

UCSF

UC San Francisco Previously Published Works

Title

A violence-prevention and evaluation project with ethnically diverse populations.

Permalink

<https://escholarship.org/uc/item/8s5469bx>

Journal

American journal of preventive medicine, 20(1 Suppl)

ISSN

0749-3797

Authors

Alkon, A
Tschann, JM
Ruane, SH
[et al.](#)

Publication Date

2001

DOI

10.1016/s0749-3797(00)00274-9

Peer reviewed

A Violence-Prevention and Evaluation Project with Ethnically Diverse Populations

Abbey Alkon, PhD, Jeanne M. Tschann, PhD, Susan H. Ruane, MA, Mimi Wolff, MSW, Amy Hittner, PhD

Abstract: The purpose of this paper is to describe some of the challenges encountered and lessons learned while providing and evaluating a violence-prevention program for and with ethnically diverse populations in child care settings. The paper discusses Safe Start, a violence prevention education program for child care staff and parents, and the evaluation of the program. Safe Start was designed to include culturally relevant content to increase cultural awareness for child care staff and parents from diverse ethnic backgrounds. The evaluation project enrolled child care centers with families representing the ethnically diverse communities in which they were located. Violence prevention research involving children from diverse ethnic backgrounds presents new methodologic challenges, but also provides new opportunities for creative, novel methods. This paper describes some of the challenges encountered with curriculum development, staff recruitment, instrument selection, and data collection procedures.

Medical Subject Headings (MeSH): child, child care, culture, ethnic groups, family, parents, primary prevention, research, violence (Am J Prev Med 2001;20(1S):48–55)
© 2001 American Journal of Preventive Medicine

Introduction

The demographic profile of California is changing and it is becoming more culturally, ethnically, and racially diverse. In 1970, 80% of the San Francisco Bay Area's population was European American and by 1998, no single ethnic group constituted a majority of the population in the Bay Area. Thirty-eight percent of the population was European American, 23% was Asian/Pacific Islanders, 24% was Latino, 12% was African/African American, and less than 1% was Native American.¹ Therefore, it is important to design, develop, and evaluate community-based interventions that include ethnically diverse population and use culturally sensitive methods. This poses enormous challenges, primarily because previous interventions and research have focused on European American populations.

From the Department of Family Health Care Nursing, School of Nursing (Alkon), and Departments of Psychiatry and Pediatrics (Tschann), University of California; Safe Start Program, College of Health & Human Services, San Francisco State University (Ruane, Hittner), San Francisco, California; and Harold E. Jones Child Study Center, Institute of Human Development, University of California (Wolff), Berkeley, California

Address correspondence and reprint requests to: Abbey Alkon, PhD, Department of Family Health Care Nursing, School of Nursing, University of California-San Francisco, 2 Kirkham Street, Room N431F, Box 0606, San Francisco, CA 94143-0606. E-mail: abbeyalk@uclink4.berkeley.edu.

Culture, Race, and Ethnicity

Culture is closely intertwined with concepts such as race, ethnicity, and social class.^{2,3} Culture is “. . . the way of life of a people. It consists of conventional patterns of thought and behavior, including values, beliefs, rules of conduct . . . and the like, which are passed on from one generation to the next by learning—and not by inheritance.”⁴ These cultural elements include a wide range of measureable variables, such as familial roles, communication patterns, affective styles, and values regarding personal control, individualism, collectivism, spirituality, and religiosity.²

Racial categories are cultural constructs based on the belief that identities are inherited and passed on from generation to generation.⁵ Race has been defined in terms of physical characteristics, such as skin color, facial features, and hair type, which are common to an inbred, geographically isolated population. In the United States, race is often used interchangeably with culture or nationality. Genetically, however, there are more within-group differences than between-group differences in the three so-called races (Caucasoid, Negroid, and Mongoloid).^{3,6}

Ethnicity is a socially acquired characteristic based on cultural distinctiveness derived from national origin, language, or religion.⁵ One's “ethnic identity is defined as one's sense of belonging to an ethnic group and the perceptions and feelings that one has due to ethnic group membership.”⁷ Ethnic identity may change because of acculturation and cross-ethnic contacts, such

as the media or personal relationships. Because there is overlap between ethnicity and culture, it is difficult to study each concept independently.⁸ The overlap of culture, race, and ethnicity is omnipresent for the U.S. Hispanic population, which comprises different racial and ethnic groups. Mexican Americans (Chicanos), Cuban Americans, Puerto Ricans, and other Spanish-speaking, national-origin groups are all Hispanic and these groups also include individuals from different races, including Asian, Native American, black, and white. In addition, Hispanics share many common characteristics, such as language, but there are important within-group differences based on cultural, historical, geographic, and socioeconomic diversity.⁹

