
Ethnicity in Child Maltreatment Research: A Replication of Behl et al.'s Content Analysis

Alisa B. Miller

Brandeis University

Theodore Cross

Brandeis University and University of New Hampshire

This study examines the use of ethnicity in 489 empirical research articles published in three major child maltreatment specialty journals from 1999 to 2002. Of the American samples, 12.5% focus on ethnicity, 76.2% report the ethnic composition of participants, and 33.8% use ethnicity of participants in analyses. Ethnicity has a significant effect in 52.3% of articles in which it was used in analyses, suggesting its importance as a variable in a wide range of studies. African Americans and Native Americans are underrepresented in research samples. These findings indicate more attention to ethnicity in American research than Behl, Crouch, May, Valente, and Conyngham's 2001 study might suggest but also highlight the need for continued expansion in focusing on, reporting, and using ethnicity in research.

Keywords: *ethnicity; child maltreatment*

Child maltreatment research must face squarely the role that culture and ethnicity play in risk, response, and recovery. This article investigates how often and with what effect the role of culture and ethnicity are investigated in recent empirical research on child maltreatment. It replicates and enlarges on Behl, Crouch, May, Valente, and Conyngham's (2001) content analysis on the inclusion of ethnicity in child maltreatment research during the course of 20 years. We analyze research from 1999 to 2002 and compare it to the research from 1995 to 1998 analyzed by Behl et al.

Importance of Ethnicity in Child Maltreatment

A number of child maltreatment studies have found important differences between ethnic groups on a disparate array of abuse-related variables, including risk and coping factors, child maltreatment impact, and service response variables. Ethnic groups have differed, for example, on overall parenting styles (Dietz, 2000; Ferrari, 2002), informational knowledge of sexual abuse (Calvert & Munsie-Benson, 1999), patterns of social support for parents (Coohey, 2001), attitudes toward victims of sexual abuse (Rodriguez-Srednicki & Twaite, 1999), and characteristics of abusive acts (Shaw, Lewis, Loeb, Rosado, & Rodriguez, 2002). Two studies have also found differential rates of reporting of abuse by ethnicity (Ards, Chung, & Myers, 1998; Lane, Rubin, Monteith, & Christian, 2002).

There is evidence that victims from different ethnic groups react and respond differently to child maltreatment (Rao, Di Clemente, & Ponton, 1992). Cohen, Deblinger, Mannarino, and Arellano (2001) reviewed empirical evidence addressing racial, ethnic, and cultural differences on symptom formation, treatment-seeking behaviors, treatment preferences, and responses to treatment following child maltreatment. They found evidence suggesting that non-White children may develop more severe symptoms and experience more serious consequences following child abuse. In general, non-White children were also less likely to be referred to and receive mental health treatment (Cohen et al., 2001). Rates of serious sequelae of abuse, such as eating disorders and self-mutilation, have been found to differ by ethnicity

(Anderson, LaPorte, & Crawford, 2000; Turell & Armsworth, 2000).

Number of Minority Victims

Knowledge about ethnicity and child maltreatment becomes particularly salient when we consider how many children are affected and could potentially be affected. Ethnic minorities make up about one quarter of the American population, and this segment is expected to increase to nearly 50% during the next half century (U.S. Census Bureau, 2000). Moreover, ethnic minorities are disproportionately represented in child protective service populations (Children's Bureau, 2004; see also Kenny & McEachern, 2000; Wyatt & Peters, 1986). According to the National Child Abuse and Neglect Data System (NCANDS) for 2002 (Children's Bureau, 2004), Whites constitute only little more than half of children in the national child protective service population (54.2%), followed by African Americans (26.1%), Latinos (11%), Native Americans (1.8%), and Asian Americans (1%). The proportion of ethnic minorities in the foster care population is even higher (65% as of 2001; Children's Bureau, n.d.) These proportions are dramatically higher than their proportion in the overall child population (15.06%; U.S. Census Bureau, n.d.). Because of minority overrepresentation in foster care, the differences in the amount of time White children and children of color are involved with the child protection system is substantial. Given the disproportion of children of color among populations of identified victims, knowledge related to race, culture, and ethnicity has great policy importance.

Paucity of Research Focusing on Ethnicity

Despite increasing diversity and increasing professional attention to ethnic minorities (American Psychological Association, 2002), the amount of attention paid to ethnic groups in research has frequently not matched their representation in the U.S. population (Iwamasa & Smith, 1996; S. Sue, 1999). Several comprehensive reviews of scholarly literature have demonstrated the paucity of social science research that considers ethnicity, race, and culture (Case & Smith, 2000; Graham, 1992; Iwamasa, Sorocco, & Kooce, 2002; Ponterotto, 1988; Santos de Barona, 1993). In child maltreatment research specifically, ethnicity and culture were considered infrequently in child maltreatment research as of the late 1990s (Behl et al., 2001).

There are several conjectures about why ethnically inclusive research is lacking. First, examination of ethnicity in behavioral research has been socially and

politically charged in the United States (Abney, 2002; Scarr, 1988; W. S. Sue, Bingham, Porche-Burke, & Vasquez, 1999). Second, methodological challenges of conducting ethnically inclusive research may contribute to its shortage. S. Sue (1999) suggests that the emphasis in scientific psychology in favor of internal validity over external validity has been a hindrance to the development of a solid ethnic research base. Rigorous attention to internal validity (i.e., to establishing causal effects and ruling out confounding variables) can compromise the applicability of research to real life situations and to different populations of interest (i.e., to its external validity). Related methodological issues that have been addressed are a lack of theory to drive research, lack of culturally appropriate and valid psychometric tools, and an overreliance on convenience samples (Ponterotto, 1988; W. S. Sue et al., 1999).

