events including sexual abuse and traumatic loss, and has conducted several randomized controlled treatment trials for these children. Dr. Cohen is the Principal Author of the Practice parameters for Childhood PTSD published by the American Academy of Child and Adolescent Psychiatry, and has published extensively with regard to the assessment and treatment of traumatized children. Dr. Cohen is also Director of the Center for Child Abuse and Traumatic Loss, which is part of the SAMHSA-funded National Child Traumatic Stress Network.

John Fantuzzo, Ph.D. is the Diana Riklis Professor of Education in the School, Community, and Clinical Child Psychology Program at the University of Pennsylvania. Dr. Fantuzzo is a clinical child psychologist whose research has focused primarily on the design, implementation, and evaluation of school- and community-based assessment and prevention strategies for vulnerable, low-income children and families in high-risk urban environments. His applied research is the result of numerous partnerships with parents, teachers, school administrators, community-based organizations, and city government. Currently, Dr. Fantuzzo's funded research projects involve working with large urban municipalities to build capacity through integrated databases to study incidence and prevalence of risk and protective factors that influence the development and learning of young children. This also includes a grant to develop and test a scientifically valid system in partnership with law enforcement and other relevant municipal agencies to investigate the prevalence and impact of child exposure to domestic violence.

Margaret Feerick, Ph.D. is a developmental psychologist with a research background in child maltreatment and family violence. Dr. Feerick received her doctorate from Cornell University in Developmental Psychology, with concentrations in social and personality development and developmental psychopathology. Prior to joining the NICHD, Dr. Feerick held research positions on several federally-funded grants, including two projects funded by the NIH, and the National Data Archive on Child Abuse and Neglect, funded by the National Center for Child Abuse and Neglect. Dr. Feerick has also been the recipient of several national fellowships and awards, including an NIH Individual National Service Award, and a Society for Research in Child Development Executive Branch Policy Fellowship. Dr. Feerick has worked as director of development and contributions for an independent school in New York City and has taught at both the elementary and junior high school levels. As part of the Child Development and Behavior Branch of the NICHD, Dr. Feerick is responsible for managing a large research and training program in cognitive, social, and affective development, and child maltreatment and violence.

Betsy McAlister Groves, MSW, LICSW is the founding Director of the Child Witness to Violence Project at Boston Medical Center, and Assistant Professor of Pediatrics at Boston University School of Medicine. She is the past recipient of a fellowship from the Open Society Institute and has been a fellow at the Malcolm Weiner Center of Social Policy at Harvard University. She has lectured widely, providing training to police, social workers, health providers, judges and court personnel, and teachers on a range of topics associated with children's exposure to violence. Her publications include a book, Children Who See Too Much: Lessons from the Child Witness to Violence Project, published by Beacon Press and articles in the Journal of the American Medical Association, Pediatrics, Harvard Mental Health Letter, and Topics in Early Childhood Special Education. She is a member of the Massachusetts Governor's Commission on Domestic Violence and has served as consultant to the Massachusetts Department of Social Services, the Massachusetts Judicial Institute, Family Communications, Inc, producer of Mister Roger's Neighborhood, the Family Violence Prevention Fund, and the National Center for Children Exposed to Violence. Ms. Groves received her Master's degree from Boston University School of Social Work and her undergraduate degree from the College of William and Mary.

Hope M. Hill, Ph.D. is a Professor of Psychology and Director of Howard University's Center for Violence Prevention and Youth Development. She is a graduate of Wesleyan University and Columbia University where she received a Ph.D. in psychology. She completed a post-doctoral fellowship at Yale in child development and social policy. Dr. Hill is responsible for the development of a number of schoolbased and community-based interventions designed to prevent youth involvement in violence. She has developed several interventions throughout the United States designed to promote the well being of families living under stressful conditions. She has conducted parenting and adult development groups for the past 25 years. At Howard she conducts basic research on the impact of witnessing violence on young children and effective protective processes for children living in high-risk situations. She is currently the Principal Investigator for a unique program in Washington, DC. for children who have been exposed to family violence. Both her advocacy work and research have been devoted to maximizing human potential among individuals exposed to major life stresses such as violence and poverty. Dr. Hill recently completed a project in South Africa examining the coping capacities of high school students who have been exposed to serious community and societal violence, and developed an HIV prevention intervention for two locales in South Africa. Dr. Hill has authored several publications on youth violence, mental health and child development and how women cope with stressors. She speaks French and some KiSwahili.

