Understanding Children Exposed to Violence

Toward an Integration of Overlapping Fields

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Although comprehensive studies examining a variety of violence types and potential outcomes are becoming more common, there continues to be an overreliance on relatively simple, single violence type, criterion group comparisons. Unfortunately, the sheer volume of what is known about different forms of childhood violence, the many potential outcomes that have been shown to be related to a history of violence in childhood, and emerging research on mediators and moderators makes conducting comprehensive research a significant theoretical and technical challenge. Complicating this situation is that vertically organized and isolated professional fields of study and practice have emerged around specific types of childhood violence and outcomes, making cross-fertilization of ideas and methods difficult. Suggestions concerning theory, methods, and professional integration are offered to promote more integration of the field of childhood violence.

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The past two decades have seen an explosion in research concerning the degree to which children are victims of violence, their witnessing violence against others, and the immediate and long-term impact of these experiences. This research includes sophisticated epidemiological studies assessing the prevalence of violence against children (Ageton, 1983; Bastian & Taylor, 1991; Finkelhor & Dzuiba-Leatherman, 1994; Finkelhor, Hotaling, Lewis, & Smith, 1990; Hanson et al., 2001; Kilpatrick & Saunders, 1999; Saunders,

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Kilpatrick, Hanson, Resnick, & Walker, 1999; Sedlak & Broadhurst, 1996; Tjaden & Thoennes, 1998), retrospective studies of adults assessing the long-term impact of child victimization (Briere & Runtz, 1988; Duncan, Saunders, Kilpatrick, Hanson, & Resnick, 1996; Elliott & Briere, 1992; Epstein, Saunders, & Kilpatrick, 1997; Felitti et al., 1998; Saunders, Villeponteaux, Lipovsky, Kilpatrick, & Veronen, 1992), and studies of victimized children (Famularo, Kinscherff, & Fenton, 1992; Fiering, Taska, & Lewis, 1998; Gomes-Schwartz, Horowitz, & Cardarelli, 1990; Lipovsky, Saunders, & Murphy, 1989; Mannarino & Cohen, 1996). The volume of research has resulted in important reviews and summaries of research being written to describe the prevalence and correlates of various forms of victimization, particularly sexual abuse (Beitchman et al., 1992; Berliner & Elliott, 2002; Briere & Elliott, 1994; Browne & Finkelhor, 1986; Kendall-Tackett, Williams, & Finkelhor, 1993; Kolko, 1992, 2002; Polusny & Follette, 1995; Watkins & Bentovim, 1992).

Within this body of large research, various forms of childhood victimization have been linked, at least statistically, to a multitude of negative outcomes. Studies have found some type of childhood violence to be associated with outcomes such as problematic substance use and delinquent behavior (Dembo et al., 1992; Epstein, Saunders, Kilpatrick, & Resnick, 1998; Huizinga, Loeber, & Thornberry, 1995; Kilpatrick et al., 2000; Kilpatrick & Saunders, 1999; Spaccarelli, Coatsworth, & Bowden, 1995; Widom, 1992); a variety of mental health problems and psychiatric diagnoses, including post-traumatic stress disorder, depression, anxiety disorders, sexual disorders, and eating disorders (Beitchman et al., 1992; Browne & Finkelhor, 1986; Burnam et al., 1988; Epstein et al., 1997; Kilpatrick, Saunders, & Smith, 2002; Polusny & Follette, 1995; Saunders et al., 1992, 1999); suicidality (Bryant & Range, 1995; Saunders et al., 1992, 1999); medical and physical problems (Felitti et al., 1998; Hanson et al., 2001; Harrop-Griffiths et al., 1988; Nelson, Higginson, & Grant-Worley, 1995); risky sexual health behaviors (Carballo-Dieguez & Dolezal, 1995; Nagy, Adcock, & Nagy, 1994; Zierler et al., 1991); risk for revictimization (Saunders, Kilpatrick, & Resnick, 1998); general child development problems (Egelend, Sroufe, & Erickson, 1983; Wolfe, 1987); and many other difficulties. It seems that experiencing violence in childhood is a significant risk factor for a great variety of human problems that occur in childhood, adolescence, and adulthood. In fact, a comprehensive list of all the psychological, psychiatric, social, behavioral, and medical problems found to be associated with a history of childhood exposure to violence would be difficult to construct at this point.