Benefits of Research That Includes Ethnicity

Greater focus on ethnicity in child maltreatment research could have several social, scientific, and training benefits. Socially, it could help identify biases and inequities based on ethnicity. It could help policy makers and practitioners tailor interventions to the needs of different communities and identify and illuminate situations in which interventions are particularly effective or ineffective for certain groups. If risks and impacts of maltreatment vary by ethnic group, effort and resources for prevention and treatment could be allocated accordingly. Generally, it would promote greater sensitivity to culture and ethnicity among child abuse professionals. The scientific benefits are considerable as well. Attention to the ethnic composition of samples and analysis of how results vary by ethnic group could help us assess the generalizability of results (W. S. Sue et al., 1999). It would promote better theory, either by showing how effects are common across groups or by illuminating how they are specific to particular ethnic groups or moderated by ethnicity. Likewise, research that shows no difference between ethnic groups on outcomes or that identifies third variables that spuriously lead to a correlation between ethnicity and outcomes could help dispel prejudice about minority groups.

Research is also important for training on cultural competence. Experts on ethnicity have called on human service professionals to become culturally competent to improve services for the variety of ethnic groups affected by child maltreatment (Abney, 2002; Fontes, 2001). For child maltreatment professionals to become culturally competent, research addressing ethnicity needs to be available to them. The knowledge base on culture and ethnicity there-

fore needs to be expanded not prior to but rather in concert with training in cultural competence (Iwamasa et al., 2002).

Behl et al.'s Content Analysis

Behl et al. published a seminal article on ethnicity in child maltreatment research. They conducted a content analysis that examined ethnicity in child maltreatment research during a 20-year period. They found that fewer than 7% of articles during a 20-year period (1977 to 1998) in three major specialty child maltreatment journals focused on ethnicity. That percentage did not increase significantly during the 20-year time period. They found that 50% of articles in the most recent period they reviewed (1995 to 1998) reported the ethnicity of the participants and that 24.5% used ethnicity in data analyses.

Behl et al.'s article was an important contribution, and it is worthwhile to extend their analysis to a more current time period, particularly given changes in professional and government standards on the treatment of ethnicity in research in the past 10 years. In 1994, the American Psychological Association (APA) recommended that descriptions of samples include ethnicity (Phinney, 1996), and the most current version of the APA (2001) publication manual requires reporting all major demographics of the sample, including race and ethnicity. It notes the utility of describing culturally distinct groups (e.g., Chinese, Indians, Vietnamese, etc., not just Asian) "to determine how far the data can be generalized" (p. 19). As of 2001, the National Institute of Health (NIH) policy holds that members of minority groups be included in all NIH-funded clinical research (NIH, 2001). If inclusion is not met, a compelling rationale and justification for exclusion (aside from cost or inconvenient sampling) must be presented (NIH, 2001). Thus, we would expect to see greater inclusion of and reporting on ethnicity in child maltreatment research since the last year (1998) covered by Behl et al.'s review.

Behl et al.'s article also had important limitations that need to be addressed. One concerns how the sample of studies was used. Most of the studies took place in the United States, but a meaningful proportion were conducted in other societies, particularly studies in *Child Abuse & Neglect*, which is subtitled *The International Journal* and is published by the International Society for the Prevention of Child Abuse and Neglect. Although invaluable to the larger cause of developing knowledge about maltreatment of all the world's children and providing multiple cultural perspectives, it seems improbable that more than a handful of these articles will focus on ethnicity, report eth-

nic composition, or use ethnicity in analyses. These societies may be ethnically homogeneous, and they are unlikely to have developed the same standards about the handling of ethnicity in research as the APA, NIH, and other American organizations. They certainly have a different social, psychological, and political context than the United States. Consider one article that met the criteria for Behl et al.'s sample. Does it make sense to include *An Incidence Survey of Battered Children in Two Elementary Schools of Seoul* (Kim & Ko, 1990) in the sample to compute the proportion of studies that report ethnic composition or use ethnicity in analyses? It is meaningless to apply standards to this article that were not derived from nor entirely meaningful for their society. Given that the standards for research and the issues of ethnicity dealt with here are, at this point, particularly American, we thought it was important to report Behl et al.'s percentages for the subsample of exclusively American studies as well as for the total sample.

Behl et al.'s article reported how often ethnicity was used in analyses but not how often it had a statistical impact when it was used. It is much more important to include a variable in analyses if it tends to have a significant statistical effect than if it is consistently unrelated to other variables.

Finally, Behl et al. did not consider the extent of ethnic lumping, a problematic practice described by Fontes (1993). Ethnic lumping involves using a broad label to encompass two or more groups that are actually culturally distinct. One example of ethnic lumping is using only one ethnic group (e.g. Puerto Ricans or Cubans) but reporting it under an umbrella term (e.g., Hispanics or Latinos); another occurs when multiple ethnic groups (e.g., Vietnamese, Koreans, and Chinese) are collapsed into one larger (Asian) group. This type of ethnic lumping may lead to overgeneralization of findings and may inhibit the identification of importance differences (Fontes, 1993). It should be noted, however, that ethnic lumping is a constant temptation given the wish for parsimony and the need to have large cell sizes and avoid using degrees of freedom. Indeed, we can be criticized for it in this study as we analyzed ethnic composition in terms of only six ethnic groups to facilitate the use of significance testing.

