The Victimization of Children: Recommendations for Assessment and Instrument Development

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ABSTRACT

The study and treatment of juvenile victimization would greatly benefit from instruments that are comprehensive, methodologically sound, and relevant to settings such as health and mental health clinics, criminal justice institutions, and child protection agencies. Toward these ends, this article makes 20 recommendations. Among other things, instruments should (1) allow victimization to be mapped onto conventional crime and child protection system categories; (2) adequately assess victimization by family and other nonstranger perpetrators; (3) ask about crimes specific to childhood, such as nonviolent sexual offenses and neglect; (4) allow for comparisons between juvenile and adult victimizations; (5) collect self-report data with children as young as age 7 years; (6) use simple, behaviorally specific language; (7) protect privacy during data collection; (8) attend to potential ethnic, class, and gender differences; and (9) prepare procedures to assist children in danger. Comprehensive and well-researched instrumentation could greatly advance the study and treatment of juvenile victimization. *J. Am. Acad. Child Adolesc. Psychiatry*, 2000, 39(7):829–840. **Key Words**: juvenile victimization, assessment, measurement.

Interest in juvenile victimization continues to expand, spurred on by evidence about its frequency (Boulton and Underwood, 1992; Richters and Martinez, 1993; Sheehan et al., 1997; Straus et al., 1998), variety (Crick and Grotpeter, 1995; Finkelhor and Dzuiba-Leatherman, 1994; Hill and Jones, 1997), and association with other adversities of childhood and adulthood (Berman et al., 1996; Boney-McCoy and Finkelhor, 1995; Gorman-Smith and Tolan, 1998; Kochenderfer and Ladd, 1996; Martin et al., 1995; Weist et al., in press; Whitbeck et al., 1997). This interest in turn has generated an increasing number of measures of juvenile victimization, developed for a variety of specific research, clinical, and public policy needs. These instruments have represented major conceptual and methodological advances on many fronts, for example, establishing that children are exposed to a panoply of potentially traumatizing violent interactions, that

caretakers will self-report abusive acts toward children (Straus et al., 1998), and that juveniles can be interviewed about sexual victimization.

At the same time, the multiplication of instruments has revealed a variety of conceptual and methodological issues that are not being discussed or debated in any formal way. Among the major problems are fragmentation of focus, disciplinary isolation, separation of research from practice, developmental discontinuities, and methodological inconsistencies.

Fragmentation of Focus. Questionnaires about one form of victimization (e.g., peer violence) do not systematically inquire about other forms (e.g., child maltreatment). Not only does this underestimate the scope of the problem, but it fails to inform about the overlapping nature of forms of victimization, the developmental and causal pathways among them, and the existence of summative or interactive effects or the possibility that outcomes from one form explain the outcomes of another (e.g., parental maltreatment may account for depression among victims of date rape).

Disciplinary Isolation. Professionals in this field have come from backgrounds in child maltreatment, traumatic stress, criminology, and others, but the conceptual and methodological wisdom and needs of these fields have not been sufficiently synthesized. In particular, criminology, which has an extensive body of literature on victimization

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and the measurement of juvenile deviance, has not been brought together with traditions rooted in psychology.

Separation of Research From Practice. Many instruments do not gather information that maps onto real-world categories that define practice and public policy. Results are not organized in ways that allow the articulation of concepts such as aggravated assault as defined by the criminal justice system or physical abuse as defined by the child welfare system, even though these concepts organize much of the institutional activity around victimization.

Developmental Discontinuities. Existing measurement strategies have arrived at only patchwork solutions to the need to compare information about victimization across developmental stages, but at the same time accommodate to the changing types of victimization over the lifespan.

Methodological Inconsistencies. In part because the methodological approaches relevant to this endeavor are relatively recent and come from diverse disciplines, the design of instruments has not always benefited from the most current methodological findings. Thus instruments from traumatic events fields have not drawn from research on victimization recall in criminology, and instruments in criminology have not drawn on insights about developmental capacities of children.

This article identifies some of these conceptual and methodological issues, to promote more synthesis among the efforts under way on the topic of juvenile victimization. It draws on literature from a diversity of fields and a variety of victimization measurement efforts, melded into 20 recommendations that can inform the development of current and future measures. These 20 recommendations are provided below.

Map Child Victimization Onto Conventional Crime Categories

Questionnaires about juvenile victimization should allow the mapping of child victimization onto the same conventional offense categories that are used in studies with adults, including assault, aggravated assault, sexual assault (penetrative, contact, and noncontact), robbery, theft, and vandalism. The lack of correspondence in most measures limits our ability to aggregate child and adult data and to make child—adult comparisons on matters such as relative rates of victimization, injury, and property damages. Numerous studies of juvenile exposure to violence have established the vulnerability of children to victimization and its effects (Boney-McCoy and Finkelhor, 1995; Crick and Grotpeter, 1995; Finkelhor and Dzuiba-Leatherman, 1994; Gorman-Smith and Tolan, 1998;

Grych et al., 1992; Kochenderfer and Ladd, 1996; Richters and Martinez, 1993; Straus et al., 1998; Whitbeck et al., 1997). Few studies, however, have collected data in a way that allows victimization reports to be classified into conventional crime categories such as aggravated assault. This is unfortunate because it makes much social science research appear less relevant to criminal justice authorities, to whom such categories are important.