George W. Holden, Ph.D. is Professor and Associate Chair of the Psychology Department at the University of Texas at Austin. He received his B.A. from Yale University and his M.A. and Ph.D. in developmental psychology with a minor in social psychology from the University of North Carolina at Chapel Hill. He served as head of the developmental area in the Psychology Department from 1990 to 1996. From 1995 to 1997 he was the director of the Institute of Human Development and Family Studies. He is a fellow of the American Psychological Society and a member of the Society for Research in Child Development and the American Professional Society on the Abuse of Children. He has been or is currently on the editorial boards of Child Development, Developmental Psychology, and the Journal of Emotional Abuse. Dr. Holden's research interests are in the area of social development, with a focus on parent-child relationships. He is especially interested in understanding the determinants of parental behavior, parental social cognition, and the causes and effects of family violence. One of the topics of several of his studies has been why parents use corporal punishment. He has also studied how parenting is affected and children are impacted by marital violence. His research has been supported by grants from the NICHD, the Guggenheim Foundation, and the Hogg Foundation for Mental Health. He is author of numerous scientific articles and chapters, and the book Parents and the Dynamics of Child Rearing (1997). In addition he is a co-editor of Children Exposed to Marital Violence (1998) and the Handbook of Family Measurement Techniques, Vol. 2 & 3 (2001).

Honore M. Hughes, Ph.D. is a Professor of Psychology at Saint Louis University and a Clinical Child Psychologist whose research and clinical interests are in the area of family violence broadly defined, including child sexual abuse, and child physical abuse, as well as children who have been exposed to interparental violence. She has written numerous research and practice articles and book chapters, and has been working clinically with children of battered women and conducting research in this area for over two decades. One of her most recent publications is the book Children and Interparental Violence: The Impact of Exposure, co-authored with Robbie Rossman and Mindy Rosenberg. She received funding from NCCAN in the early- and mid-1980's for one of the first demonstration projects regarding services provided to children of battered women and their mothers. After obtaining her Ph.D. from the University of South Carolina, she completed an internship at the Vanderbilt-Peabody Internship in Professional

Psychology in Nashville, TN. She went on to a post-doctoral fellowship in Portland, OR, with the Crippled Children's Division of the University of Oregon Health Sciences Center. While at the University of Arkansas, she began consulting with the staff of the local battered women's shelter, and in 1979 initiated the program of research she continues to pursue in her present position. Currently at Saint Louis University, she maintains her research and consulting with several local battered women's shelters, supervises graduate students providing clinical services to community residents, and teaches students in the graduate training program in Clinical Psychology.

Janice Humphreys R.N., C.S., Ph.D., P.N.P. is an Associate Professor in the Dept. of Family Health Care Nursing at the University of California, San Francisco. Over the last 13 years Dr. Humphreys has been involved in a program of research that addresses the strengths and experiences of battered women and their children. Her initial research explored the life histories of adult daughters of battered women who have successfully overcome the experience of growing up in a violent home. More recently she has researched sleep patterns of sheltered battered women and their children and the role of resilience and spirituality in mediating these symptoms. She has twice been acknowledged as an outstanding woman faculty member at UCSF and was selected by the American Nurses Foundation Virginia Kelley, CRNA Scholar for 2000-2001. In addition to her many graduate teaching responsibilities, Dr. Humphreys continues to provide advanced practice nursing to women and children at the Riley Center, one of three battered women International and a member of the Nursing Research Consortium on Violence and Abuse, an invited panel of expert nurse-scientists. Along with co-editor Jacquelyn Campbell, FAAN, R.N., Ph.D., she is currently revising their book Nursing Care of Survivors of Family Violence.