An additional complexity is that the number of children from mixed ethnic backgrounds is growing in the United States.⁷ In 1990, a total of 620,000 births were recorded for children with one African/African-American and one European-American parent. Children with mixed ethnicity are rarely studied and present a challenge to researchers who try to classify persons into a single ethnic group.⁸

Background of the Research

To understand violence in a multicultural society, researchers and educators need to develop culturally relevant interventions, research questions, and study methodologies.^{10,11} Past research on cultural groups had many limitations. Many research studies compared cultural groups using an “etic” perspective, in which one mainstream cultural group, generally European American, was used as a framework for understanding a different group. This ethnocentric perspective usually explained differences across ethnic groups as genetic or inferior aspects of the non-Caucasian culture.^{5,12} On the other hand, anthropologists have suggested that researchers develop measures that are culturally sensitive, by using the “emic” perspective, which attempts to understand a phenomenon from the “natives” point of view.⁴ This approach accounts for the values and traditions of different ethnic groups. Therefore, research that includes ethnically or culturally diverse populations should include new study methods, which incorporate an emic perspective in each phase of the study.

Since research methodologies are determined by the research questions, research questions may need to include issues related to ethnicity. Research questions can explore cultural differences within and across ethnic groups, in addition to their effects on different outcome measures. Other research questions may expand to include individual (age) and group (ethnicity) influences on children’s health or behavior to understand which aspects of a child’s life promotes or inhibits their potential. For example, studies of children’s risk of violent behavior or exposure to violence could include children’s individual characteristics (e.g., tem-

perament and biological differences), different contexts (e.g., schools, neighborhoods, and health systems), and family characteristics (e.g., ethnicity, structure, roles, values, and goals).⁵

Research also needs to combine both qualitative and quantitative methods to enrich our understanding of processes,¹³ in addition to outcomes. In fact, it may be valuable to conduct exploratory research to understand processes through which ethnicity or cultural values affect the developmental course.¹⁴ Exploratory research about associations between ethnic identity and childrearing practices would help researchers, educators, and clinicians understand ethnic influences on different beliefs about raising children.¹⁵

Purpose

The purpose of this paper is to describe some of the challenges encountered and lessons learned while providing and evaluating a violence-prevention program for and with ethnically diverse populations in child care settings. The paper discusses the Safe Start Project, a violence prevention education program for child care staff and parents, and program evaluation. Diversity issues were considered in all phases of the project. This paper highlights the challenges with curriculum development, staff recruitment, instrument selection, and data collection procedures.

Summary of Safe Start Intervention and Evaluation Project

Safe Start, a violence-prevention program for child care teachers, directors, and parents, was developed in 1994 as a partnership between San Francisco State University (SFSU) and five local community colleges. The program was conceived in response to the increase in neighborhood violence and the lack of violence prevention training for child care teachers who work in these communities. It was guided by Bronfenbrenner’s ecologic model of prevention,¹⁴ which emphasized the dynamic interaction of individual and environmental characteristics in determining behavior. To prevent adolescent antisocial or violent behavior, young children’s cognitive processes and their relevant contextual systems—family and child care environments—were targeted for intervention. Since children’s role models for learning about social relationships, communication, and conflict resolution are their parents and/or teachers, these adults were targeted by the Safe Start intervention. This program involved ecologic, group-level interventions that focused on known risk factors for violence in young children and supported adults to provide nurturing, developmentally appropriate, high-quality environments for young children at home and at child care centers. It was developed to apply to

multiple ethnic groups, but it had the flexibility to be modified to include issues relevant for specific ethnic groups.

The Safe Start curriculum was based on the conceptual foundations of early childhood education,^{16–18} the repertoire of skills used in cross-cultural counseling,¹⁹ and the extant sociologic knowledge of the roots of urban violence.^{20,21} The curriculum's objectives were to develop skills in: (1) self-awareness, (2) cultural competency and sensitivity, (3) violence intervention for young children, and (4) counseling on violence prevention. The Safe Start curriculum, developed initially for child care teachers and directors, was modified and extended to provide classes for parents.

Child care teachers attended the Safe Start program at their local community colleges, which included nine academic units. The courses they attended were titled as follows: The Impact of Violence on Young Children and their Families, Violence Intervention Techniques, and Field Work Experience in Violence Prevention. Child care directors attended a three-unit course on violence in the community and media, facilitating parent-staff communication, dealing with staff conflicts, and expanding knowledge of community resources and referrals. Safe Start parent classes were offered on-site at participating child care centers. There were six evening sessions covering content on violence in the community, violence in the media, discipline, communication, resiliency, and stress reduction.