The unsystematic categorization of victimization also makes comparisons across studies more problematic and, in particular, makes it difficult to compare rates of juvenile victimization with adult rates as identified by important national surveys such as the National Crime Victimization Survey (NCVS) (U.S. Department of Justice, 1994). Standardizing victimization categories has the potential to advance the generalizability and applicability of research. For example, in mental health research, measures have increasingly moved away from global indicators of distress toward operationalizing categories from DSM-IV (American Psychiatric Association, 1994), which, despite its shortcomings, has nonetheless resulted in the ability to compare across studies and apply results to specific patient populations. For victimizations, organizing incidents according to conventional crime categories will require information on the age of and relationship to the perpetrator and on the presence of injury.

Include Nonviolent Victimization

Questionnaires about juvenile victimization should include conventional nonviolent victimizations such as larceny, in addition to violent offenses. Most victimization studies to date have focused on violent interpersonal victimizations such as assault and child abuse. But property crimes, such as theft and vandalism, are also important categories of victimization. Theft, in fact, is the most commonly reported crime by both adults and adolescents in crime surveys (data on younger children are not available) (Kindermann et al., 1997; Mawby, 1979; Wells and Rankin, 1995). Research on the sequelae of nonviolent victimizations indicates that while postvictimization symptoms are less severe for property crimes than for violent offenses, they do occur and are otherwise similar to the stress reported after assaultive victimization (Wirtz and Harrell, 1987).

Map Data Onto Child Protection System Offense Categories

Questionnaires should gather information that allows reports to be mapped onto offenses monitored by child

protection systems. Child protection agencies are another enormously important societal institution and a major source of data on juvenile victimization, and the offenses they track hold tremendous policy interest. It would be of great benefit if juvenile victimization findings could relate to the categories around which child protection agency work is organized. Although studies that rely on substantiated child protection cases use these categories (e.g., Kaufman et al., 1994), many self-report measures of victimization present barriers to such categorization. The NCVS measures only violent sex offenses, which excludes a large portion of what is considered sexual abuse by the child protection system. In addition, many self-report measures cannot distinguish caretaker perpetrators, those of primary interest to child protection agencies, from other perpetrators. Many measures ask children about assaults that occur in the home (e.g., Richters and Martinez, 1993), but collect no perpetrator or injury information that could be used to identify which subset of home assaults would meet child protection definitions of physical abuse by caregivers, nor whether assaults in settings less associated with family violence (such as schools) might also include some instances of child abuse.

Broaden Context Beyond "Crime"

The context for questioning in juvenile victimization questionnaires should be broader than the topic of "crime" alone. There is considerable evidence that questionnaires about "crime" bias reporting toward nonsexual assaults, stranger perpetrators, and incidents that were reported to the police (Eigenberg, 1990; Kindermann et al., 1997; Koss, 1992, 1996; Lynch, 1996; Osofsky, 1995; Percy and Mayhew, 1997; Wells and Rankin, 1995). Questionnaires that do not focus exclusively on crime obtain generally higher rates of victimization, including many kinds of serious episodes that victims do not conceptualize as crime. Wells and Rankin (1995) showed that surveys which embed crime victimization questions among noncrime items on drug use and other behaviors and attitudes produce juvenile victimization rates that are 2 to 4 times higher than that obtained by the original NCVS.

It is nonetheless a valid concern that very broad contexts may result in the reporting of trivial events as crimes (Levine, 1976). One analysis of adolescents' victimization narratives did indicate that some reports seemed fairly minor in nature (Garofalo et al., 1987), which a crime context may help to screen out. Despite these concerns, however, it seems preferable to cast a wide net and elimi-

nate incidents that do not meet some severity threshold in the data analyses rather than make the focus too narrow and not know what incidents have been omitted by respondents.

The redesigned NCVS, in an attempt to deal with the crime context problem, managed to broaden reporting beyond stereotypical crime by adding greatly extended sets of cues to the setting in which a crime might occur, the type of assault, the type of weapon, and the type of property loss. Contrary to some expectations, the subsequent increases in reporting were not limited to minor incidents. An analysis of all respondents found that while reports of simple assault increased 77%, reports of aggravated assault increased 24%, and while reports of thefts of less than \$50 increased 47%, reports of thefts greater than \$250 increased 18% (Taylor and Rand, 1995). The percentage increases for more severe crimes were less than for minor ones but still high enough to have major practical and policy implications.