Peter Jaffe, Ph.D. is the Founding Director for the Centre for Children and Families in the Justice System (1975-2001) and currently a Special Advisor on Violence Prevention for the Centre, which is a children's mental health center specializing in issues which bring children and families into the justice system in London, Ontario. He is a member of the Clinical Adjunct Faculty for the Department of Psychology and Professor (part-time) for the Department of Psychiatry at the University of Western Ontario. Dr. Jaffe received his undergraduate training from McGill University in Montreal (1970) and his Ph.D. in Clinical Psychology from the University of Western Ontario (1974). Most of his clinical work and research has focused on children and adolescents involved with police or the courts, either as offenders or victims of family violence or custody disputes as well as individuals traumatized by violence in childhood or adult relationships. He has co-authored eight books, 24 chapters and over 70 articles related to children, families and the justice system including Children of Battered Women and Working Together to End Domestic Violence. His current research involves the impact of family violence on children. Among his many activities, he was a member of the Canadian Panel on Violence Against Women between 1991 and 1993, and was appointed to the Joint Committee on Domestic Violence to provide advice to the Attorney General on the implementation of the jury's recommendations. Dr. Jaffe has been honoured by receiving several awards for his work including the Commemorative Medal for the 125th Anniversary of the Confederation of Canada for his dedication and contributions to the community and to all fellow Canadians, and the distinguished Colonel Watson Award, presented annually by the Ontario Association for Curriculum Development, for his significant contribution to education in Ontario, and the Award of Merit from the Ontario Psychological Foundation for his contribution to research and clinical practice in the prevention of family violence.

Paramjit T. Joshi, M.D. is Chair of the Department of Psychiatry and Behavioral Sciences, at the Children's National Medical Center (CNMC) and Professor of Psychiatry, Behavioral Sciences & Pediatrics, at the George Washington University School of Medicine in Washington D.C. Over the past 20 years, Dr. Joshi has developed an expertise in the study of psychological effects of violence, crisis and trauma in children. She has received numerous grants to direct research and provide outreach services, including programs in Croatia, Bosnia-Hercegovina and Macedonia. She recently returned from Israel

where she was able to get a closer look at the psychological impact of armed conflict on children in the Middle East. Dr. Joshi's focus over the last decade has been to chart local and international efforts to identify and treat children traumatized by violence – in wars abroad and closer to home in America: on its streets, in its schools, and through the media. Dr. Joshi joined CNMC in 1999, after serving as Director of Clinical Services at Johns Hopkins Hospital in the Division of Child & Adolescent Psychiatry. She obtained her medical degree from the Christian Medical College and Brown Memorial Hospital, Punjab University in India, where she first trained as a Pediatrician. She completed her training in general and child and adolescent psychiatry at Johns Hopkins Hospital, where she remained for 22 years before coming to CNMC. Dr. Joshi is a fellow of the American Psychiatric Association (APA) and a recipient of the APA's Bruno Lima award for outstanding contributions in the care and understanding of disaster psychiatry. In addition the National Alliance for the Mentally III (NAMI) recently honored her with the Annual Exemplary Psychiatrist Award for her contributions to a greater understanding of brain disorders and mental illness. She has taught and published extensively on the issues of depression and childhood trauma, and in 1999 co-authored the book, Empowering Children: Psychological Assistance, Under Difficult Circumstances