This Replication

In this article, we replicated Behl et al.'s content analysis, extending their analysis of the same three specialty child maltreatment journals to the years 1999 to 2002. We calculated relevant percentages for all empirical studies, as Behl et al. did, and for the subsample of American studies, which the previous

study did not do. Although this study examines only 4 years (1999 to 2002) to Behl et al.'s 21 years (1977 to 1998), it analyzes 489 empirical studies compared to Behl et al.'s 1,133, only 19% of the years but 43% of the articles. This reflects growth in the number of journals and the amount of child maltreatment empirical research.

Based on the specific findings of Behl et al. and the general findings of other content analyses examining ethnicity (Case & Smith, 2000; Graham, 1992), it was hypothesized that (a) overall ethnicity would continue to be modestly attended to in the child maltreatment research, (b) ethnicity as a focus of articles would remain constant, (c) reporting of ethnic composition would increase with time, and (d) use of ethnicity as a variable in research would increase with time. Other hypotheses are that (e) the majority of articles would group ethnicity into six major categories, with a minority including subcategories according to APA (2001) guidelines, and (f) ethnicity would have a significant effect in a meaningful proportion of the articles in which it is used.

The initial questions asked in the current content analysis mirror those examined by Behl et al. We calculated percentages for the years 1998 to 2002 and compared them to the corresponding percentages published in Behl et al. for 1995 to 1998. These percentages were as follows:

- the percentage of articles focused on ethnicity,
- the percentage of articles that reported ethnic composition of the sample,
- the percentage of articles that used ethnicity in analyses, and
- the percentage of various ethnic group representation in child maltreatment research.

We first replicated Behl et al.'s method of calculating percentages for all empirical articles. Then, we calculated these percentages again for the subgroup of studies with American samples. We also calculated percentages to measure the extent of ethnic lumping and to assess the relationship of ethnicity to dependent variables specifically:

- the percentage of articles reporting ethnicity only within the six major ethnic groupings (i.e., White, African American, Latino, Asian American, Native American, and other) versus the percentage using a more differentiated set of categories, and
- the percentage of those articles using ethnicity in analyses that found a statistically significant effect of ethnicity.

METHOD

Journal Sample

This analysis included 489 empirical articles during a 4-year period (1999 to 2002) in the following journals: *Journal of Child Sexual Abuse*, *Child Maltreatment*, and *Child Abuse & Neglect*. These journals were chosen to replicate Behl et al.'s analysis of the same journals and were selected because they are the three major specialty journals dealing specifically with child maltreatment. Only articles reporting empirical investigations were included; comment articles, editorial prefaces, book reviews, and introductions of special editions were excluded. All empirical articles were coded on a number of variables related to ethnicity. (See appendix for coding sheet.)

Handling Lack of Uniformity in Labels

One challenge in research related to ethnicity is the lack of uniformity in the labels used to identify participant ethnicity across research studies (Kenny & McEachern, 2000). In reviewing this literature, the traditional confusion in the use of the terms *race*, *ethnicity*, and *culture* became evident. Race, ethnicity, and culture are not interchangeable yet are not completely independent of each other (Abney, 2002; Cohen et al., 2001). The term *race* can be broadly defined as a group of local geographic peoples distinguished by genetically transmitted physical characteristics. *Ethnicity* can be defined as the character, background, or affiliation of an area in which a person identifies, whereas *culture* refers to the attitudes and behaviors that are characteristic of a particular social group. It is important to note that we have chosen primarily to use the word *ethnicity* instead of alternating the terms *race*, *ethnicity*, and *culture* throughout this article for the sake of semantic consistency only.

Variables Coded

Focus on ethnicity. Articles were coded as having a focus on ethnicity if ethnicity, race, or culture was mentioned as an area of interest in the title or in the abstract of the article.

Report of ethnic composition. All articles were coded for whether ethnic composition was reported.

Mean ethnic composition of specific groups. All ethnic and multiethnic articles were coded for mean percentage of representation by each ethnic group. Ethnicity of the participants used the following group categories: White (included in this category were

European American, Caucasian, and Anglo), African American (included in this category was Black), Latino (included in this category was Hispanic), Native American, Asian American, and other (included in this category was non-White, unknown, multiracial, biracial, and Mulatto). When the ethnicity of participants was specified outside of these categorical groupings (e.g., Mexican American, Vietnamese American), the specific terms and percentages were listed separately on the coding sheet but were incorporated into the categorical group seemingly most appropriate for data entry (e.g., Vietnamese American was incorporated in the Asian American group). Although this perhaps perpetuated the practice of ethnic lumping, statistical analysis using the numerous different ethnic groups represented in the hundreds of studies we analyzed would have been substantially unwieldy otherwise.

Ethnicity used in analyses. All articles that reported ethnic composition were coded for whether ethnicity was used in statistical analyses. Ethnicity was coded as used in analyses if ethnicity was used as an independent variable, a covariate, or both in statistical analyses. Ethnically matched experimental and control groups were not identified as using ethnicity in analyses because mere matching does not allow for the possibility of assessing the effect of ethnicity. This is a slight departure from Behl et al., who coded "ethnicity as held constant in the design" (p. 145) as an example of using ethnicity in the analysis.

Statistical significance found. Articles that used ethnicity in analyses and found at least one statistically significant result for ethnicity at an $\alpha = .05$ or less were coded as finding statistical significance.