Although much of the consideration of context has focused on the wording of items, it should be noted that there are many contextual factors. These include the preamble to the victimization survey, the sequence of questions within the victimization instrument, the other variables that are assessed, and the placement of the victimization questions in relation to other items and instruments. There is no standard prescription for the best context for victimization research, but all of these factors should be considered in the design of any study.

Adequately Assess Victimization by Family and Other Nonstranger Perpetrators

Special efforts need to be made to adequately assess victimization by family and other nonstranger perpetrators. It is clear from past research that nonstranger crime will be underreported unless respondents are specifically asked about family and nonstranger perpetrators. Simply directing respondents' attention to offenses that may occur in "the home" has not proven adequate. For example, one study obtained the unlikely result of no violence in the home setting although the reported rates of community and school violence were high (Richters and Martinez, 1993). The NCVS was revised with this problem in mind, and enhanced cues about known perpetrators did substantially increase reporting of nonstranger violence (Kindermann et al., 1997; U.S. Department of Justice, 1994). Research with adults has found minimal correlations between victimization reports and social

desirability (Meston et al., 1999; Sugarman and Hotaling, 1997), suggesting that adequate assessment may depend primarily on the presence of appropriate cues about known perpetrators.

Include Offenses That Are Specific to Children's Dependency Status

Forms of victimization unique to childhood, such as nonviolent sexual offenses and neglect, should be included in juvenile victimization surveys. Many victimization measures, including the NCVS and a wide variety of community violence measures, do not ask any questions about these offenses. Nonviolent sexual offenses, including child molestation, statutory rape, and other forms of sexual misconduct, comprise about 10% of all juvenile sex offenses which are reported to the police (Finkelhor and Ormrod, 1999). This suggests that more effort needs to be made to document their occurrence in the general population. Questions that ask simply about force, assault, or rape will not fully capture such episodes. The presence of childhood-specific offenses complicates the comparison of juvenile and adult victimizations, but one possibility is to report victimizations in a way that such status crimes are excluded for purposes of adult-juvenile comparison.

Establish Methods to Compare Juvenile and Adult Victimizations

Protocols need to be established for aggregating and comparing juvenile and adult victimizations in flexible ways that deal with different normative and policy perspectives about victimization in these 2 populations. Other issues beside incorporating status victimizations exist in thinking about how to aggregate and compare adult and juvenile victimizations. For adults, it has become generally accepted that any physical attack, even between 2 friends or between a husband and wife, qualifies as a criminal assault, even if not reported to police. This is not true for acts against children. Many assaults that occur among peers or siblings, especially of elementary school age or younger, are rarely thought of as meeting the criteria for criminal assault, even though equivalent acts among adults would be seen as such. The taking of property by children is also rarely considered as robbery or theft, especially if the items are not of substantial value. Physical assaults by parents against children are considered more as "abuse" than crime. The controlling normative features for this view are both fictitious (e.g., that such acts are less victimizing to child than adult victims—not true) and real (e.g., that

criminal justice agencies are not the established interventions for these wrongs—true).

Nonetheless, the arguments for including such acts in victimization surveys are numerous. First, if only clearcut, socially defined "crimes" were asked about in victimization surveys, then other normatively ambiguous acts, even involving adults, such as spousal violence, would also be excluded. Second, using a different threshold of behavioral acts to define crimes against children would make it impossible to aggregate or compare adult and juvenile victimizations. Third, because norms about criminality vary with the age of children and gradations of assault severity and also seem to be undergoing a historical shift, it would be hard to craft with current knowledge a single, all-purpose threshold. Finally, if the issues of interest concern the psychological and social impact of assaultive behavior, it seems important to gather information on juvenile "crime equivalents."

The argument against the inclusion of such acts is also important. To the degree to which victimization surveys are used as measures of crime or unreported crime, the inclusion of such acts will inflate figures and possibly reduce the credibility of estimates that aggregate responses of adults and children. One possible solution is to use roughly parallel definitions of victimizing acts for adults and juveniles for purposes of data collection but to report data in ways that allow analysts and readers to exclude incidents that seem clearly outside the bounds of conventional crime definitions. Thus the scope of interest in juvenile victimization questionnaires would be any offensive act that would be included in studies of adult crime victimization (i.e., any assault), but in aggregating data with adults or calculating "crime victimization" rates, it will be useful to operationalize a subset of "criminal justice relevant" crimes, acts that are currently handled by police and prosecutors (thus excluding peer victimizations of a noninjurious sort involving younger children). Thus data on noncriminal offenses would be available to serve the needs of professionals who are interested in all forms of aggression and victimization, but there would also be categorization for those who want to focus on acts that meet current normative views about conventional crime standards.