Lewis Leavitt, M.D. is a Professor of Pediatrics at the University of Wisconsin School of Medicine. He is coordinator of the Social and Affective Processes Research Unit and Medical Director of the Waisman Center on Human Development and Mental Retardation. His research interests include early language development in typical and atypically developing children and the development of parent-infant communication. His publications include work on infant speech perception, children's language play, language development in children with Down Syndrome and the role of parental expectations in determining parent-child interaction. His research has used physiologic responses such as heart rate, skin contracture and eye-blink to study neuro-developmental and behavioral phenomena. In recent years he has also done research on the psychological effects of violence on children and studied media interactions to enhance mutual respect in children of different ethnic groups. He has co-edited books on children's exposure to violence and communication development in people with Down Syndrome. As a clinician involved in evaluating young children with developmental disabilities, Dr. Leavitt has been active in efforts to translate research into clinical practice. He has worked extensively with parent groups on public education about developmental disabilities. He directs an interdisciplinary training program at the Waisman Center for pre- and post-doctoral physicians, nurses and allied health workers in the field of Child Development and Developmental Disabilities. His work on parent-child interaction includes a current project on how parents cope with adolescent and adult children with autism. Dr. Leavitt received his B.S. in Mathematics and M.D. degree from the University of Chicago. He did post-doctoral fellowships in neonatology and psychophysiology at the University of Wisconsin.

Sheldon Levy, Ph.D., M.P.H. is a child clinical psychologist and is currently the Staff Executive for the Rhode Island Governor's Advisory Council on Health and a Consultant to the Center for Child and Family Health at the Rhode Island Department of Human Services. In addition, he is Clinical Associate Professor of Family Medicine and Adjunct Associate Professor of Community Health at Brown University Medical School. His work for the state involves developing programs for children with special health care needs under the State Medicaid Program. His research, teaching and clinical work at Brown has focused on the psychological and mental health aspects of primary care including the role of gender in clinical decision-making, substance abuse and child abuse screening by primary care physicians and self-esteem and preventive medicine practices of women. In addition, he has been involved in research and program development related to child abuse and neglect and street children in Central and Eastern Europe and the Former Soviet Union. This international work began in 1991 when he was awarded an Individual Health Scientist Exchange to the Former Soviet Union by the Fogarty International Center, NIH. Between 1995 and 1997 he served as a member of an advisory committee which provided consultation on primary care to Health Resources and Services Administration, DHHS, for the Summits between Vice-President Gore and the then Prime Minister of Russia, Victor Chernomyrdin. Between 1985 and 1987 he was on the

faculty of the National College of District Attorney's and trained prosecutors around the United States in the behavioral indicators of child abuse and neglect. In 1985 he was also invited to participate in the Surgeon Generals Policy Workshop to develop public health policy guidelines for the States in the area of Family Violence. Prior to this, he served as the psychologist on the Child Abuse Team at Cook County Hospital in Chicago. During the late 1970's he worked at the Office of Child Abuse Prevention in the California State Department of Health and Social Services where he contributed to the policy development for statewide programs for the Prevention of Child Abuse and Neglect.

Michael Lynch, Ph.D. is an Assistant Professor in the Department of Psychology at the State University of New York, College at Geneseo. He received his doctoral degree from the University of Rochester working with his advisor Dante Cicchetti. Prior to joining the faculty at Geneseo, Dr. Lynch worked for nearly 15 years at the Mt. Hope Family Center in Rochester with Dr. Cicchetti, While at Mt. Hope, Dr. Lynch supervised intervention programs for multi-risk urban children, and he coordinated a major longitudinal investigation of child abuse and neglect. Throughout his career, Dr. Lynch has been interested in the development of psychopathology, and his research has focused on the effects of child maltreatment and exposure to community violence. He has written extensively with Dr. Cicchetti about an ecological-transactional model of violence. He also has looked at the impact of community violence on children from a family systems perspective. Currently, he is expanding his research to investigate links between family adversity and the timing of pubertal maturation. Dr. Lynch is a former Graduate Student Research Fellow for the National Center on Child Abuse and Neglect. He is a current member of the Federal Child Neglect Research Consortium, where he is a co-principal investigator on a five-year study of child neglect entitled "Processes Linking Child Neglect and Adaptation to School." He also is a founding board member for the Charter School of Science and Technology in Rochester where he is working to integrate his knowledge about the effects of ecological adversity into school-based approaches for supporting children and families.