Restricted to six ethnic categories. To assess ethnic lumping, articles were coded for the number of ethnic groups reported, specifically whether participant ethnicity was restricted to the six major categories mentioned above, or reported more categories.

Procedure

Two raters, one undergraduate student and the first author, coded the articles. The first author developed the coding categories based on the previous content analytic procedures of Behl et al., Iwamasa et al. (2002), Iwamasa and Smith (1996), and Ponterotto (1988). The first author then trained the undergraduate student in the coding categories. To reduce any effect of experimenter expectancies, one rater (the undergraduate student) was blind to the hypotheses. Both raters were given the opportunity to become familiar with the coding categories by practicing coding with articles not used in the current study.

Raters coded the articles independently. To assess interrater reliability, Cohen's kappa and intraclass correlation coefficients were calculated on the 142 articles (29% of the total) coded by both raters.

Analyses

Analysis began with simple frequency distributions to calculate relevant percentages. Goodness-of-fit χ^2 tests were performed to compare the current findings from 1999 to 2002 to the results from 1995 to 1998 as reported by Behl et al. Comparisons were made for three coding categories: focus on ethnicity, report of ethnic composition, and ethnicity used in analyses. Two comparisons of the present findings to the results reported by Behl et al. were conducted: One used the entire sample ($N = 489$) and the other used only the American studies ($n = 328$). To test for differences from year to year within the 4-year period and to test for differences in the mean percentages of different ethnic groups, a 4×6 repeated measures analysis of variance was conducted. One sample t tests were also conducted to compare the mean percentage of each ethnicity for the adult survivors and child victims of child abuse and neglect in this study to the ethnic percentages of victims of maltreatment as reported by the U.S. Department of Health and Human Services, Administration for Children & Families: National Child Abuse and Neglect Data System (2002).

RESULTS

Interrater Reliability

Interrater reliability was assessed on 143 empirical articles from two different child maltreatment journals in 1999: *Child Abuse & Neglect* ($n = 109$) and *Child Maltreatment* ($n = 34$). The *Journal of Child Sexual Abuse* was excluded from the interrater reliability procedure because of initial difficulty in locating the journal. Kappa demonstrated adequate interrater reliability (.70 or more) for the three nominal variables for which it was used: focus on ethnicity ($K = .74$), ethnic composition reported ($K = .79$), and ethnicity used in analyses ($K = .88$). Intraclass correlation coefficients were also calculated for continuous variables: percentage of White participants (intraclass $r = .99$), percentage of African American participants (intraclass $r = .97$), percentage of Latino participants (intraclass $r = .98$), percentage of Native American participants (intraclass $r = .97$), percentage of Asian American participants, and percentage of *other* participants (intraclass $r = .63$). All of the intraclass correlation coefficients demonstrated high levels (.80 or more)

TABLE 1: Ethnicity in Child Maltreatment Research Throughout Time

	Sample of Articles		
	1995 to 1998: All Empirical Articles ^a (n = 1,133)	1999 to 2002: All Empirical Articles (n = 489)	1999 to 2002: Only Empirical Articles With American Samples (n = 328)
Focus on ethnicity	8	9*	13*
Report of ethnic composition	50	59*	76*
Ethnicity used in analyses	15	24*	34*

NOTE: All figures are presented as percentages.

a. Source: Behl et al., 2001.

* $p < .01$.

of interrater reliability, except the last category, which had a moderate level.

Primary Outcomes for the Entire Sample

Of the 489 empirical articles coded from the three journals—*Journal of Child Sexual Abuse* ($N = 58$), *Child Abuse & Neglect* ($N = 351$), and *Child Maltreatment* ($N = 80$)—during the 4-year period, 9% ($n = 44$) focused on ethnicity, 58.9% ($n = 288$) reported ethnic composition, and 23.9% ($n = 117$) used ethnicity of participants in analyses. Goodness-of-fit χ^2 tests were conducted to compare the percentages found for all the empirical articles in the current study ($N = 489$) for the 4-year period from 1999 to 2002 with those reported by Behl et al. for the 4-year period from 1995 to 1998. All those percentages were significantly higher in 1999 to 2002: The percentage of articles that focused on ethnicity, $\chi^2(1, N = 488) = 11.94, p < .01$; the percentage of articles that reported ethnic composition, $\chi^2(1, N = 488) = 15.48, p < .01$; and the percentage of articles that used ethnicity in analyses, $\chi^2(1, N = 289) = 156.25, p < .01$.

Primary Outcomes for the American Sample

Out of the 489 empirical articles coded from the three journals, 67.1% ($n = 328$) had American samples (*Journal of Child Sexual Abuse* $n = 46$; *Child Abuse & Neglect*, $n = 208$; and *Child Maltreatment*, $n = 74$). Of these, 12.5% ($n = 41$) focused on ethnicity. Ethnic composition was reported in 76.2% ($n = 52$) of these articles. Ethnicity of participants was used in analyses in 33.8% ($n = 111$) of these articles. These percentages were all substantially and significantly higher than those for 1995 to 1998 in Behl et al. (see Table 1): focus on ethnicity, $\chi^2(1, n = 327) = 12.45, p < .01$; reporting of ethnic composition, $\chi^2(1, n = 327) = 90.20, p < .01$; percentage using ethnicity in analyses, $\chi^2(1, n = 252) = 176.08, p < .01$. Although, it is unclear what the comparison would have been if Behl et al. had reported percentages for the American studies as well as for all of the studies.