ASSESSING VIOLENCE HISTORY

A large proportion of the studies concerning violence in childhood have examined only one type of childhood violence. For example, a great many studies have examined psychosocial and mental health correlates of sexual abuse. Typically, studies have taken community, specialty, or clinical samples and assessed participants for a history of a certain type of violence in childhood while also evaluating their past and current functioning. Analysis then determines the prevalence of that type of violence within the sample and the prevalence of various outcomes among those with and without a history of the particular violence type. Gross risk ratios, odds ratios, and measures of association between the violence type and outcomes of interest are constructed and statistically tested. As noted above, violence is nearly always associated with a significantly greater level of negative outcome, regardless of its type. Many of these types of studies have produced important and, at times, rather astonishing results, and they form the core of our understanding about violence in childhood. They have informed us about the many problems associated with childhood violence and its potential for disrupting lives over the long term. It is not uncommon for victims of violence to exhibit certain types of psychiatric disorders or dysfunctional behaviors at rates three, four, and even five times greater than nonvictims (Kilpatrick et al, 2000; Saunders et al., 1992, 1999).

Beyond the useful information generated, however, the shortcomings of this design and analysis approach are readily apparent. The most obvious deficiency is that unless the comparison groups are equal in their concurrent, alternative risk factors for the outcomes assessed, the results may be confounded. Specific linkages between violence exposure and outcome are difficult to discern because they often are confounded by exposure to other types of trauma or other risk factors for the outcome in question. Elevated levels of negative outcomes may be due, at least in part, to other factors that are uncontrolled in a simple bivariate analysis. If these alternative explanatory factors are not measured, then criterion group equality cannot be assessed, the impact of other risk factors cannot be determined, and important potential confounds cannot be controlled. It is more common in more recent studies to control for some other risk factors when assessing the impact of a certain type of violence (Boney-McCoy & Finkelhor, 1997; Epstein et al., 1997). Authors have commented on this problem and offered ways of controlling for various risks through study conceptualization, design, and statistical analysis (Briere & Elliott, 1993; Hamby & Finkelhor, 2000; Slep & Heyman, 2001), and complex, multivariate analyses are now used more often than in earlier studies. However, simple criterion group designs with risk ratio, odds ratio, and/or

correlational analysis with a singular violence type remain a common, if not the most common, design and analysis approach.

EXPOSURE TO MULTIPLE TYPES OF VIOLENCE

When assessing this large literature as a whole, a relatively small proportion of studies concerned with childhood violence has assessed participants for exposure to multiple forms of violence, multiple incidents of the same type of violence, or exposure to potentially stressful or traumatic events other than violence. More thorough screening for histories of victimization, violence, and trauma is becoming the accepted norm, and this trend is likely to continue. However, most studies generally still do not assess or control for the effects of other types of victimizations and traumas when evaluating the potential psychological impact of a particular type of violence. Consequently, our ability to understand the unique effects (if any) of a particular type of violence or a particular violent episode, the cumulative impact of multiple forms of violence and trauma, and the potential interactions between different types of violence is limited in most studies. In addition, even when other victimizations or risk factors are not present, moderator variables may affect the relationships between the trauma and the studied outcomes. For example, Kilpatrick and Saunders (1999) examined a history of sexual assault, physical assault, physical abuse, and witnessing violence as predictors of past year delinquency among a nationally representative sample of African American and White male and female teenagers, controlling for various demographic and familial variables. The final predictive models were quite different for these four groups, indicating that both gender and race are moderator variables for these relationships. Unfortunately, relatively few studies in the child violence literature have examined changes in predictor-outcome relationships due to different levels of moderator variables such as gender or racial and ethnic identification.