Emphasize Behaviorally Specific Questions Over General Queries

Behavioral checklists, which outline specific behaviors, are preferred over measures that ask about global categories. Questions should ask about being hit or

stabbed instead of about being assaulted or some other general victimization category. Providing specific behaviors increases the consistency across respondents and helps cue respondents to think of relevant incidents (Koss, 1996; Percy and Mayhew, 1997; Resnick et al., 1993; Smith, 1994). Behavioral standardization is the current trend not only for measuring victimization, but for many other constructs, such as DSM diagnostic categories. Behavioral descriptions are preferred over legal terms because legal terminology can raise the reading requirements to college level (e.g., Gylys and McNamara, 1996), which is obviously inappropriate for juvenile samples. Data from adults has shown that few victims, especially of nonstranger assault, label their experiences with emotionally laden terms such as "rape," "battering," or "abuse" (Hamby and Gray-Little, in press; Koss, 1988; Resnick et al., 1993), and using more behavioral descriptions will greatly increase reporting of intimate crimes. For example, only a third of women reporting forced sex on the British Crime Survey responded affirmatively to a followup question asking whether that experience was a rape (Percy and Mayhew, 1997). Although these advantages make behavioral checklists the preferred technique, it should be noted that they miss forms of victimization which are not on the list and thus it is important that behavioral checklists be carefully constructed to include all common forms of the victimization under study (Hamby et al., 1996).

Keep Vocabulary Simple

Vocabulary should be kept simple. Questionnaires need to be written using the simplest vocabulary possible, especially those instruments that will be used with youths, particularly pre-high school age. It is important to note that most reading level formulas use only word and sentence length and do not consider how common each word is in everyday speech. In general, broad categories that refer to a class of acts are less preferable than specific terms (Saywitz and Camparo, 1998). Legal terminology will often be unfamiliar to children (Saywitz et al., 1990; Steward et al., 1993). Hence, concrete visual terms (e.g., hit, gun) are better than abstract legal terms (e.g., abduction, assault, weapon). Be aware that children may say they understand a concept but their actual understanding of that concept may be different from an adult's (Wells and Rankin, 1995). "Private parts" can be recommended as a reference to genitalia for most American children aged 5 and older (Everson and Boat, 1994). Most children will

be able to handle "why," "when," and "how" questions by age 5 or 6 (Steward et al., 1993). Relational terms (e.g., "more," or "less") and other modifiers should be avoided with young children as much as possible. The use of examples can help define a category, although one must be careful not to inadvertently constrain a category through a poor or restricted set of examples.

Use Simple Grammar and Syntax

Questions should use simple grammar and syntax. The use of short sentences, few noun-verb units per utterance, simple past tense, active voice, and familiar contextual cues will enhance reporting of specific information about past events (Saywitz and Camparo, 1998; Steward et al., 1993). For example, simple past tense such as "Did somebody steal your bike?" is preferable to past perfect such as "Has somebody stolen your bike?" Simple past tense is easier to understand because the main verb (in the example, "steal") is in the same form as the present tense and the common auxiliary verb ("do") is in simple past form ("did"). The past participle "stolen" is avoided.

A recent study found that many 9- to 11-year-old children had difficulty with long questions on the Diagnostic Interview Schedule for Children (DISC). Comprehension of questions with 1 to 9 words was roughly 80%, of questions with 10 to 19 words only about 60%, and of questions with 20 or more words only about 40% (Breton et al., 1995). While it is likely that the DISC's use of complicated time concepts and vocabulary also contributed to low comprehension, Breton and colleagues' data still suggest that sentences should be kept as brief as possible.

Collect Self-Report Data With Children Down to Age 7

Self-report should be used when possible with children down to age 7, because a high percentage of victimizations will occur out of sight of caregivers or other potential proxies. Even parents do not know about all of the experiences of their children, especially once those children reach school age and spend significant amounts of time outside the home (Osofsky, 1995). Existing data indicate caregivers report that their children have been exposed to less community and school violence than their children report themselves (Hill and Jones, 1997; Reiss, 1982; Richters and Martinez, 1993). Furthermore, evidence is accumulating that school-age children can provide good self-report. Children as young as ages 6 and 7 have been interviewed about their exposure to community violence in a number of studies (Raviv and Raviv, 1997; Richters

and Martinez, 1993; Richters et al., 1990; Sheehan et al., 1997; Zima et al., 1997). The Violence Exposure Scale for Children (VEX) (Fox and Leavitt, 1995) has been used with children as young as 3½ years (A. Shahinfar, unpublished manuscript). Peer victimization researchers have interviewed children as young as age 5 (Kochenderfer and Ladd, 1996; Ladd et al., 1997). Grych (1998) has included 7-year-olds in his research on witnessing domestic violence. Young children down to age 8 have been interviewed about their experience of child abuse (Jouriles and Norwood, 1995). Data obtained from young samples have generally shown internal consistency, test-retest reliability, and construct validity comparable with those obtained with older children (Kochenderfer and Ladd, 1996; Ladd et al., 1997; Raviv and Raviv, 1997; Richters and Martinez, 1993; Sheehan et al., 1997). Experimental research on children's testimonial abilities, which was designed to evaluate very young children's abilities to give forensic interviews in sexual abuse cases, has shown that children are more than 90% accurate in their self-reports down to age 4, especially when inappropriately suggestive interviewing techniques are avoided (Carter et al., 1996; Peterson and Bell, 1996; Steward et al., 1993). Preschool-age children are the most suggestible (Bruck et al., 1998). Taken together, these studies provide good indication that useful information can be obtained from the self-report of children down to