The overall goals of the Safe Start evaluation project were to study the effects of the Safe Start program on preschool age children's behavior, adults' childrearing beliefs, and child care center quality. The research questions addressed in the study were: (1) Do children attending child care centers participating in the Safe Start Program engage in fewer aggressive behaviors, have lower injury rates, or exhibit more pro-social behaviors compared to children attending centers not participating in the Safe Start Program? (2) Does the Safe Start program improve teachers' and parents' knowledge and beliefs about aspects of childrearing? (3) Does the overall quality of the child care environment change after teachers complete the Safe Start program?

The Safe Start evaluation project was a 3-year randomized experimental study with a crossover design conducted in 15 child care centers. Child care centers were recruited for the evaluation project if they met the following inclusion criteria: publically funded, serving children from diverse cultural/ethnic backgrounds, full-day programs for preschool-aged children, English-speaking teachers, staff who had not previously taken Safe Start or other violence-prevention programs, and 60% of staff interested in enrolling in the Safe Start program. In Year 1, ten child care centers were matched on enrollment size and geographic location and were randomly assigned to the intervention or

control group. In Year 2, the Year 1 control group centers became the intervention group and five new child care centers were enrolled in the research project as the control group.

In the spring of each year, data collection occurred at each child care center and by mail for parent-completed questionnaires. Teachers and directors completed questionnaires on demographic information, work environment, childrearing beliefs, and child behavior. Parents were mailed questionnaires on demographic information, neighborhood safety, television watching, family conflict, childrearing beliefs, and child behavior. Observations were conducted of the child care environment to assess global quality and teacher-child interaction. Children were interviewed to identify peer relationships and hostile attributions.

Challenges Encountered in Each Phase of the Project Prevention Project: Curriculum Development and Content

The Safe Start curriculum for child care teachers was based on knowledge regarding societal origins of violence, which included intolerance, racism,²² social inequalities,²³ and community and interpersonal violence.^{24–26} The curriculum integrated cross-cultural counseling,¹⁹ anti-bias techniques,¹⁷ and cultural self-awareness and competence.²⁷

The curriculum was developed by an interdisciplinary, diverse team, which included professionals from early childhood education; counseling; psychology; gay and lesbian studies; and African-American, Asian-American, Latino, Middle-Eastern, European-American cultural groups. These professionals each contributed to distinct and unique aspects of the curriculum. Educators suggested multiculturally appropriate textbooks and readings and developed multicultural scenarios for students to explore their own child care practices. Therapists helped develop the curriculum on cross-cultural counseling techniques, which included class exercises and assignments, such as sharing family rituals, role playing, and journal writing. Counselors helped develop the curriculum on communication skills with families, which included case studies focusing on family violence in different cultural groups.

The Safe Start curriculum focused on the impact of prejudice, bias, and cultural competence on children's development.¹⁷ Child care teachers were encouraged to explore their own family history and cultural background in order to understand different lifestyles and cultural beliefs.²⁸ It is known that when child care teachers develop culturally sensitive skills and attitudes during their educational experience, they are more competent to handle cultural issues in their child care settings.²⁹ Cultural competence has been defined as a set of congruent behaviors, attitudes, and policies that

enable people to work effectively in cross-cultural situations.²⁷ To foster mutual respect and understanding of parents' cultural backgrounds, teachers learned effective communication techniques to utilize during teacher-parent conversations and conferences.^{19,30}

Cultural awareness was a central theme in the courses' readings, teaching modalities, and assignments, since childhood education courses were previously ethnocentric and not inclusive of cultural diversity issues.¹⁸ To encourage cultural self-awareness, assignments included weekly journal entries to explore personal backgrounds and growth during the course. Through classroom content, role playing, and homework assignments, students were encouraged to realize when they unwittingly stereotyped others based on previous experiences. Other student exercises included sharing personal experiences and contributing to class discussions about different ethnic backgrounds. The instructors and students created a supportive classroom environment where these cultural issues were discussed in a sensitive and educational manner.

Parent classes were developed based on the Safe Start community college curriculum. A diverse group of experienced mental health professionals facilitated the sessions. The classes provided violence prevention information for parents with diverse ethnic backgrounds and encouraged them to form support networks. They also included ways to improve communication among parents, teachers, and children. Translators were available for parents who spoke Chinese or Spanish, and handouts were distributed on each topic in English, Spanish, and Chinese, since these were the most common languages of the families served.