Understanding these problems, there is a trend for investigators to examine multiple types of victimization among children, and more studies are testing for moderator effects. A growing body of research is emerging demonstrating that many of the types of violence experienced and witnessed by children (and adults) are not unique, singular experiences. Rather, it is common for children to have been the victims of and/or witnessed several types of violence on multiple occasions (Finkelhor & Dzuiba-Leatherman, 1994; Kilpatrick & Saunders, 1999). For example, in a victimization survey of 2,507 female college students, Green et al. (2000) found that of the students who had experienced at least one serious traumatic event, most had experienced

TABLE 1: Number of Different Types of Victimizations Reported by Adolescents in the National Survey of Adolescents (*N* = 4,023)

Number of Types	n	%
0	2028	50.4
1	1181	29.4
2	557	13.8
3	201	4.9
4	56	1.4

other types as well. That is, most of the victims were actually victims of multiple traumas. In a large national epidemiological survey, Kessler, Sonnega, Bromet, Hughes, and Nelson (1995) found that 61% of men and 51% of women experienced at least one of the potentially traumatic events they assessed, and 34% of men and 25% of women had experienced two or more events. Resnick, Kilpatrick, Dansky, Saunders, and Best (1993) found that 69% of a nationally representative sample of American women had been exposed to at least one of the potentially traumatic experiences they measured, many of which occurred prior to age 18. Of those who had experienced at least one criminal victimization, more than half reported more than one episode.

More evidence for the overlap of different forms of victimization among children comes from the National Survey of Adolescents (NSA) (Acierno et al., 2000; Crouch, Hanson, Saunders, Kilpatrick, & Resnick, 2000; Kilpatrick et al, 2000, 2002; Kilpatrick & Saunders, 1999). The NSA was a telephone survey of a national random sample of 4,023 adolescents age 12 to 17 living in households in the United States. Participants were assessed for a history of sexual assault, physical assault, severe physical abuse, and witnessing community and family violence. Table 1 summarizes the percentage of participants who reported experiencing none, one, two, three, or all four types of violence. Nearly half of this nationally representative sample of American adolescents had experienced at least one of the four types of violence. And 20% (more than 40% of the victims) had experienced at least two types of violence. Even among those who had experienced only one type of violence, a large minority had been the victims of multiple episodes of the same type of violence.

The overlap of victimization types is even more apparent in clinical or reported samples. For example, in a study of a sample of children living in residential care due to emotional and behavioral problems, Brady and Caraway (2002) found that 88% had histories of more than one type of violence. In

TABLE 2: Number of Different Types of Victimizations Reported by Children and Adolescents in the Navy Family Study (*N* = 195)

Number of Types	n	%
0	22	11.3
1	38	19.5
2	57	29.2
3	42	21.5
4	18	9.2
5	18	9.2

the Navy Family Study, a longitudinal study of U.S. Navy families reported to authorities for allegations of either domestic violence, physical abuse, or sexual abuse, Saunders, Williams, Hanson, Smith, and Rheingold (2002) assessed 195 children and adolescents living in these families using structured in-person interviews. They were evaluated for a history of witnessing community violence, witnessing domestic violence, and experiencing sexual assault, physical assault, or physical abuse by a parent. Table 2 presents the number of children reporting different types of abuse. Only 11.3% of this sample of children denied any history of violence, not a surprising result for a reported sample. However, only 19.5% reported a history of only one type of violence, and 18.4% reported experiencing four or five types of violence. The large majority of these children, 69.1%, reported more than one type of violence in their history. The average number of victimization types experienced was 2.26 (*SD* = 1.42). Again, even among those with a history of only one type of violence, a large proportion had experienced more than one incident of that type.

The overlap of witnessing domestic violence and other types of childhood violence within this sample is illustrated in Table 3. Of the children describing a history of sexual assault, physical assault, physical abuse by a parent, or witnessing community violence, approximately 50% indicated they also had witnessed domestic violence in the home. Of those children reporting witnessing domestic violence, between 40% and 80% reported one of the other types of violence as well.