Steven Marans Ph.D. is the Harris Associate Professor of Child Psychoanalysis at the Yale Child Study Center (CSC) where he is the Director of the National Center for Children Exposed to Violence (NCCEV) and the Center for Childhood Violent Trauma. Dr. Marans is also the founder of the Child Development-Community Policing Program (upon which the National Center for Children Exposed to Violence is founded). The primary goals of the NCCEV are to raise public awareness of the effects of violence on children and families; to serve as a national resource center for information about the effects of violence on children and families; and to provide training and technical assistance to communities throughout the country that respond to children and families exposed to violence. The Center for Childhood Violent Trauma is part of the National Childhood Traumatic Stress Network and is involved in program evaluation and research regarding acute response to violent trauma. The CSC programs provide direct services for children, families and communities with the aftermath of violent events and traumatic reactions. In addition, Dr. Marans has consulted and worked closely with ranking members of the U. S. Department of Justice, members of Congress, and the White House, on issues related to trauma, youth violence, and law enforcement. Dr. Marans has led the NCCEV in responding to September 11th, with the 3rd Congressional District, the State of Connecticut, nationally and within New York City.

Gayla Margolin, Ph.D., Professor of Psychology, has been at the University of Southern California since 1978, where she also served as Director of Clinical Training from 1995-2000. She is a clinical psychologist with research specialties in marital conflict/violence, and children's exposure to multiple forms of violence. She received her Ph.D. from the University of Oregon in 1976. She was the recipient of the Harry Frank Guggenheim Career Development Award (1985-1989) for a project titled "Interpersonal Factors in the Intergenerational Transmission of Family Violence." She received the 1993 Award for Distinguished Contribution to Family System Research from the American Family Therapy Association. She has received four competitive NIMH grants studying the treatment of multi-problem families and the effects of family violence. Dr. Margolin has presented to the California Assembly Select

Committee on Domestic Violence and provided Domestic Violence Training for Child Custody Evaluators and Mediators for the State of California. She has served as Associate Editor for the *Journal of Family Psychology and Behavioral Assessment* and also has served on the editorial/advisory boards of 10 additional journals.

Laura McCloskey, Ph.D. is an Associate Professor in the Department of Maternal and Child Health at the Harvard University School of Public Health. She received her doctorate in Psychology from the University of Michigan (1986) and was a postdoctoral scholar at the University of Rochester working with Dante Cicchetti. Dr. McCloskey was on the faculty in Psychology at the University of Arizona for eleven years, where she launched her landmark longitudinal study of children exposed to marital violence. Her research has received funding from the National Center on Child Abuse and Neglect, the NIMH and, most recently, the Agency for Healthcare Research and Quality. The Arizona study was conducted over a decade-long series of large data collection waves. Children who were exposed to marital violence and control group children were followed up and studied to examine outcomes in aggressive behavior and crime, dating and sexual relationships, academic achievement, and mental health. Findings reveal a long shadow of early domestic violence on later adjustment, but there is also remarkable evidence of resilience. Dr. McCloskey is presently engaged in a new research effort to evaluate community-based interventions for abused women and their children to identify the parameters of an effective public health approach to the problem of domestic violence. She is also a founding member of the new Women, Gender and Health Program at Harvard University.