Evaluation Project: Staff Recruitment

It was a challenge to hire staff who could recruit and retain families from diverse ethnic backgrounds. Although some researchers advocate matching the ethnicity of study participants and research staff to enhance minority group participation and produce more valid results,^{31,32} other researchers support hiring culturally competent and sensitive staff rather than matching participants' and staff members' ethnicity.^{3,13} In this study, the population was so diverse that it was not feasible to match participants with research staff ethnicity. Therefore, we selected research assistants who reflected the diversity of and lived in the community. Staff members were also required to demonstrate culturally competent skills through their past work experience with ethnically diverse populations and their understanding of and identity with their own culture. They also demonstrated open-mindedness, respectful attitudes toward others, and excellent communication skills. The research staff (N=4) included an ethnically diverse group of women who were African American, Asian American, and European American. They were

also generationally and linguistically diverse (one was a first-generation American, another was a second-generation American), all staff had lived outside the United States, and two staff were fluent in languages other than English.

To promote trust and mutual understanding within our diverse group, we discussed our different work and communication styles during our weekly meetings. As a result, our group developed a supportive and cohesive work environment that was also very productive.

Ethnicity as a Category

Data collection on ethnicity usually includes only self-identification of ethnicity or cultural group. Ideally, researchers would also collect information on other related constructs, such as race, affiliation with other members of one's group, acculturation, language, years in the United States, generational status, and cultural values.^{2,8,33}

How much data to collect on child and parent ethnicity poses many challenges. In this project, parents identified their own ethnic group, their child's ethnic group, income, work status, and number of years lived in the United States. Ethnicity data were collapsed from 11 to 6 ethnic categories to provide sufficient numbers within each group for data analysis. We knew that each ethnic category did not represent homogenous beliefs, traditions, and affiliations,² and could not be analyzed as such. For example, the category for Chinese/Chinese Americans included both immigrant and American-born families. In addition, because many families were from countries not listed on the form, the "other" category represented the most diverse group. It is not possible to make interpretations about cultural values with only information about self-identified ethnic group categories.

This study enrolled a sample that was fairly representative of the ethnic backgrounds of families enrolled in the 15 child care centers. Table 1 shows the percentages of each ethnic group enrolled in the centers and the study. African/African Americans were under-represented in the study with 37% enrolled in the centers and 27% enrolled in the study. Chinese/Chinese American children were slightly over-represented in the study (25% vs 20% center enrollment), as were European American (15% vs 12% center enrollment), and multi-ethnic children (14% vs 7% center enrollment), whereas Latino/Hispanic (10% vs 13% center enrollment) and other ethnic groups (9% vs 11% center enrollment) were slightly under-represented in the study.

Instruments

The lack of instruments validated with ethnically diverse populations created a challenge in planning our evaluation project.^{3,4} Most relevant standardized instru-

Table 1. Comparison of center and study enrollment by ethnic group (N=15 centers)

Ethnicity	Mean center enrollment^a n (%)	Study enrollment^b n (%)
African, African American	277 (37)	180 (27)
Chinese, Chinese American	146 (20)	167 (25)
European American	89 (12)	100 (15)
Latino, Hispanic	95 (13)	67 (10)
Other, including Korean, American Indian, Vietnamese, Laotian, Pacific Islander, Indian	81 (11)	60 (9)
Multi-ethnic	57 (7)	93 (14)
Total	745 (100)	667 (100)

^a Mean center enrollment is the average enrollment of children by ethnic group in study Year 2.

^b Study enrollment is the total number of children in each ethnic group that enrolled in the study over Year 1 and Year 2. Therefore, the study enrollment numbers are higher than mean center enrollment, which only includes Year 2.

ments had been validated with one ethnic group, usually European Americans, and did not have information on conceptual equivalence for other ethnic groups. Administering instruments to participants from different ethnic groups can be a problem if no linguistic, conceptual, or measurement equivalence is established, because it is then difficult to interpret findings for these different ethnic groups.^{4,8,15}

Several approaches exist for establishing linguistic, conceptual, and measurement equivalence for instruments administered to different language groups.^{4,8,12,15,33} One step is to translate the instruments into the language(s) spoken by the ethnic group(s) in the target population.^{34,35} Several researchers have suggested that translations follow specific guidelines: (1) third-grade reading level English, (2) no colloquial language, (3) bicultural and bilingual people should do the translations, and (4) back-translation to the original language should be done by a second person.^{4,9,36}

Decentering is an important process that should occur after the initial translation and back-translation are complete. Decentering involves reviewing and re-translating items that are not equivalent in English and the other language(s) to ensure linguistic and conceptual equivalence. During this process, both languages are considered equally important; for example, the items in English may be altered to obtain equivalence with the other language.⁹ Another approach to establishing conceptual equivalence across languages is to convene a bicultural and bilingual advisory group or focus group representative of the target population to examine each item in an instrument to determine the semantic, syntactic, and pragmatic meanings across languages.