Ethnic Composition and Ethnic Lumping

Examining all the articles reporting ethnic composition ($n = 288$), 64.8% ($n = 197$) reported ethnicity in terms of the six major ethnic categories, whereas 31.6% ($n = 91$) provided more specific information about participants' ethnicity than the six major categories. Examination of American studies ($n = 250$) showed that 78.4% ($n = 196$) reported ethnicity in terms of the six major ethnic categories, whereas 21.6% ($n = 54$) provided more specific information about participants' ethnicity than the six major categories. Within American studies, when ethnic composition was reported ($n = 250$), 74.4% ($n = 186$) of samples had one predominant ethnic group, and 25.6% ($n = 64$) of samples had two or more predominant ethnic groups. Of the 186 articles in which one ethnic group comprised more than 50% of the sample, Whites were represented an average of 76.3% of the time, followed by African Americans at an average of 16.1% and Latinos at an average of 4.8%. Of the 64 articles in which two or more ethnic groups were predominant in the sample, Whites and African Americans were predominant 31.3% of the time, followed by Whites, African Americans, and Latinos 29.7% of the time; African Americans and Latinos 15.6% of the time; and Whites and Latinos 10.9% of the time. A 4 (year) \times 6 (ethnicity of sample) ANOVA was performed to test for differences between the 4-year period and the overall average percentage of ethnic composition reported for six different ethnicities. A main effect for ethnicity was demonstrated, $F(5, 1230) = 282.44, p < .001$. No main effect was demonstrated for year, and there was no interaction between year and ethnicity. Figure 1 presents the mean percentage of ethnic group representation for research samples for the 4-year period from 1999 to 2002.

We compared the overall mean percentage of each ethnicity for the participants from the American studies ($n = 144$) to the reported ethnic distribution of victims of maltreatment in the NCANDS (Children's Bureau, 2004; see Table 2). For four ethnic categories, there were no significant differences. However,

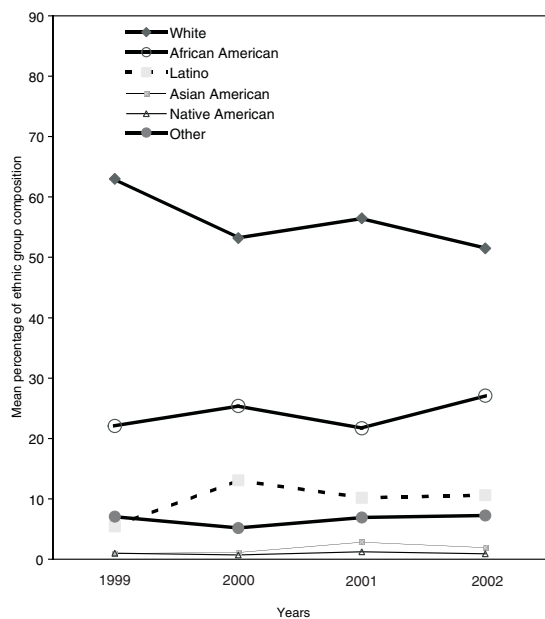


FIGURE 1: Mean Ethnic Composition of Sample From Research Studies Published in Specialty Child Maltreatment Journals Between 1999 and 2002

TABLE 2: Comparison of the Mean Percentage of Each Ethnicity for the Adult Survivors and Child Victims of Child Abuse and Neglect to the Ethnic Percentages of Victims of Maltreatment as reported by National Child Abuse and Neglect Data System in 2002

	Current Study (N = 144) Reported Percentages	NCANDS Reported Percentages
Whites	56.3	54.2
African American	21.8	26.1*
Latino	10.6	11
Native Americans	0.99	1.8*
Asian Americans	1.5	1

SOURCE: U.S. Department of Health and Human Services Administration for Children & Families' National Child Abuse and Neglect Data System (2002).

* $p < .05$.

African Americans composed 26.1% of victims of maltreatment but were only represented as an average of 21.8% of participants in the child maltreatment studies, one sample $t(143) = -2.26, p = .025$. Similarly, Native Americans composed 1.8% of victims of maltreatment but were only represented an average of .99% of participants in the child maltreatment studies, one sample $t(143) = -3.55, p < .01$. One limitation of this is that the many samples represented in our research included both child victims and adult survivors, whereas the NCANDS data only concern child victims.

Statistical Significance of Ethnicity

Examining the articles that used ethnicity in analyses ($n = 117$), 54.7% ($n = 64$) reported statistically significant differences at $\alpha = .05$ or less between at least two ethnic groups for at least one analysis. Similarly, 52.3% ($n = 58$) of the 111 American studies did as well.

DISCUSSION

Use of Ethnicity

This study analyzed studies from 1999 to 2002 to extend Behl et al.'s investigation by 4 more years. Using Behl et al.'s methods, we found that all three outcomes changed significantly from the years 1995 to 1998 to the years 1999 to 2002. The percentage of empirical articles that focused on ethnicity remained less than 10%, the percentage that reported ethnic composition exceeded 50%, and the percentage of articles using ethnicity in analyses increased from 14.5% to about 24%. When we consider just American samples, a more meaningful population for this analysis we believe, the differences from Behl et al. are larger. The percentage of studies focusing on ethnicity is a little higher (12.5%), the percentage of articles reporting ethnic composition is substantially higher (76%), and the percentage using ethnicity in analyses is notably higher (34%).