Robert S. Pynoos, M.D., M.P.H. is Professor of Psychiatry in the UCLA Department of Psychiatry and Biobehavioral Sciences. He is Co-Director of the National Center for Child Traumatic Stress, Director of the UCLA Trauma Psychiatry Service and Executive Director of the UCLA Anxiety Disorders Section. Dr. Pynoos is a graduate of Harvard University and Columbia University Schools of Physicians & Surgeons and Public Health. Over the past two decades, he has written extensively on child development and child traumatic stress, the neurobiology of child and adolescent trauma, and public mental health approaches for children and families after disaster, war and community violence, and has elevated the standards of mental health care for child victims and witnesses. He is past President of the International Society for Traumatic Stress Studies and the 2001 recipient of the Lifetime Achievement Award. Dr. Pynoos has served as Chair for the William T. Grant Consortium on Adolescent Bereavement and for the MacArthur Foundation Network Study Group on Children's Responses to Traumatic Stress. He served as a consultant to the United States Department of Education after the Oklahoma City bombing, to the Springfield Oregon Public School District after the Thurston High School shooting, to Jefferson County Mental Health after the Columbine High School tragedy and to Santana High School, Santee, California. He has been a consultant to UNICEF for Kuwait after the Gulf War, has a long-standing collaborative relationship with UNICEF to conduct a long-term post-war recovery program for adolescents in Bosnia-Herzegovina, and worked for years with the Armenian Relief Society in their decade-long postearthquake recovery efforts. Dr. Pynoos was an invited participant to the 1999 White House Strategy Session on Children, Violence and Responsibility. He has received the American Psychiatric Association Bruno Lima Award for excellence in disaster psychiatry. Dr. Pynoos has extensive experience in work with the Institute of Medicine, serving as committee member, reviewer, and speaker on a range of topics, including issues related to chemical and biological terrorism R&D needs and civilian readiness, clinical evaluation protocols, and public mental health planning and readiness, response and recovery to catastrophic acts of terrorism. In response to September 11, he has served as a consultant to the New York State Office of Mental Health and to the New York City Department of Health, as well providing assistance to the New York City Board of Education and U.S. Department of Education outreach to the private school community. By recommendation of the NIMH, Dr. Pynoos provided consultation to the First Lady, Laura Bush, in regard to publicly addressing children and families in the aftermath of September 11.

Kathy Sanders-Phillips, Ph.D. is currently the Director of the Research Program in the Epidemiology and Prevention of Drug Abuse and Professor in the Department of Human Development and Psychoeducational Studies at Howard University in Washington, DC. She also holds an appointment as Clinical Associate Professor in the School of Public Health at the University of California at Berkeley and serves on several national advisory boards. She has a Ph.D. in developmental psychology and is an expert on the topics of children's exposure to community violence and the relationship between exposure to community violence and risky behaviors. Dr. Sanders-Phillips has authored numerous articles, which have been published in a variety of sources, such as *Advances in Medical Sociology, Journal of Adolescent Health*, and the *Journal of Health Care*. Raised in St. Louis, MO, Kathy is married with two children. Having had a long-term research career at UCLA and King Drew Medical Center, she recently began working at Howard University. She will continue multidisciplinary research, facilitating the careers of research scientists and establishing collaborative external institutional research activities.

Jon A. Shaw, M.D., Ret. Col. USA is Professor and Director, Division of Child and Adolescent Psychiatry, University of Miami School of Medicine. He is certified in General Psychiatry, Child and Adolescent Psychiatry, Adult and Child Psychoanalysis. Dr. Shaw graduated from the University of Oregon Medical School obtaining his M.D. degree and a M.S. in Physiological Psychology. He completed his residency training in General Psychiatry, Child Psychiatry and a Clinical Research Fellowship at the Walter Reed Army Medical Center. While on active duty with the U. S. Army, Dr. Shaw held such positions as Chief, Child and Adolescent Psychiatry, Walter Reed Army Medical Center; Chairman, Department of Psychiatry at the Walter Reed Army Medical Center; and Consultant in Psychiatry and Neurology to the Army Surgeon General. After serving on the National Advisory Council to the NIMH, he became Director of the Child and Adolescent Disorders Research Branch at the NIMH, 1987-1989. Dr. Shaw's areas of scientific publications and research interests have focused on the psychological effects of trauma both on adults and children with publications on the transcultural aspects of sexual abuse, child on child sexual abuse, sexual aggression, psychological effects of Hurricane Andrew and a number of papers on combat stress reactions, the psychological effects of war on children, and grief and mourning. He served as a consultant to Mozambique and was instrumental in developing the prevention-intervention program for child victims of war in that country. He edited a book on Sexual Aggression, (1999). More recently he has served on a task force with the Uniform Services University of the Health Sciences focusing on bioterrorism and has written a paper about the psychological effects of a community-wide disaster on children and planning for bioterrorism.