Although many researchers promote the need for

equivalence of meaning across languages, there is some controversy about the need to validate instruments with every ethnic group in a study.⁸ It may be feasible to validate some instruments with the largest ethnic groups in a study, but other instruments may never be considered “standard”; revisions may be made during the decentering process to develop conceptual equivalence across different ethnic groups. In addition, instruments may need to be validated across contexts, and not ethnic groups. Okazaki and Sue⁸ explain that a concept may be equivalent in one cultural setting (e.g., school) for different ethnic groups, but meanings may differ in other contexts. Therefore, the process of developing conceptual equivalence may require frequent modifications to reflect changes within and across cultures over time. Thus, conceptual equivalence is not static, but a continuous process.

In this study of multiple ethnic groups we established the following criteria for selecting instruments: (1) language at a fifth-grade reading level, (2) conceptual relevance to the research questions, and (3) cultural relevance to study population. We tried to attain cultural relevance and linguistic equivalence among the English, Chinese, and Spanish languages because these were the largest ethnic groups in our study. We also established cultural relevance by reviewing the literature and discussing the items with ethnically diverse research staff and community members. Linguistic equivalence had not been previously established for any of the measures we selected. Only one instrument, the Social Competence and Behavior Evaluation (SCBE),³⁶ had been validated in English, Spanish, and French, but it had not been validated for Chinese Americans. Therefore, as a first step to validate the instruments across three ethnic groups, reputable local consultants who were bilingual, bicultural, and native speakers of the language, translated all the parent-completed instruments into Spanish and Chinese. Since we had a limited budget, we chose to translate the instruments into only the two languages spoken by the largest groups in the target population.

A Spanish-speaking consultant translated the parent instruments and informational letters into Spanish and then a second consultant back-translated them into English, according to established translation standards.^{9,12,36} For the Chinese-language instruments and informational letters, one bilingual person translated the instruments into Mandarin, and then a second translator reviewed the documents. This procedure was more efficient and acceptable than back-translation because there are many cultural nuances that affect the meaning of words. Some Chinese words may be back-translated to English differently depending on the translator’s cultural background.

Discrepancies between the Spanish and Chinese translations were resolved by consensus among the evaluation research director, project coordinator, and

Table 2. Informants' ethnicity and parenting attitudes on childrearing (PACR) subscales, Year 1 (*n*=148)

Ethnicity	Warmth ^a mean (SD)	Encouragement ^a mean (SD)	Strictness ^a mean (SD)	Aggravation ^a mean (SD)	<i>n</i> ^b
Chinese, Chinese American	5.2 (.39)	5.0 (.40)	3.7 (.46)	3.4 (.41)	46
African, African American	5.5 (.31)	5.1 (.49)	3.4 (.55)	3.2 (.52)	33
European American	5.7 (.20)	5.5 (.31)	2.5 (.52)	2.7 (.50)	36
Other, Multi-ethnic	5.3 (.52)	4.9 (.60)	3.2 (.87)	3.2 (.70)	33
Total	5.4 (.42)	5.1 (.49)	3.2 (.76)	3.1 (.58)	148

^a *p*<0.001 for subscales by ethnic group.

^b Although 297 parents enrolled in the study, only 50% (*n*=148) of the enrolled families completed the PACR.

translators. The instruments were decentered, that is, they were modified slightly to maintain a consistent meaning across the English, Spanish, and Chinese forms. For example, one English-language item asked for the initials of household members. Since Chinese names do not have initials, we modified this item to ask for first name of household members. Also, the Chinese language does not have words to distinguish between Likert ratings of “never” or “rarely,” so the instruments in all three languages deleted “rarely” as an option.

Our experience with one instrument, Parenting Attitudes on Childrearing (PACR),³⁷ showed that translating instruments does not achieve conceptual equivalence. The PACR has four subscales: warmth, encouragement of independence, strictness, and aggravation. Since the PACR was previously validated only among European Americans, we translated it into Chinese and Spanish. After data collection, preliminary analyses of subscale means across four ethnic groups—Chinese/Chinese-American, African/African American, European American, and other ethnic groups—showed that Chinese/Chinese-American parents were stricter and more aggravated about childrearing than the other groups (Table 2). European Americans and African/African Americans were highest on warmth and encouragement of independence. Therefore, we explored the meaning of some items with Chinese/Chinese-American parents. Supplemental funding supported two focus groups with Chinese-speaking parents to explore the meaning of the items in the strictness subscale with a bicultural, bilingual leader.