Use Caregiver Reports in Some Circumstances

Caregiver proxy reports should be used for: (1) very young children, (2) reports of service utilization, and (3) reports of family violence. It is fairly self-evident that very young children, especially those with limited language skills, will not be able to provide self-report of their own experiences. Furthermore, preschool-age children often lack the attentional skills necessary to complete an interview. These limitations should not lead to this group's being omitted from study, however, as there is evidence that even very young children experience victimization (Taylor et al., 1994). Caregivers will likely have fairly complete information on preschoolers' experiences as young children spend a high percentage of time with caregivers and young children disclose more to their parents than do older children.

Caregivers are also likely to have more accurate information than most juveniles about service utilization, including what criminal justice, medical, or mental health agencies became involved in dealing with the victim-

ization or its aftermath. They may also be able to provide more accurate estimates of costs. It seems unlikely that large numbers of children are making police reports, seeing mental health providers, or receiving medical care without the knowledge of their parents. Even adolescents may lack sufficient familiarity with these institutions to describe completely their contacts with them. For example, many children do not appear to understand clearly the difference between a "doctor" who is a psychologist versus a physician. Parents may also have important information about children's symptomatic behavior that children may be unlikely or possibly even unable, for example in cases of dissociation, to report themselves.

Another area where caregiver report may be superior is family violence. Access is much less of a problem for caregiver reports of family violence, and data on caregiver reports of child abuse and witnessing domestic violence suggest that caregivers may actually report more family violence than children. Research has found that mothers report more domestic violence than children report (e.g., Grych, 1998). Jouriles and Norwood (1995) found, in a shelter sample, that mothers' reports of parental aggression toward sons were not significantly different from sons' reports and that mothers' reports of their own aggression toward their daughters were actually higher than daughters' reports. Kruttschnitt and Dornfeld (1992) similarly found that mothers reported more mother-to-child aggression than did their children in both clinical and community samples. It should be noted, however, that some of these samples were composed in whole or part of self-identified battered women (Jouriles and Norwood, 1995; Kruttschnitt and Dornfeld, 1992), and it is likely that prior labeling contributed to mothers' willingness to report. While these studies have not examined the reasons behind discrepant reports, it seems possible that children may be reluctant to provide negative information about their parents or are perhaps uncertain about their own culpability for child abuse. Whatever the reason, it seems that caregivers have important information to provide about children's exposure to family violence. Of course, children's reports of family violence are important and may be most useful for some research purposes. In the ideal situation, it is desirable to obtain both parent and child report for all forms of victimization.

Protect Privacy During Data Collection

Children and adolescents should be interviewed or allowed to complete questionnaires in conditions that are

as private as possible. The possibility that other family members or peers may become aware of a child's responses is probably a major source of underreporting. Providing privacy for interviews on sensitive topics may seem like an obvious consideration, but it is nonetheless not always provided. The NCVS, one of the most important sources of victimization data, has no procedural mechanisms in place to ensure that others in the household cannot hear the interview (Finkelhor, 1998). Many school-based studies use group administration of surveys (e.g., Crick, 1995; Graham and Juvonen, 1998; Perry et al., 1988). Unfortunately, no formal studies have compared interviews done privately with interviews not completed in private, or compared individual to group administration. Existing methodological data, however, suggest there is some increase in reporting on sensitive topics with more private methods of data collection (Sykes and Collins, 1988; Turner et al., 1992). Privacy is also an ethical consideration. Privacy protects youths not only from the possible consequences of perpetrators becoming aware of disclosure, but also from the potential stigma of peers or family members becoming aware of the victimization. Studies have shown that some peers and family members respond negatively to victimization disclosures and that such negative reactions can have long-lasting adverse effects on victims (Roesler, 1994; Ullman, 1996). Researchers should take adequate precautions to ensure against accidental disclosure due to project participation.