At this point, the data are clear that a large proportion of children, perhaps even the majority, experience personally or directly witness at least one serious violent event during childhood (i.e., prior to age 18). Unfortunately, research taking a more comprehensive look at childhood violence is demonstrating that children who have been exposed to only a single episode of one type of violence are a minority of victimized children. And a substantial pro-

TABLE 3: Percentage of Children and Adolescents in the Navy Family Study Reporting Witnessing Domestic Violence (DV) and Other Types of Violence (*N* = 195)

Type of violence	*% Witnessing DV*	*% Within DV (*n *= 85)*
Sexual assault (*n* = 57)	57.9**	38.8**
Physical assault (*n* = 67)	53.7*	42.4*
Physical abuse (*n* = 94)	50.0	55.3
Witnessed community violence (*n* = 137)	48.9*	78.8*

*$p < .05$. **$p < .01$.

portion of violence-exposed children have experienced multiple episodes of several types of violence. As demonstrated above, the overlap in violence types experienced by children is large. In fact, among clinical or reported samples of children, the proportion of victims having only one type of violence or only one violent episode in their histories is small. Most have experienced multiple types of violence and multiple victimizations. The best conclusion is that multiply victimized children are the norm in most research samples.

This overlap of childhood violence presents considerable challenges to researchers (as well as clinicians). When the sexual abuse researcher evaluates sexually abused children, and the physical abuse researcher studies physically abused children, and the school violence researcher investigates victims of school crime, and the gang violence researcher examines child victims of gang violence, and the dating violence researcher assesses adolescents assaulted in dating relationships, and the domestic violence researcher studies children who have witnessed domestic violence, and the street crime researcher evaluates child victims of street crime, and the community violence researcher examines children who have witnessed violence in the community, for the most part, they are all studying many of the same children. They are simply catching them at different times of the children's lives and categorizing them according to the singular research protocol. Many children get selected for a certain type of research because they are part of an emergent case of a certain type of violence. However, if they had been contacted earlier by a researcher with a focus on a different type of victimization, they may have been eligible for that study as well because of a different type of emergent case at that time. In that case, causal attributions for their current problems may have been very different. In fact, outcomes apparently associated with one type of violence exposure might well be the result of another, perhaps unmeasured, type of violence; the cumulative result of exposure to multiple types of violence; and a complex interaction of violence types and episodes.

When different forms of violence are not assessed in a comprehensive manner, discerning interactions, cumulative effects, and complex pathways to specific outcomes becomes very difficult. Most important, the risk for misunderstanding the full phenomenon of childhood violence and misattributing outcomes to one type or episode of violence is great. The research community is well aware of this danger and has begun to examine multiple forms of victimization among children in earnest. However, this situation presents its own technical problems. Is it possible to assess every type of violence that a child might have experienced, every other alternative risk factor for the outcomes of interest, and every potential moderator and mediator variable that might influence the outcome and the predictor-outcome relationships, all in a single study? Even if a researcher attempts to do this, is it technically possible? Will respondent fatigue affect responses to long screening inquiries? Will answers to screening questions for one type of victimization affect answers to subsequent ones? How much follow-up information about each type of victimization can be obtained before exhausting participants? To say the least, this situation is a conceptual and methodological challenge.

COMORBIDITY OF OUTCOME VARIABLES

Not only is violence exposure history complex, but a similar overlap situation exists with many outcome variables commonly assessed among victimized and violence-exposed children. As noted above, different forms of violence in childhood have been linked to a wide variety of human problems. Many of these problems are often comorbid with one another. Thus, we have a situation where not only do children often have multiple violence and trauma histories, they frequently exhibit several outcomes as well. Victimized children often have met diagnostic criteria for several psychiatric disorders, and they may have other psychological and behavioral problems at the same time.

Again, data from the NSA in Table 4 illustrate this problem. These teenagers were assessed for currently meeting *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) (American Psychiatric Association, 1994) diagnostic criteria for post-traumatic stress disorder (PTSD) and major depression, for a history of past year problematic alcohol use (drinking at least once per month), past year nonexperimental illegal drug use, and past year delinquency. Of the 4,023 adolescents assessed, more than 70% reported none of these problems. However, of those who reported at least one of these problems, 42.4% reported two or more. Similar data from the Navy Family Study are reported in Table 5 and illustrate this overlap with a younger sample of

TABLE 4: Number of Different Types of Outcomes Reported by Adolescents in the National Survey of Adolescents (*N* = 4,023)

Number of Types	n	%
0	2865	71.2
1	667	16.6
2	311	7.7
3	125	3.1
4	40	0.9
5	15	0.4

TABLE 5: Number of Different Types of Past Year Outcomes Reported by Children and Adolescents in the Navy Family Study (*N* = 195)