Preliminary qualitative analysis showed that Chinese-American parents had different childrearing beliefs, but some of these differences may have been misinterpreted by researchers. For example, the item “I believe that too much affection and tenderness can harm or weaken a child” was usually rated as strongly disagree by non-Chinese families and as moderately or strongly agree by Chinese parents. During the focus groups, the Chinese-American parents stated that “too much” was considered harmful but that affection was interpreted as “doing things for a child,” not physical affection. Parents from other ethnic groups may have interpreted

“affection” as meaning only physical affection, such as holding and hugging.

This experience suggests that future research would benefit by eliciting more in-depth information about cultural values involved in the central constructs of the research before the instruments are administered. Focus-group discussions are often a useful way to obtain this information. Moreover, focus groups should be conducted with all majority ethnic groups selected for participation in the research. Understanding more about cultural values and beliefs^{4,38} may help explain ethnic differences found in research studies.³⁹

Child Interviews

We planned to establish standardized data collection procedures for interviewing children to ensure comparable experiences for all study children. The challenge was that the research staff and children included different ethnic groups with different communication styles. The text of one child interview measure, Hostile Attribution Bias (HAB), was initially edited by our staff and a child care teacher not involved in the study to ensure that the words were understandable to preschool-aged children. The research staff then conducted pilot interviews with study children using the edited HAB measure. Since this measure had not been validated on a multi-ethnic sample, we pretested it and modified it further to improve children's understanding, standardize administration, and establish interrater reliability.

The format and content for the HAB interview was based on social information-processing studies with young children.^{40–42} Our modified HAB measure had four short “real-life” scenarios. For example, “A child at the snack table spills juice and your pants get wet. Was the child being ‘mean’ or ‘not mean’?” Each research assistant pretested the HAB with ten children. We found that some of the Chinese/Chinese-American children had difficulty with the interview. They had poor eye contact with the interviewer and gave inconsistent responses. Many of the Chinese/Chinese-American children did not respond to any of the interview questions.

We explored new ways to standardize the interview process and improve children's responses. The interviewer was changed to a raccoon puppet named Tam, who was gender and ethnically neutral. The staff also simplified and shortened the scenarios, added two open-ended questions, and incorporated standard prompts (additional questions). In addition, a "warm-up" story was added before the scenarios to introduce Tam and then say, "Tam wants to tell you some stories and ask you some questions." The research assistants standardized their interviews by role modeling the puppet interview, critiquing each other's interview style, and being observed by the project coordinator on-site at each child care center. After these changes were made, the research assistants reported that the children enjoyed the puppet interviews and provided more thorough answers to the questions. The research staff also achieved high inter-rater reliability with the modified data collection procedures.

However, Chinese/Chinese-American children continued to respond to the puppet interview differently than the other children. The Chinese/Chinese-American children generally did not respond to many questions and asked the research assistant, "What was the correct answer?" Since the Chinese culture places high value on conforming to the group (e.g., child care center) norm and not doing something wrong,³⁹ these children may not have been comfortable answering questions posed by an adult or responding to situations involving a child "doing something wrong," which could be socially embarrassing. To ensure that children's lack of response was not due to language problems, the researcher repeated the interviews in Chinese, as needed, which did not markedly increase the number of responses. These issues call into question the validity of this measure for Chinese/Chinese-American preschool children.

Future Directions

In summary, working with parents, teachers, and children from ethnically diverse backgrounds offers new challenges. We learned many lessons during each phase of the Safe Start project. Issues of diversity affected all levels of the research project. In retrospect, the project would have benefited from more time and resources devoted to the planning and development phases to incorporate more culturally sensitive methods. The specific challenges encountered were: (1) designing an ethnically relevant, violence-prevention curriculum for child care teachers and parents; (2) recruiting ethnically diverse staff; and (3) using study methods that were culturally sensitive, such as translating instruments, conducting focus groups, and using appropriate data collection procedures during child interviews.