Use Audio-CASI Technology

Audio-enhanced, computer-assisted self-interviewing (audio-CASI) should be pursued as a promising new technology. Audio-CASI promises to improve the quality of self-report of socially sensitive issues (Bloom, 1998). Uses with adult respondents suggest audio-CASI increases respondents' sense of privacy and is particularly advantageous for the study of sensitive issues, including sexual victimization, abortion, and drug use (Bloom, 1998; Fu et al., 1998; O'Reilly et al., 1994; Percy and Mayhew, 1997). A recent study of adolescent males compared the responses of participants who heard the most sensitive portion of an interview over headphones and typed their responses into a laptop computer with the responses of those who answered the same questions using a penciland-paper self-administered questionnaire (Turner et al., 1998). Turner and colleagues found increased reporting for a variety of sensitive behaviors, including male-male sexual behavior, substance use, and both the perpetration and victimization of threatening and violent behavior. It is interesting that increased reporting was not found for male-female sexual behaviors, which are probably less sensitive. Findings to date suggest that the benefits arise more from providing increased privacy than from decreasing literacy requirements (Turner et al., 1998).

Unfortunately, audio-CASI is expensive and no studies have examined its use with younger children. Other means of collecting data include face-to-face interviews, telephone interviews, and self-administered questionnaires. Probably the majority of juvenile victimization studies have used face-to-face interviews (Berman et al., 1996; Cooley-Quille, 1998; Gorman-Smith and Tolan, 1998; Hill et al., 1996; Kipke et al., 1997; Kochenderfer and Ladd, 1996; Ladd et al., 1997; Martin et al., 1995; Selner-O'Hagan et al., 1998; Shahinfar et al., 1998), but telephone interviews have been used with children down to age 10 (Finkelhor, 1998). Self-administered questionnaires are sometimes used to collect victimization data in school and clinic settings (Gladstein et al., 1992; Hastings and Kelley, 1997), often in group administrations (Grotpeter and Crick, 1996; O'Keefe, 1997). When literacy is a question because of the age or disadvantaged socioeconomic status of participants, group administrations often involve a researcher reading the questionnaire to the group while the children record their own responses (e.g., Cooley et al., 1995; Crick and Grotperer, 1995; DuRant et al., 1995; Graham and Juvonen, 1998). Children as young as first graders have been surveyed in this latter manner (Richters and Martinez, 1993).

Given the personal nature of questions on victimization, it is especially important to consider the effects of assessment mode on reporting, but few data are available. One study found that a telephone interview that allowed adolescents to respond using a touch-tone pad (versus verbalizing a response) achieved similar disclosure rates about sexual and drug behaviors as a face-to-face interview (Boekeloo et al., 1998). Another study of adolescents found that private, self-administered questionnaires yielded more drug use reports than face-to-face interviews (Turner et al., 1992). A comparison of telephone versus face-to-face interviews found few effects for sensitive questions, but observed differences generally favored telephone interviews (Sykes and Collins, 1988). There is no conclusive evidence suggesting a major advantage for any one method, but more research is needed on the effects of administration format on youths.

Collect Data for 1-Year Incident Periods

One-year incident rates should be collected (versus lifetime prevalence) to facilitate age comparisons. Victimization rates increase with exposure time. This fact particularly affects lifetime rates for juvenile populations. For children, even a 1- or 2-year difference in age comprises a proportionately long differential exposure to the risk of victimization. Some instruments, such as the VEX (Fox and Leavitt, 1995), do not specify a referent period. Some authors have concluded that the older children in their samples are exposed to more violence (Raviv and Raviv, 1997; Zima et al., 1997), but it cannot be determined whether this is recent exposure or just the cumulative exposure due to having lived longer. Standardized referents for all participants are required to determine whether children's lives become more violent as they age. Research indicates that shorter referent periods (e.g., 6 months versus 1 year) produce the most accurate results (Czaja et al., 1994; U.S. Department of Justice, 1974). One-year referent periods are also very commonly used and will decrease the sample size required to collect adequate numbers of rare forms of victimization.

Attend to Potential Ethnic, Class, and Gender Differences in Self-Report

Questionnaire design needs to attend to potential ethnic, class, and gender differences in self-report and in responses to various measurement strategies. Research on interviewing has in some cases shown the value of matching interviewer and respondent characteristics or taking steps to enhance perceptions of confidentiality with some groups. Although the value of these steps has not necessarily been demonstrated with children, consideration needs to be given to the possible relevance to this context as well.

Ethnic, class, gender, and other group differences have been examined in a number of studies of juvenile victimization (e.g., Kipke et al., 1997; Selner-O'Hagan et al., 1998; Wells and Rankin, 1995). Many studies have drawn samples from high-crime areas that have a high percentage of minorities and individuals with lower socioeconomic status (Berman et al., 1996; Cooley-Quille, 1998; DuRant et al., 1995; Gorman-Smith and Tolan, 1998; Hastings and Kelley, 1997; Hill et al., 1996; O'Keefe, 1997; Richters and Martinez, 1993; Sheehan et al., 1997). Very few studies, however, have actually examined whether victimization measures are equally valid across diverse groups. The redesigned NCVS produced greater increases