These findings suggest that some practices have changed and some have remained the same. Studies focusing on ethnicity in child maltreatment are still the province of only a small minority of investigators. Reporting of ethnic composition is increasing. In American samples, it is typical but not universal, despite the recommendations of national research organizations. The increase in the use of ethnicity in data analysis is encouraging, although it is not clear to what extent this stems from special attention to ethnicity versus a general rise in the sophistication of data analysis in child maltreatment research.

Is the degree of focus on ethnicity adequate? It is difficult to say. We are not aware of any benchmarks for this. On one hand, one in nine articles in which culture, ethnicity, or race are important enough to mention in the abstract or title might seem like a good percentage, considering all the other worthy topics related to child maltreatment. On the other hand, given the corrosive effects of racism and unequal treatment of people of color in this country, ethnicity might deserve a disproportionate amount of research attention.

Ethnicity was used in data analysis in more than one third of American empirical studies from 1999 to 2002. This may be an increase over previous years but

still strikes us as low given the near omnipresence of ethnicity as a consideration in all areas of child maltreatment. One explanation may be the practical benefits of using convenience samples that are not ethnically diverse, which can arise from using college student samples, community samples in ethnically homogeneous areas, and so forth. Researchers need to extend investigation to more ethnically diverse populations, and funders need to recognize this need. Another problem may be that disaggregating samples by ethnicity may create cell sizes that make it difficult to use Pearson chi-square, analysis of variance, multiple regression, and the like—this is especially problematic when researchers try to avoid ethnic lumping. Applied statisticians need to bring new methods that are being developed for small samples (e.g., Fearson, 2003) to analysis related to ethnicity, and qualitative methods need to be used in conjunction with quantitative methods.

Ethnicity as a Statistically Significant Effect

The substantial proportion of studies in which there was a significant ethnicity effect underlines the importance of ethnicity in child maltreatment. Ethnicity is significantly related to a wide range of variables measuring the risk and effects of abuse and the use and outcomes of interventions. Even considered solely from a statistical perspective, ethnicity was an important variable because it often explained variation that would otherwise be unexplained and would decrease the statistical power of tests on other variables.

It is difficult to know how often ethnicity would have a significant effect if used more often. How good an estimate is the 52.3% of American studies we found here? The percentage might be smaller if ethnicity was used more generally, as it might currently be used primarily when researchers have a strong theoretical basis for expecting ethnicity to have an effect. On the other hand, it might now be used relatively casually, either as a small part of an attempt to cover the bases of potentially important variables (e.g., sex, age) or as a pro forma effort to give ethnicity its due, in which case the 52.3% might be a reasonable estimate. The fact that ethnicity was used in analyses only a little more than a third of the time but was significant more than half of the time it was used at least suggests that many researchers may be missing out on something important.

Ethnic Lumpiness

This practice remains a concern, as more than three fourths of American studies used only the six major ethnic groupings (i.e., White, African Ameri-

can, Latino, Asian American, Native American, and other). It seems like a practice that could be changed relatively rapidly with better education about the need for more meaningful categories and with more widespread dissemination of good category sets to use. Even if researchers face problems using better categories in analyses because of statistical issues, they could at least treat it more sensitively in their reports of ethnic composition. There are no current specific professional standards for addressing ethnic lumping. However, many researchers acknowledge this as problematic and recommend being as descriptive as possible when reporting sample characteristics by including variables such as socioeconomic status, country of origin, and acculturation (Abney, 2002; APA, 2002; Fontes, 2001; Kenny & McEachern, 2001). Some researchers call for the use of more qualitative research, which is a very different but useful perspective on the ethnic composition of a population (Hall, 1997; S. Sue, 1999).

Limitations

The limitations of this study stem mainly from the demands of doing an empirical, systematic review with limited resources. Only three journals were used, although it is likely that these three publish a large proportion of the peer-reviewed empirical articles on child maltreatment in the United States. If anything, the focus on these three may have biased estimates of the inclusion of ethnicity higher because of attention that the parent organizations of these journals have given to culture and ethnicity. The International Society for the Prevention of Child Abuse and Neglect (*Child Abuse & Neglect*) explicitly has a multicultural mission, the American Professional Society on the Abuse of Children (*Child Maltreatment*) sponsored the People of Color Leadership Institute for a number of years and has had special issues of its journals on cultural competence, and the Family Violence and Sexual Assault Institute (*Journal of Child Sexual Abuse*) is providing a training workshop titled *Child maltreatment and culture: Working with diverse families* (Family Violence and Sexual Assault Institute, 2005) the very month of this writing.

In some of our analysis, we can be criticized for practicing the same kind of ethnic lumping that several experts decry because of statistical concerns. Future research reviews should go into more detail to examine the number and percentages of articles from a wide array of ethnic and cultural groups.

It is also possible that we missed some important research efforts in our operationalization of focus on ethnicity and our restriction to quantitative research. Coding as *focused on ethnicity* only those articles that

mentioned ethnicity, race, or culture in the title or abstract (as Behl et al. did) excluded articles that may have focused substantially on ethnicity in the body of article. Valuable nonquantitative or nonempirical articles on ethnicity and culture include Korbin (2002), Tyagi (2001), and Fontes, Cruz, and Tabachnick (2001).

Furthermore, the value of a number of individual articles on specific cultural groups should be acknowledged even if attention to that group is infrequent. For example, Green, Ramelli, and Mizumoto (2001) extensively reported the ethnicity of participants in a breakdown of 11 subcategories (e.g., Hawaiian, Samoan, Filipino) in their study on treatment-seeking behaviors of those who have been sexually assaulted. Park (2001) used a sample completely composed of first-generation Korean Americans in a study about child physical abuse.