Lessons Learned

The first lesson we learned was about developing a culturally relevant curriculum on violence prevention for child care teachers and parents of preschool-aged children. The second lesson was hiring capable, culturally competent, and ethnically diverse staff, which required more time than we had planned. It would have been ideal to allocate more time and resources to the planning phase of the research to allow for instrument adaptation and development. This would have allowed for more extensive meetings with advisory and community groups, pretesting with small groups, and pilot testing of the instruments and interview procedures. Although we were able to devote sufficient resources to translation, back-translation, and decentering, we did not pretest instruments with different ethnic groups in focus groups or small groups. This would have helped assess the cultural meaning of the items and appropriate approaches to data collection procedures before the study started. Integrating qualitative and quantitative methods would have helped establish conceptual equivalence of the instruments across diverse ethnic groups. In addition, the entire recruitment and interview procedures could have been pilot tested more extensively to ensure appropriateness across ethnic groups. Lastly, researchers should obtain information about other attributes related to ethnicity beyond self-identification of ethnic group, such as race, affiliation with other members of one's group, acculturation, language, years in the United States, generation status, and ideally, cultural values that may be relevant to the research hypotheses.^{2,8,33}

In the future, multicultural research needs more support among scientists to establish universal principles and theories.⁴³ Instruments and interventions need to be more sensitive to our ethnically diverse society and world.² Research studies should include multiple measures and multiple methods of assessment.^{5,8}

This paper highlights some of the issues that arose while designing and evaluating a violence-prevention project for preschool-aged children. The challenges and experiences of the Safe Start program may be familiar to some and novel to others. The authors offer this work as an example, and not as an exemplar. Research and interventions with diverse populations are becoming more common, and we hope to learn from our experiences and those of others.

We are grateful to the child care staff, parents, and children in the participating centers for their time and effort. We also thank the research assistants, including Kim To, BA, Anika Trancik, BS, Raber Wharton, MA, and Mimi Wolff, MSW, and other colleagues, W. Thomas Boyce, MD, David Ragland, PhD, and Robin Ikeda, MD.

Safe Start was developed and expanded under grants from

the U.S. Department of Education, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, David and Lucile Packard Foundation, California Department of Education, and Child Development Training Consortium. The Safe Start content does not necessarily represent the policy nor endorsement of the grantors.