Number of Types	n	%
0	126	64.6
1	33	16.9
2	16	8.2
3	14	7.2
4	4	2.1
5	2	1.0

children from families reported for family violence. Of these children and adolescents, 64% reported experiencing none of these problems. Of those that reported at least one, more than half reported two or more. Consequently, we have a situation similar to the one presented above with violence types. When the PTSD researcher investigates children with PTSD, and the depression researcher studies children with depression, and the drug, alcohol, and delinquency researchers examine children with those problems, they are studying many of the same children. The overlap may be as great as 50%.

The same problems with the roles of alternative risk factors, mediator variables, and moderator variables exist with these potential outcomes as with the violence types. For example, each of these outcomes have risk factors other than childhood violence. Some outcomes, such as depression, have large literatures and sophisticated conceptual models organizing multiple risk factors. Strictly speaking, these risk factors would need to be ruled out or controlled for to make proper attribution to violence as the primary etiological factor. As was the case with types of violence, assessing every outcome and the alternative risk factors for each outcome presents a substantial techni-

cal challenge to the childhood violence researcher. Because of our growing knowledge in all of these areas, a comprehensive approach to assessing childhood violence and its many potential outcomes, accounting for alternative risk factors, and potential mediators and moderators associated with different forms of violence, and the potential outcomes, is, to say the least, a daunting challenge.

UNDERSTANDING THE IMPACT OF VIOLENCE

The co-occurrence of different types of violence in the histories of many children coupled with the comorbidity of many studied outcomes among these children make discerning the unique impact of a certain type of violence very difficult. One could argue that in many of the single violence type studies, it is really the large proportion of multiply exposed children who are driving the simple criterion group comparisons on a single outcome that is often reported. Furthermore, there may be interactions with other types of comorbid outcomes that further push the simple comparison. It may be an unassessed primary problem that is comorbid with the assessed one that is actually the most salient and powerful outcome.

These notions are illustrated by data from the NSA (Kilpatrick, Saunders, & Resnick, 1998). Figure 1 presents the prevalence of a diagnosis of substance abuse or dependence among groups of adolescents who have experienced none or up to three or more physical or sexual assaults and who either have or have not ever met diagnostic criteria for PTSD. There is a clear trend for both PTSD positive and negative groups to be more likely to have substance abuse or dependence disorder the more assaults they have experienced. This relationship is approximately linear for both groups with no interaction by PTSD status. However, it is also clear that PTSD-positive teenagers are more likely to develop a substance abuse disorder compared to PTSD-negative ones, regardless of the number of assaults. Therefore, both the number of assaults and PTSD contribute to substance abuse or dependence.

Figure 2, also from the NSA, illustrates an interaction brought on by comorbidity. Here, the dependent variable is depression. Adolescents with PTSD are very likely to also have depression no matter how many assaults they have experienced, with approximately 70% of them having this additional diagnosis. However, for adolescents without PTSD, there is a clear linear association between number of assaults and likelihood of developing depression. PTSD status moderates the relationship between number of assaults and depression. If these two multiple outcomes were not analyzed

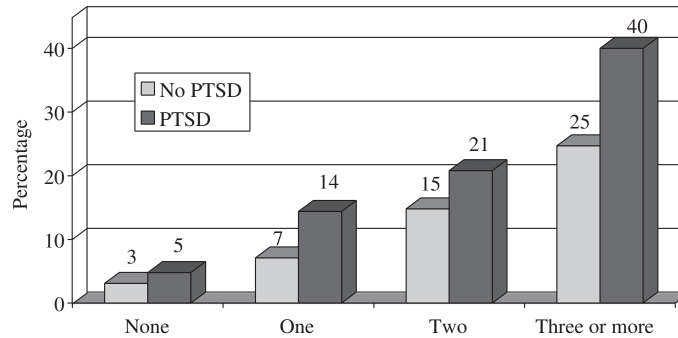

Figure 1: Prevalence of Substance Abuse/Dependence by Number of Assaults and Post-Traumatic Stress Disorder Status