CONCLUSION

To develop a literature that is responsive to diversity and representative of different ethnic groups,

child maltreatment research must be conducted that includes ethnicity in research design and analyses (Behl et al., 2001). Attention should be paid to ensure adequate representation across ethnic groups in research studies, and subsequently, reporting of the ethnic composition of the sample should be as accurate and as detailed as possible (Behl et al., 2001; Graham, 1992). Although increased attention has been given to the importance of ethnicity in research, more ethnically sensitive research is still needed (Fontes, 2001).

More can be done to encourage this research. Federal agencies can offer grants specifically to fund research on ethnicity, culture, and child maltreatment. Postdoctoral research training programs could recruit and support fellows with such interests. Cultural competence training programs could include research tracks. Special issues of journals could be set aside to encourage just such research. We believe that we will recognize and make use of many opportunities if we keep our eyes on the prize of developing a stronger link between empirical research and the role of ethnicity in child maltreatment.

APPENDIX

Full citation APA style: Title: _____
 Author: _____

Journal Title: Please circle one

Journal of Child Sexual Abuse Child Maltreatment Child Abuse & Neglect
 Vol. ____ No. ____ Date ____ Page # _____
 Year: 1999 2000 2001 2002

Focus on ethnicity: Yes or No **If yes, is it:** Ethnic Multiethnic Non-ethnic Non-American
 Characteristics of subject sample: N = _____
 Ethnic Composition reported? Yes or No

If yes, please circle the appropriate category and report percentages and N values

White/Caucasian/Anglo/European American _____ % N = _____
 African American Black _____ % N = _____
 Latino Hispanic _____ % N = _____
 Native American _____ % N = _____
 Asian American _____ % N = _____
 Other (please specify) _____ % N = _____

Sample populations: Please specify
 Adult survivors of child abuse/neglect Child victims of child abuse/neglect
 Please specific population: _____

Data:

Ethnicity used in analyses? Yes or No
 (If used in analyses, please direction of results; for example: White African American = Hispanic)