Bradley D. Stein is a Health Services Researcher at RAND and Assistant Professor of Psychiatry at the University of Southern California. He has worked closely with the Los Angeles Unified School District Mental Health Services Unit over the last 4 years on the development, implementation, and evaluation of the Mental Health Intervention Program, which identifies and intervenes with students traumatized by community violence. Recent activities also include working with RAND colleagues in examining the psychological effects of terrorism and examining "best practices" for school mental health response after school violence.

Patricia M. Sullivan, Ph.D. is currently affiliated with Creighton University in Omaha, Nebraska where she is a Professor of Neurology in the School of Medicine and Professor of Psychology in the College of Arts and Sciences. She is also the Director of the Center for the Study of Children's Issues, a university-wide center dedicated to conducting research on issues impacting children and their families. Dr. Sullivan previously directed the Center for Abused Children with Disabilities at the Boys Town National Research Hospital, a division of Father Flanagan's Boys Town. Dr. Sullivan's research has focused on children and youth with disabilities as victims and perpetrators of physical and sexual violence, including child maltreatment among children and youth with disabilities, and co-occurring factors of that maltreatment including domestic violence and runaway behavior as they relate to disability status. She is currently

investigating violence linkages among children and youth with and without disabilities, including both perpetrator and victim outcomes in adulthood.

Martin H. Teicher, M.D., Ph.D. is an Associate Professor of Psychiatry at Harvard Medical School and Director of the internationally-recognized Developmental Biopsychiatry Research Program at McLean Hospital. His research studies range from the molecular mechanisms of brain development, cellular neuroanatomy, regional neuropharmacology, and up through studies of human behavior and brain imaging. Currently, the major focus of his clinical research program has been on the possible enduring effects of childhood maltreatment on brain development. Among his pioneering work, Dr. Teicher has been at the forefront of studies of actigraphy and motion analysis as tools for research in psychiatry and developed a new approach and software for non-linear modeling of biological rhythms that can delineate and define the different forms of rest-activity disturbance observed in many of the major psychiatric disorders including depression in children, adults and geriatric patients, ADHD, Post-traumatic stress disorder, and Alzheimer's disease. In collaboration with Perry Renshaw, M.D., Ph.D. in the Brain Imaging Center at McLean Hospital, Dr. Teicher devised, validated and patented a new method for functional MRI imaging (T2-relaxometry) that provides indirect information about basal blood volume that is not only safer for developing brains, but also has higher resolution. Using this technique, this collaborative research team provided the first evidence that there is an abnormality in the paramagnetic properties of the striatum (specifically the putamen) and cerebellar vermis in children with ADHD that stems from alterations in brain activity and cerebral blood volume. Furthermore, these changes correlate strongly with the child's basal level of activity and inattention and change significantly with drug treatment. In addition, Dr. Teicher has done seminal work on dopamine-receptor pruning, a developmental phenomenon that occurs between adolescence and adulthood, that may have relevance to the emergence of schizophrenia in late adolescence or early adulthood, and to the waxing and waning of symptoms of ADHD and Tourette's disorder during development. He is currently investigating the molecular mechanisms that regulate the overproduction and pruning of these dopamine receptors, along with the effects of exposure to early stress on the process. Dr. Martin Teicher has served on the Editorial Board of the Journal of Child and Adolescent Psychopharmacology since its inception, has been a Committee Member of the NIMH Neurochemistry and Neuropharmocology Study Section, is a member of the Scientific Advisory Board of the Juvenile Bipolar Research Foundation, and is the author of over 150 articles in the scientific literature.