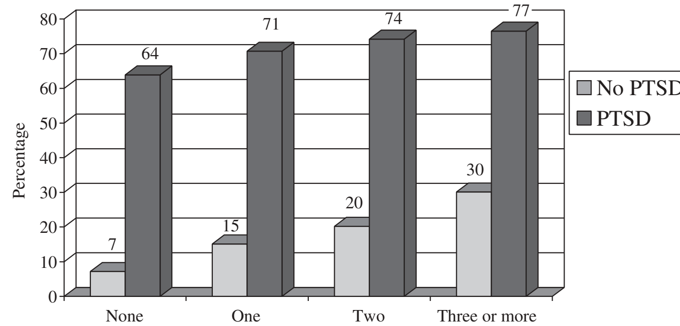

Figure 2: Prevalence of Depression by Number of Assaults and Post-Traumatic Stress Disorder Status

together, this more complicated relationship would not be revealed. These rather simple illustrations demonstrate how multiple victimizations and multiple outcomes can quickly become very complicated to conceptualize, research, and analyze in a way that systematically eliminates alternative explanations for findings.

MULTIPROBLEM CHILDREN VERSUS SINGULAR FIELDS OF STUDY

The way professional areas of study and practice have developed over time has made it difficult to understand the totality of children's experience

with violence in a comprehensive manner. Essentially singular fields of study and practice have developed around different forms of violence and around different potential outcomes. There are sexual abuse victim researchers, sex offender researchers, physical abuse researchers, neglect researchers, school violence researchers, PTSD researchers, substance abuse researchers, and so forth. Likewise, there are practitioners that specialize in treating delinquent youth; children with PTSD, substance abuse, or depression; and juvenile sexual offenders. The list of specialty fields is long. Each field of study and practice has its own language, theoretical frameworks, axioms, research methods, and clinical approaches. Each has its own professional conferences, organizations, journals, and newsletters. Each tends to be organized as a vertical establishment with its own culture, sacred cows, and hot button issues. Most important, there is little sharing of knowledge, assumptions, methods, clinical and research approaches, and other types of cross-fertilization between these unitary fields. Some professionals in these fields cross some lines, but the number is relatively few. Gelles (2000) termed this situation the "Balkanization of family violence," a term that is not inappropriate to apply to the way in which our study of all forms of child violence and their potential outcomes has evolved. At best, the various areas of study are a loose confederation of states that only rarely meet in congress.

Table 6 illustrates the situation. Each of the child violence areas listed is a field unto itself with a large research and clinical literature and professionals who specialize in that area. This conclusion is true of each of the outcome fields as well. However, the state of affairs is even more complicated than violence and outcome fields. Constructs now considered to be prime candidates as moderators and mediators of relationships between child violence experiences and various outcomes often are the province of still other professional fields. The most obvious of these is child development, but the others listed also are professional areas of study and practice specialization that claim moderators and mediators critical to understanding child violence. Finally, many modalities of treatment and intervention commonly used in cases of child violence are also specialized fields of practice (e.g., play therapy, family therapy, parent training, etc.). All of these area of interest have the many trappings of a professional field. There are conferences and journals devoted to each one. Professionals identify themselves as specializing in them and may even be certified in a specialty area. Each has theories, a body of research, practice methods, and a certain professional culture. Each has idiosyncratic aspects that set it apart from other areas of interest. As with the many areas of violence, it is impossible to be an expert in all of these fields.

The vertical organization and horizontal fragmentation of the child violence field that has evolved over time creates many difficulties. As noted by

TABLE 6: Fields of Academic Study Associated With Child Violence

	Moderator Fields *Child Development* *Cultural/Ethnic/Racial Studies* *Environmental/Community Studies* *Family Studies*		
Child Violence Fields	*Mediator Field*	*Outcome Fields*	*Treatment and System Response Fields*
Child sexual abuse	Cognitive-attributions	Post-traumatic stress disorder	Cognitive-behavioral therapy
Child physical abuse		Depression	Family therapy
Child neglect		Anxiety	Parent training
Sexual offenders		Eating disorders	Play therapy
Juvenile sexual offenders		Delinquency	Child protective services
Child sexualized behavior		Aggression-conduct	Law enforcement
Rape/sexual assault		Medical problems	Legal
Community violence		Dissociative disorders	
School violence		Alcohol abuse	
Dating violence		Drug abuse	
Domestic violence			
Witnessing domestic violence			
Witnessing violence			