in reporting for whites than for blacks and for persons earning more than \$15,000 per year than those earning less than that (Kindermann et al., 1997), suggesting that group differences in responses to survey methodology may affect rates. Studies on other types of sensitive behaviors, such as racial attitudes, sexual activity, and abortion, have sometimes found that individuals with less education and persons of color disclose less, report more inconsistently, or say "no opinion" more (Fu et al., 1998; Jones and Forrest, 1992; Lauritsen and Swicegood, 1997; Mott, 1985; Pickery and Loosveldt, 1998). One older study found that men and black respondents reported more suspicions than women and white respondents about research participation, such as what the true risks were and whether confidentiality would really be protected (Singer, 1984). In this same study, women objected more than men to the intrusiveness of some sensitive questions. Analyses of the characteristics of juvenile selfreport have found mixed results with regard to such group differences (Alexander et al., 1993; Breton et al., 1995; Newcomer and Udry, 1988; Rodgers et al., 1982; Saywitz, 1996). Basic questions remain about whether instruments are equally valid with different subgroups of children. Are there ethnic, class, or gender differences in perceptions of what constitutes a "victimization"? Are the language of questions and organization of response categories too tailored toward white, middle class, or male modes of communication? Are there ethnic, class, or gender differences in willingness to report given the social context of the interview? Do members of oppressed minority groups have a greater tendency to believe that risk is involved in reporting crime to researchers? More empirical attention to these issues is needed.

Use Events in Respondents' Lives to Help Bound Recall

Interviewers should identify events in the respondents' lives at the beginning of the time period to help bound the recall. Otherwise, forward telescoping occurs, which is the tendency to include events in the 6-month or 1-year period the interviewer is asking about that actually occurred longer ago. The most common technique to help cue respondents to stick to the time frame under question is the use of bounding, or helping to identify events that anchor the beginning of the referent period. Bounding appears to improve the accuracy of date reporting, and hence decrease forward telescoping, but may not improve the rates at which victimizations are disclosed (Czaja et al., 1994). Evidence for negative effects of

bounding is rare, however, suggesting that there is no reason not to use the technique. To help young people with the developmentally difficult task of time-bounding, it may help to review other events that occurred during the reference period in a forward direction to help familiarize children with the time frame (for example, it started near Thanksgiving, and included what happened during Christmas and last winter). This is because young children can discuss forward time movement more easily than backward time movement (Kennedy, 1994).

Keep Time and Number Concepts Simple

Time and number concepts should be kept as simple as possible in questions and response categories. No more than one time component should be introduced in any question. It is not yet known which response categories are best for use with children, but it seems clear that references to frequencies and time periods need to be simple (Breton et al., 1995). Categories such as "a few times," "lots of times," or "often" may vary in interpretation from respondent to respondent and hence are problematic (Breton et al., 1995; Margolin and John, 1997). Unfortunately, requiring youths to provide the precise number of victimization incidents may be too demanding. One fairly simple approach is to ask children whether something happened 1 time, 2 times, 3 times, or 4 or more times. This technique is often appropriate, except in cases in which many participants have experienced numerous victimizations.

It is important to ask about only one time concept at a time and to use only a single time category (day, month, year) in a single question. A recent study of a mental health diagnostic interview (Breton et al., 1995) found that many questions included multiple time concepts (such as both duration and frequency) and multiple time categories (e.g., choices ranging from "4 to 7 days a week" to "less than once a month"). These complexities appeared to interfere with comprehension for a majority of 9- to 11-year-old interviewees. If it is important to identify the average frequency of occurrence, it would be preferable to use the same time frame in each category, such as "less than once month," "1 or 2 times a month," "3 to 5 times a month," or "5 or more times a month." This is more cognitively challenging than simply describing frequencies, however.

Longitudinal studies of the self-report for a variety of sensitive behaviors, such as drug use and sexual experiences, generally find that self-report is fairly accurate. One study found that reports of whether an incident occurred were more reliable than reports about the

frequency of occurrence (Alexander et al., 1993), but others have found no such differences (Simon et al., 1996).

Offer Young Participants Practice Items

Younger interviewees should be given a brief practice interview on some nonsensitive subject to clarify the question-and-answer procedure, instruct in how to search memory, illustrate time bounds, and give respondents a chance to practice saying "no," "I don't know," "I don't understand," and providing longer explanatory responses. Research on forensic interviewing techniques has shown the benefits of providing children an opportunity to get adjusted to the interview situation and become familiar with the format of the interview (Steward et al., 1993). Demonstration items are also a standard part of many cognitive and other clinical assessments (Sattler, 1982). Some existing victimization instruments, such as the VEX (Fox and Leavitt, 1995), already provide practice items on topics such as eating ice cream to make sure that the child understands the response format. We recommend that juvenile victimization measures adopt some form of practice when they will be used with preadolescents.