References

- Children Now. County data book. Oakland, CA: Children Now, 1999.
- Betancourt H, Lopez SR. The study of culture, ethnicity, and race in American psychology. *Am Psychol* 1993;48:629-37.
- Dumas J, Rollick D, Prinz RJ, Hops H, Blechman EA. Cultural sensitivity: problems and solutions in applied and preventive intervention. *Appl Prev Psychol* 1999;8:175-96.
- Pachter L, Harwood RL. Culture and child behavior and psychosocial development. *J Dev Behav Pediatr* 1996;17:191-8.
- Garcia Coll C, Lambert G, Jenkins R, et al. An integrative model for the study of developmental competences in minority children. *Child Devel* 1996;67:1891-914.
- Rowe D, Laxzanyi A, Flannery D. No more than skin deep: ethnic and racial similarity in developmental process. *Psychol Rev* 1994;101:396-413.
- Morrison J, Rodgers LS. Being responsive to the needs of children from dual heritage backgrounds. *Young Child* 1996;52:29-39.
- Okazaki S, Sue S. Methodological issues in assessment research with ethnic minorities. *Psychol Assess* 1995;7:367-75.
- Marin G, Marin BV. Research with Hispanic populations. Newbury Park: Sage Publications, 1991.
- Lieberman A. What is culturally sensitive intervention? *Early Child Dev Care* 1989;50:197-204.
- McLoyd V. Changing demographics in the American population: implications for research on minority children and adolescents. In: McLoyd V, Steinberg L, eds. *Studying minority adolescents: conceptual, methodological, and theoretical issues*. Mahwah, NJ: Lawrence Erlbaum Associates, 1998:3-28.
- Rogler L. Methodological source of cultural insensitivity in mental health research. *Am Psychol* 1999;54:424-33.
- Andersen M. Studying across difference: race, class, and gender in qualitative research. In: Stanfield JH, Dennis, RM, eds. *Race and ethnicity in research methods*. Newbury Park: Sage Publications, 1993:39-52.
- Bronfenbrenner U. Ecology of the family as a context for human development: research perspectives. *Dev Psychol* 1986;22:723-42.
- Hughes D, Seidman E, Williams N. Cultural phenomena and the research enterprise: toward a culturally anchored methodology. *Am J Community Psychol* 1993;21:687-703.
- Bredekamp S. Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington, DC: National Association for the Education of Young Children, 1986.
- Derman-Sparks L. *Anti-bias curriculum: tools for empowering young children*. Washington, DC: National Association for the Education of Young Children, 1989.
- Mallory B, New R. *Diversity and developmentally appropriate practices: challenges for early childhood education*. New York: Teachers College Press, 1994.
- Sue D, Sue D. *Counseling the culturally different: theory and practice*. New York: John Wiley and Sons, 1990.
- Osofsky J. The effects of exposure to violence on young children. *Am Psychol* 1995;50:782-8.
- Garbarino J, Dubrow N, Kostelny K, Pardo C. *Children in danger: coping with the consequences of community violence*. San Francisco, CA: Jossey-Bass, 1992.
- Clark R, Anderson N, Clark V, Williams D. Racism as a stressor for African Americans: a biopsychosocial model. *Am Psychol* 1999;54:805-16.
- Kunesh L, Farley J. Collaboration: the prerequisite for school readiness and success (Rep. No. ERIC document EDO-PS-93-8). Urbana, IL: ERIC Clearinghouse and Elementary and Early Childhood Education, 1993.
- Aber J, Brown JL, Chaudry N, Jones SM, Samples F. The evaluation of the resolving conflict creatively program: an overview. *Am J Prev Med* 1996;12:82-90.
- Huesmann L, Maxwell CD, Eron L, et al. Evaluating a cognitive/ecological program for the prevention of aggression among urban children. *Am J Prev Med* 1996;12:120-8.
- Hudley C, Friday J. Attributional bias and reactive aggression. *Am J Prev Med* 1996;12:75-81.
- Hernandez M, Isaacs M. *Promoting cultural competence in children's mental health services*. Baltimore, MD: Paul H. Brookes Publishing, 1998.
- McCracken J. *Valuing diversity: the primary years*. Washington, DC: National Association for the Education of Young Children, 1993.
- Bowman B, Stott F. Understanding development in a cultural context: the challenge for teachers. In: Mallory B, New R, eds. *Diversity and developmentally appropriate practices: challenges for early childhood education*. New York: Teachers College Press, 1994:119-34.
- Powell D. *Families and early childhood programs*. Washington, DC: National Association for the Education of Young Children, 1989.
- Sue S, Fujino D, Hu L, Takeuchi D, Azne N. Community mental health services for ethnic minority groups: a test of the cultural responsiveness hypothesis. *J Consult Clin Psychol* 1991;59:533-40.
- Florsheim P, Tolan P, Gorman-Smith D. Family processes and risk for externalizing behavior problems among African American and Hispanic boys. *J Consult Clin Psychol* 1996;64:1222-30.
- Cauce A, Coronado N, Watson J. Conceptual, methodological, and statistical issues in culturally competent research. In: Hernandez M, Isaacs MR, eds. *Promoting cultural competence in children's mental health services*. Baltimore, MD: Paul H. Brookes Publishing Co., 1998:305-30.
- Devins M, Beiser M, Dion R, Pelletier LG, Edwards RG. Cross-cultural measurements of psychological well-being: the psychometric equivalence of Cantonese, Vietnamese, and Laotian translations of the Affect Balance Scale. *Am J Public Health* 1997;87:794-800.
- Stone L, Payne C. The translation process: expanding the utility and validity of the project protocol. The Chicago Project News: Newsletter from the Project on Human Development in Chicago Neighborhoods 1996;2:1-5.
- Dumas J, Martinez A, LaFreniere PJ. The Spanish version of the social competence and behavior evaluation (SCBE) preschool edition: translation and field testing. *His J Behav Sciences* 1998;20:255-69.
- Goldberg W, Easterbrooks MA. Role of marital quality in toddler development. *Devel Psychol* 1984;20:504-14.
- Steinberg L, Fletcher A. Data analytic strategies in research on ethnic minority youth. In: McLoyd V, Steinberg L, eds. *Studying minority adolescents*. Mahwah, NJ: Lawrence Erlbaum Associates, 1998:279-94.
- Chao R. Beyond parental control and authoritarian parenting style: understanding Chinese parenting through the cultural notion of training. *Child Devel* 1994;65:1111-9.
- Dodge K, Bates JE, Pettit GS. Mechanisms in the cycle of violence. *Science* 1990;250:1678-83.
- Crick N, Dodge KA. Social information-processing mechanisms in reactive and proactive aggression. *Child Devel* 1996;67:993-1002.
- Rubin K, Daniels-Beirness T, Hayvren M. Social and social-cognitive correlates of sociometric status in preschool and kindergarten children. *Can J Behav Science* 1982;14:339-49.
- Sue D, Bingham R, Porche-Burke L, Vasquez M. The diversification of psychology: a multicultural revolution. *Am Psychol* 1999;54:1061-9.