Hamby and Finkelhor (2000), limiting our scientific inquiry to only one or two areas limits our ability to fully understand the complete picture of child violence and the overlapping nature of different types of violence described above. More important, spurious or misleading conclusions may be drawn from incomplete research. Inaccurate or incomplete causal inferences may be made because more complex relationships have not been investigated. Ultimately, the precision of our understanding of this phenomenon and our ability to shape effective responses is reduced by our vertical and somewhat isolating organization.

IMPLICATIONS

Unfortunately, simple and immediate remedies for this situation are not readily apparent. Childhood violence is a complicated and complex social problem, about which we know a great deal from many perspectives. It is doubtful that even the most ambitious researcher or practitioner could incorporate all the knowledge contained in all of these fields and bring it to bear on a single research study or clinical patient. As noted above, our knowledge of child violence has exploded over the past 20 years. Because we know so much about the relationships between different forms of violence and different outcomes, it seems there is always an alternative explanation that can be supported with considerable data for nearly any conclusion of any study. It is difficult to think how a researcher could take into account all of the potential relationships contained in Table 6 and design a study that could rule out all the alternative explanations for a result. Critics and reviewers can always point to yet another type of unassessed violence or trauma that may explain a finding, other outcomes that were not evaluated, and moderators and mediators that may actually account for the findings. It probably is unrealistic to think that evaluation protocols can be constructed that assess every important type of violence and trauma, all possible mediators and moderators, and the many potential outcomes. Such a protocol would simply be too long, too complex, and too taxing on participants, particularly children. The ideal, comprehensive study of child violence may never be done. It almost seems like we now know too much to make it possible.

Of course, there is still much to be learned about child violence and its impact. For the most part, we simply have scratched the bivariate surface of this phenomenon. However, continuing to work in our isolated, vertically organized areas of interest or to neglect the tangled and intricate nature of child violence will not be helpful. To do so will only perpetuate the problems we have now. Much more complex thinking and methods will be required for

the next generation of research on child violence and its outcomes. And sophisticated approaches will require collaboration, cooperation, and partnership across the current professional boundaries. In a highly competitive research world of limited resources, such collaboration is not easy. Steps should be taken to break down the barriers that divide us and increase the information flow between the various existing fields. It is unlikely that this will happen spontaneously given the current structure of the fields. It will require an organized effort by leaders in the fields, professional organizations, and probably most important, funding agencies. Until cross-field collaboration is required for funding, it will take place only sporadically. In the meantime, some steps can be taken to improve the situation.

First, although not every form of childhood violence can be assessed in every study, we can do a much better job. More recent research has demonstrated that it is feasible to efficiently and validly assess for a history of several types of violence without unduly taxing research participants (Boney-McCoy & Finkelhor, 1995; Kilpatrick et al., 2000; Resnick et al., 1993; Saunders et al., 2002; Tjaden & Thoennes, 1998). Studies using more comprehensive approaches to victimization assessment are becoming more common and demanded as the standard in the field. The assessment technology exists to do a reasonable job of this type of assessment. This trend needs to continue and be expanded. Research on victimization screening methods and the epidemiological overlap of different forms of violence and outcomes needs to be expanded.

Comprehensive assessment of many potential outcomes is more difficult. Even the most efficient means of assessing for psychiatric diagnoses is time consuming and fatiguing for research participants. However, some diagnostic technology for efficiently detecting some of the most common problems has been developed (Kilpatrick & Saunders, 1999; Saunders et al., 2002; Tjaden & Thoennes, 1998), as has trauma specific standardized measures (Briere, 1995, 1996). They should be used comprehensively. Nevertheless, continued measurement work is needed to develop psychometrically sound measures of common problems that can be administered in an efficient manner. Hamby and Finkelhor (2000) have called for the development of more sophisticated, more comprehensive, and more efficient instrumentation. Much is known about efficient ways of doing victimization screening and assessing common outcomes. Knowledge is developing about what types of violence and what characteristics of violent incidents are associated with what types of outcomes, even controlling for a variety of other risk factors and experiences. This information should be used to develop better measures.