Gregory A. Thomas, M.S. was born and raised in Brooklyn, New York, completed public school in New York City, and attended the University of Maryland, Eastern Shore where he received his Bachelor of Arts Degree in Sociology in1982. He returned to New York City to continue his education at the Brooklyn Campus of Long Island University (L.I.U.) where he received his Master of Science Degree in Criminal Justice in 1984. As a result of his exemplary graduate work at L.I.U., in 1984, Mr. Thomas was inducted into Alpha Phi Sigma, the National Criminal Justice Honor Society. Mr. Thomas is currently employed with the New York City Board of Education as the Executive Director of the Division of Student Safety and Prevention Services. In this capacity, he is responsible for developing school safety programs and conducting research on the best practices to keep the over one million students that attend the one thousand New York City schools safe. Prior to his current position, Mr. Thomas served as the Acting Executive Director of the Board of Education's Division of School Safety where he was responsible for managing the daily operations of the country's largest school based security force (3,500 sworn New York State Peace Officers). During his eighteen years of public service, Mr. Thomas has held various executive positions in the fields of criminal justice and public safety, including as Assistant Commissioner with the New York City Fire Department; Associate Director of the City University of New York/New York City Police Department Cadet Program at John Jay College of Criminal Justice; Senior Investigator and member of the executive staff with the Mollen Commission, the mayoral commission that investigated corruption in the New York City Police Department; and as First Deputy Inspector General with the New York City Department of Investigation. In recognition of his professional

and civic accomplishments, Mr. Thomas has received the Thurgood Marshall Scholarship Fund Award for Outstanding Community Service and the United Parents Associations Award for Distinguished Service. He was also the first recipient of the Outstanding Young Alumnus Award from his undergraduate alma mater, The University of Maryland-Eastern Shore in 1993 and was honored in 1994 with a distinguished alumni citation from the National Association for Equal Opportunity in Higher Education.

Penelope K. Trickett, M.A., Ph.D. is a Professor of Social Work and Psychology at the University of Southern California. Dr. Trickett earned her Ph.D. from the New School for Social Research, New York. She is a developmental psychologist whose research, for the last 20 years, has focused on the developmental consequences of child abuse and/or neglect on children and adolescents and on the characteristics of families in which such abuse occurs. She has an Independent Scientist Award from the NIMH titled, "The Developmental Consequences of Child Abuse and Violence." In addition, Dr. Trickett is conducting two longitudinal studies. One, now in its 15th year, concerns the psychobiological impact of familial sexual abuse on female adolescents and young adults. The second is a study of the impact of neglect, alone or in combination with other forms of maltreatment, on young adolescent development. Dr. Trickett also directs a university-wide interdisciplinary violence research initiative at the University of Southern California.

David A. Wolfe, Ph.D. is Professor of Psychology and Psychiatry and Academic Director of the Center for Research on Violence Against Women and Children at the University of Western Ontario. He is a fellow of the American Psychological Association and past President of Division 37 (Child, Youth, and Family Services). Dr. Wolfe has broad research and clinical interests in abnormal child and adolescent psychology, with a special focus on child abuse, domestic violence, and developmental psychopathology. He has authored numerous articles on these topics, especially in relation to the impact of early childhood trauma on later development in childhood, adolescence, and early adulthood. He is currently studying ways to prevent violence in relationships with adolescents. He recently received the Outstanding Career Award from the American Professional Society on the Abuse of Children, and the John Dewan Prize for Outstanding Contribution to Psychology from the Ontario Mental Health Foundation. His recent books include Children of Battered Women (with P. Jaffe and S. Wilson; Sage, 1990), Preventing Physical and Emotional Abuse of Children (Guilford, 1991), Alternatives to Violence: Empowering Youth to Develop Healthy Relationships (with C. Wekerle & K. Scott; Sage, 1996), the Youth Relationships Manual (Sage, 1996), and Abnormal Child Psychology (with E. Mash; Wadsworth, 2002).

APPENDIX G. WORKSHOP PARTICIPANTS

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