REFERENCES

- Abney, V. D. (2002). *Cultural competency in the field of child maltreatment*. In I. Briere, J. L. Berliner, J. Meyers, L. Berliner, J. Briere, C. Hendrix, et al. (Eds.), *The APSAC handbook on child maltreatment* (pp. 477-486). Thousand Oaks, CA: Sage.
- American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.
- American Psychological Association. (2002). *Guidelines on multicultural education, training, research, practice, and organizational change for psychologists*. Retrieved January 12, 2005, from <http://www.apa.org/pi/multiculturalguidelines/guideline3.html>
- Anderson, K. P., LaPorte, D. J., & Crawford, S. (2000). Child sexual abuse and bulimic symptomatology: Relevance of specific abuse variables. *Child Abuse & Neglect, 24*(11), 1495-1502.
- Ards, S., Chung, C., & Myers, S. (1998). The effects of sample selection bias on racial differences in child abuse reporting. *Child Abuse & Neglect, 22*(2), 103-115.
- Behl, L. E., Crouch, J. L., May, P. F., Valente, L. A., & Conyngham, H. A. (2001). Ethnicity in child maltreatment research: A content analysis. *Child Maltreatment, 6*(2), 143-147.
- Calvert J. F., Jr., & Munsie-Benson, M. (1999). Public opinion and knowledge about childhood sexual abuse in a rural community. *Child Abuse & Neglect, 23*(7), 671-682.
- Case, L., & Smith, T. B. (2000). Ethnic representation in a sample of the literature of applied psychology. *Journal of Consulting and Clinical Psychology, 68*, 1107-1110.
- Children's Bureau. (n.d.). *The AFCARS report*. Retrieved December 17, 2004, from <http://www.acf.dhhs.gov/programs/cb/publications/afcars/apr2001.htm>
- Children's Bureau. (2004). *Child maltreatment 2002*. Washington, DC: U.S. Department of Health and Human Services, Administration on Children, Youth and Families, Children's Bureau.
- Cohen, J. A., Deblinger, E., Mannarino, A. P., & Arellano, M. A. (2001). The importance of culture in treating abused and neglected children: An empirical review. *Child Maltreatment, 6*(2), 148-157.
- Coohey, C. (2001). The relationship between familism and child maltreatment in Latino and Anglo families. *Child Maltreatment, 6*(2), 130-142.
- Dietz, T. L. (2000). Disciplining children: Characteristics associated with the use of corporal punishment. *Child Abuse & Neglect, 24*(12), 1529-1542.
- Family Violence and Sexual Assault Institute. (2005). *Specialized training for people who work with traumatized children and families* [brochure]. San Diego, CA: Author.
- Fearson, P. (2003). Big problems with small samples. *Psychologist, 16*, 632-635.
- Ferrari, A. M. (2002). The impact of culture upon child rearing practices and definitions of maltreatment. *Child Abuse & Neglect, 26*(8), 793-813.
- Fontes, L. A. (1993). Considering culture and oppression: Steps toward an ecology of sexual abuse. *Journal of Feminist Family Therapy, 5*, 25-54.
- Fontes, L. A. (2001). Introduction: Those who do not look ahead, stay behind. *Child Maltreatment, 6*(2), 83-91.
- Fontes, L. A., Cruz, M., & Tabachnick, J. (2001). Views of child sexual abuse in two cultural communities: An exploratory study among African Americans and Latinos. *Child Maltreatment, 6*(2), 103-117.
- Graham, S. (1992). Most of the subjects were White and middle class. *American Psychologist, 47*, 629-639.
- Green, T. M., Ramelli, A., & Mizumoto, M. (2001). Patterns among sexual assault victims seeking treatment services. *Journal of Child Sexual Abuse, 10*(1), 89-108.
- Hall, C. C. (1997). Cultural malpractice: With the changing U.S. population. *American Psychologist, 52*(6), 642-651.
- Iwamasa, G. Y., & Smith, S. K. (1996). Ethnic diversity in behavioral psychology: A review of the literature. *Behavior Modification, 20*(1), 45-52.
- Iwamasa, G. Y., Sorocco, K. H., & Koonce, D. A. (2002). Ethnicity and clinical psychology: A content analysis of the literature. *Clinical Psychology Review, 22*, 931-941.
- Lane, W. G., Rubin, D. M., Monteith, R., & Christian, C. C. (2002). Racial differences in the evaluation of pediatric fractures for physical abuse. *Journal of the American Medical Association, 288*(13), 1603-1609.
- Kenny, M., & McEachern, A. (2000). Racial, ethnic, and cultural factors of childhood sexual abuse: A selected review of the literature. *Clinical Psychology Review, 20*(7), 905-922.
- Kim, K., & Ko, B. (1990). An incidence survey of battered children in two elementary schools of Seoul. *Child Abuse & Neglect, 14*, 273-276.
- Korbin, J. E. (2002). Culture and child maltreatment: Cultural competence and beyond. *Child Abuse & Neglect, 26*(6, 7), 637-644.
- National Institutes of Health. (2001). *Amendment: NIH policy and guidelines on the inclusion of Women and Minorities as Subjects in Clinical Research* (Amended October, 2001). Retrieved June 2, 2005, from http://grants.nih.gov/grants/funding/women_min/guidelines_amended_10_2001.htm
- Park, M. S. (2001). The factors of child physical abuse in Korean immigrant families. *Child Abuse & Neglect, 25*(7), 945-958.
- Phinney, J. S. (1996). When we talk about American ethnic groups, what do we mean? *American Psychologist, 51*(9), 918-927.
- Ponterotto, J. G. (1988). Racial/ethnic minority research in the *Journal of Counseling Psychology*: A content analysis and methodological critique. *Journal of Counseling Psychology, 35*(4), 410-418.
- Rao, K., Di Clemente, R., & Ponton, L. (1992). Child sexual abuse of Asians compared with other populations. *Journal of the American Academy of Child and Adolescent Psychiatry, 31*, 880-886.
- Rodriguez-Srednicki, O., & Twaite, J. A. (1999). Attitudes toward victims of child sexual abuse among adults from four ethnic/cultural groups. *Journal of Child Sexual Abuse, 8*(3), 1-24.
- Santos de Barona, M. (1993). The availability of ethnic materials in psychology journals: A review of 20 years of journal publication. *Contemporary Educational Psychology, 18*, 391-400.
- Scarr, S. (1988). Race and gender as psychological variables: Social and ethical issues. *American Psychologist, 43*(1), 56-59.
- Shaw, J. A., Lewis, J. E., Loeb, D. A., Rosado, D. J., & Rodriguez, R. A. (2002). A comparison of Hispanic and African-American sexually abused girls and their families. *Child Abuse & Neglect, 25*(10), 1363-1379.
- Sue, S. (1999). Science, ethnicity, and bias: Where have we gone wrong? *American Psychologist, 54*(12), 1070-1077.
- Sue, W. S., Bingham, R. P., Porche-Burke, L., & Vasquez, M. (1999). The diversification of psychology: A multicultural revolution. *American Psychologist, 54*(12), 1061-1069.
- Turell, S. C., & Armsworth, M. W. (2000). Differentiating incest survivors who self-mutilate. *Child Abuse & Neglect, 24*(2), 237-249.
- Tyagi, S. V. (2001). Incest and women of color: A study of experiences and disclosure. *Journal of Child Sexual Abuse, 10*(2), 17-39.
- U.S. Census Bureau. (n.d.). *United States census 2000*. Retrieved December 15, 2004, from <http://www.census.gov/main/www/cen2000.html>
- U.S. Census Bureau. (2000). *Overview of race and Hispanic origin: Census 2000 brief*. Washington, DC: U.S. Department of Commerce.
- U.S. Department of Health and Human Services, Administration for Children & Families: National Child Abuse and Neglect Data System. (2002). *Summary of key findings from calendar year 2000*. Retrieved January 20, 2005, from <http://www.calib.com/nccanch/pubs/factsheets/canstats.cfm>
- Wyatt, G. E., & Peters, S. (1986). Methodological considerations in research on the prevalence of child sexual abuse. *Child Abuse & Neglect, 10*, 241-251.

Alisa B. Miller, M.A., is a research associate in the Child and Adolescent Psychiatry Department at Boston Medical Center. This article is based on her master's thesis. She received a master's in general psychology at Brandeis University. She has been accepted into the Boston University clinical psychology Ph.D. program for fall 2005. Her research interests include medical trauma and multicultural issues.

Theodore Cross, Ph.D., is a research professor and the director of the Multi-Site Evaluation of Children's Advocacy Centers at the Crimes Against Children Research Center at the University of New Hampshire. He has numerous publications on system responses to troubled children, including studies of prosecution of child abuse, outcomes of foster care, and organization of children's services. He teaches advanced statistics at Brandeis University and maintains a practice in clinical psychology.