The sheer amount of descriptive information available about childhood violence means that reasonable hypotheses for both simple relationships and more complex models abound. Yet, with some notable exceptions, strict hypothesis and model testing does not seem to be the norm in field. This situation suggests that theory needs to take a more prominent role in child violence research. Much research has been primarily phenomonological and empirical in nature, with theory occupying less of a role. Sound theory is needed to guide the important choices to be made about what to measure and what relationships to test, because everything we know cannot be measured and every possible relationship cannot be tested. Theory needs to be developed that spans different types of violence and outcome and that can guide parsimonious hypothesis testing. Many forms of childhood violence likely have common characteristics that lead to similar outcomes. Specific violence types (e.g., sexual versus physical abuse, experiencing versus witnessing violence) may matter less than characteristics that span violence types. For example, Saunders and Williams (2000) found that among children in families reported for family violence, whether or not they experienced nonspecific fear, fear of injury, or fear of death during violent episodes was an important predictor of PTSD regardless of the type of violence experienced or witnessed. Theory should be developed that looks for common themes, threads, and characteristics across violence types that may be the most powerful predictor variables of certain outcomes. More comprehensive "meta" models can be developed that are less dependent on the particular type of violence experienced and that can be applied to many violent situations. Such theory development would result in conceptual frameworks that can be realistically tested.

Creative designs will have to be used to carry out more comprehensive inquiries. Not every study can use the very large community or clinical samples required to get sufficient cell sizes for less common problems. Quasi-experimental designs, purposeful sampling for heterogeneity (Cook & Campbell, 1979), oversampling of high-risk groups, and other methods will have to be used to develop the diverse samples required for more comprehensive research. Although the limitations of these types of approaches are known, their results can still contribute significantly to the field. Longitudinal designs are critical to understanding the timing of onset of particular experiences, moderators, mediators, and outcomes. However, they are costly both in dollars and time. Results take years to produce. Rolling cohort designs may take less time and produce good knowledge particularly if their know limitations of dependency can be overcome statistically. All studies

have weaknesses and limitations that must be acknowledged and accounted for by the field. Use of creative sampling and design approaches actually makes the process of understanding the limitations somewhat easier, while still producing valuable information.

Another critical need is for more sophisticated and creative data analytic techniques that are guided by theory and well-constructed hypotheses. Traditional approaches that rely on often poorly conceived or even computer-generated variance partition models will not result in the level of specificity that is now required by the field. Also, results obtained in such a manner are frequently not replicated when the models become even minimally complex. Comprehensive and sound theory that produces specific hypotheses, tested using creative designs and creative data analytic strategies, are required for a phenomenon as complex as child violence.

Perhaps, the most important challenge facing the field of child violence is how to "de-Balkanize" the professionals involved. Mechanisms need to be developed so that those involved in the various fields associated with child violence more readily share their knowledge, expertise, theories, and methods with each other and not simply with like-minded colleagues. This point is the most difficult challenge we face, because it is not something that comes easily. We now have a series of parallel literatures, parallel professional activities, and parallel fields, oftentimes competing for scarce resources. At times, we are like toddlers, engaged in parallel play, not acknowledging each other, and rarely sharing. One answer may be promoting interdisciplinary research teams that bring together researchers from different disciplines with their own perspectives and expertise all working on a project. Interdisciplinary treatment teams are common in child abuse practice. Perhaps, the concept needs to be more widely applied in research settings as well. As noted above, this type of collaboration is unlikely to happen under the current structures and funding streams. It will require purposeful action by leaders in the field.

The data presented above imply that the many fields involved in child violence may be studying the same 20% of children who have multiple problems, and drawing their own isolated conclusions. Although some crossover of fields occurs occasionally, this is hardly the norm. Breaking down the barriers between all of the fields in Table 6, or at least getting them to play together even a bit, will be difficult. However, we have reached the point of development where significant sharing, cooperation, and even colleagueship between these professional fields are necessary if our understanding of child violence is to continue to grow in a meaningful way. If the boundaries remain solid, science and, most importantly, children exposed to violence ultimately will suffer.

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