Prepare to Assist Children in Danger

Procedures should be in place for providing assistance, providing referral, and potentially reporting if children are in danger, but procedures may vary according to the context of the study. There is a consensus that researchers have some ethical obligation to assist children whose endangerment is revealed in their studies, but the form this assistance should take is much debated.

A large part of the debate has revolved around whether and how researchers need to comply with child abuse reporting laws. Some scholars believe that the promise of confidentiality is the most important part of the researcher-participant relationship and that promise should not be breached on any account (Bradley and Lindsay, 1987; Melton, 1990). Researchers have claimed exemption from reporting obligations using Federal Certificates of Confidentiality, although this use has not been tested in court (Putnam et al., 1996).

Reporting suspected maltreatment from research studies to child protection authorities is also complicated because of legal uncertainties and institutional limitations. State statutes vary tremendously in language and are subject to interpretation, for example, on the question of whether they apply to researchers (Sieber, 1994; Socolar et al., 1995). Research instruments, while sufficient to

identify group differences, often do not possess sufficient validity to diagnose individual endangerment, and it is seldom clear what responses on many instruments would require a report (Fisher, 1994). Laws also generally do not indicate how the degree of current danger affects reporting requirements. For example, youths in shelters, detention homes, or psychiatric facilities will likely report high rates of past abuse but may not face imminent danger, and reporting requirements in such cases are unclear (Sieber, 1994).

The helpfulness of child protective services reports to child research participants has also been debated (Attkisson et al., 1996; Putnam et al., 1996; Sieber, 1994; Socolar et al., 1995). Reporting may lead to emotional distress, intrusive investigations, parental separation, and stigma. If the child feels that confidentiality was broken, he or she may lose trust in adults. Most seriously, reporting could provoke further abuse as punishment for disclosure. Abuse reporting can also affect research, as limits to confidentiality can affect participant consent, attrition, response validity, and the legal risks to researchers conducting research with children (Socolar et al., 1995).

Despite the limits of reporting, the need to protect a child's welfare is also an important ethical and legal concern that many believe overrides promises of confidentiality. Most recent scholarship takes the position that researchers are not meaningfully different from helping professionals, who are mandated reporters, and hence confidentiality is limited when a child is at risk (Putnam et al., 1996; Sieber, 1994). Also, children will probably not perceive differences between researchers and physicians, counselors, or teachers from whom they might seek help (Fisher, 1994; Sieber, 1994). A study of adolescents' views indicated that a majority of 7th, 9th, and 11th graders favored breaching confidentiality when child maltreatment is discovered (Fisher et al., 1996). In this study, reporting child maltreatment was perceived more favorably than reporting a variety of other risks. These adolescents' views are in line with most current thinking that attempting to protect a child is an important ethical priority. A National Research Council panel has called for research on the effects of abuse reports by researchers on both participants and research programs (National Research Council, 1993), but unfortunately data are lacking.

Whatever attitude researchers have toward reporting, there is more agreement that referral, counseling, or some other assistance should be offered to child participants in danger or distress (Fisher et al., 1996). Sometimes this simply takes the form of providing the numbers of hotlines or agencies, but sometimes it includes the provision of crisis counseling by members of the research group.

While there is no consensus on how to address issues about providing help, there is some consensus about the factors that should be considered when determining the appropriate research policy. These include legal requirements, the degree of imminent danger, whether the abuse has been previously reported, whether others who could intervene already know about the abuse, the recency of the abuse, expectations of participants, and the potential helpfulness of the report to the victims (Attkisson et al., 1996; Hoagwood, 1994; Sieber, 1994; Socolar et al., 1995). Empirical data have the potential to clarify a number of these issues, and there is a pressing need for more systematic investigation into the identification and intervention of abused children in research protocols.

Conclusion

Measurement is an often overlooked but critically important component of the growth and expansion of a field of study. Many areas of study have been greatly expanded by the development of a well-defined, reliable measurement tool. A prominent example is the Child Behavior Checklist (Achenbach and Edelbrock, 1983). This brief, easily administered, behaviorally oriented questionnaire helped facilitate the enormous surge in knowledge on children's psychosocial adjustment. Similarly, the Conflict Tactics Scales (Straus et al., 1996) have had a tremendous influence on the study of partner violence by demonstrating the feasibility of obtaining self-report of private relationship behaviors. The influence of such measures is so pervasive that, for better and worse, their scopes almost define the constructs of interest. Carefully crafted measures of juvenile victimization that cover a comprehensive, welldefined set of victimizations in a systematic fashion have similar potential to stimulate the study of victimization. In particular, they could help the community of professionals who work with children fill in key knowledge gaps about the total rate of juvenile victimization, the overlap among forms of victimization, developmental changes in victimization risk, and the extent to which individual differences in posttraumatic outcomes are due to multiple victimizations. But because of their potential to define the construct of interest, they need to be built with a broad perspective on what the research, policy, methodological, and ethical issues are. We hope that the recommendations presented here will contribute to the development of such measures.

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