THE JOHN D. AND CATHERINE T. MACARTHUR FOUNDATION

Series on Mental Health and Human Development

DISCOVERING SUCCESSFUL PATHWAYS in Children's Development

Mixed Methods in the Study of Childhood and Family Life

EDITED BY Thomas S. Weisner

The University of Chicago Press
Chicago and London

Pianta, R. C. 1999. *High-Risk Children in Schools.* New York: Routledge.
Pianta, R. C., and D. Walsh. 1996. *High-Risk Children in the Schools: Creating Sustaining Relationships.* New York: Routledge.
Rhodes, J. E., J. B. Grossman, and N. Resch. 2000. "Agents to Change: Pathways through Which Mentoring Relationships Influence Adolescents' Academic Adjustment." *Child Development* 71:1662–1671.
Styles, M. B., and K. V. Morrow. 1995. *Understanding How Youth and Elders Form Relationships: A Study of Four Linking Lifetimes Programs.* Philadelphia: Public/Private Ventures.
Super, C. M., and S. Harkness. 1997. "The Cultural Structuring of Child Development." In *Handbook of Cross-cultural Psychology,* vol. 2, *Basic Processes and Developmental Psychology,* 2nd ed., ed. J. Berry, P. Dasen, and T. S. Saraswathi, 1–39. Boston: Allyn and Bacon.
———. 1999. "The Environment as Culture in Developmental Research." In *Measuring Environment across the Life Span: Emerging Methods and Concepts,* ed. S. L. Friedman and T. D. Wachs, 279–323. Washington, DC: American Psychological Association.
Super, C. M., S. Harkness, N. van Tijen, and E. van der Vlugt. 1996. "The Three R's of Dutch Child Rearing and the Socialization of Infant State." In *Parents' Cultural Belief Systems: Their Origins, Expressions, and Consequences,* ed. S. Harkness and C. M. Super, 447–466. New York: Guilford Press.
Valdes, G. 1996. *Con Respeto: Bridging the Distances between Culturally Diverse Families and Schools.* New York: Teachers' College.
Whiting, B. B., and C. P. Edwards. 1988. *Children of Different Worlds: The Formation of Social Behavior.* Cambridge: Harvard University Press.
Whiting, B. B., and J. W. M. Whiting. 1975. *Children of Six Cultures: A Psychocultural Analysis.* Cambridge: Harvard University Press.

11

Including Latino Immigrant Families, Schools, and Community Programs as Research Partners on the Good Path of Life (*El Buen Camino de la Vida*)

Catherine R. Cooper, Jane Brown, Margarita Azmitia, and Gabriela Chavira

In industrialized countries, students' pathways through school to work have been described as an academic pipeline. Many democracies have laws regarding equal access to education, and each class of 5-year-olds begins school representing their community's demographics. But so many low-income, ethnic-minority, and immigrant youth—especially males—leave school and its career opportunities that as 20-year-olds, they are less likely to be in college and more likely to be in prison than middle-income, ethnic-majority youth. As immigrant and ethnic-minority youth make up growing segments of school enrollments and populations in many nations, the *academic pipeline problem* has emerged as immigrants, refugees, and guest workers remain in host countries and try sending their children through school. A college education is not the only definition of success in life, but in all ethnic groups education is strongly linked to income, and youth who leave school with low skills face lives of poverty that may lead them toward illegal work. Most programs to address the academic pipeline problem focus on early childhood or the years from high school to college, with only a few focusing on

childhood. Still, after years of civil rights laws, programs, and policies, progress has stalled, so new coalitions are working on the academic pipeline problem, and scholars are rethinking theories, research methods, and their relationships with research participants.

Rethinking Theories: Capital, Alienation, Ecocultural, and Challenge Models

Debates on ethnic diversity, inclusion, and schooling reach across the social sciences, with scholars participating actively in these interdisciplinary coalitions around the pipeline problem (Cooper and Denner 1998). *Capital* models suggest that children with college-educated parents develop college-based career identities and achieve at higher levels than those whose parents have less education, thereby reproducing social hierarchies from one generation to the next (Coleman 1988). *Alienation* models (Fordham and Ogbu 1986) argue that racial and economic barriers dim ethnic-minority parents' high hopes for their children's future and their families' upward mobility. These barriers also foster their children's oppositional identities that affirm ties with peers and buffer against failure in school and work. *Ecocultural* models, based on Vygotsky's sociohistorical analysis of cultural continuity and change, suggest that all families have tools for adaptation and well-being for children that foster change or continuity across contexts (Reese et al. 1995; Weisner, Gallimore, and Jordan 1993). Variations in families' circumstances, goals, and adaptation strategies are associated with variations in school performance. And *challenge* models, such as the Bridging Multiple Worlds Model (Cooper 1999), suggest that challenges such as immigration, poverty, or racism can motivate children and youth to succeed on behalf of families and communities and prove gatekeepers wrong, and that challenges in the context of support foster career and college identity formation.

The Bridging Multiple Worlds Model links concepts from anthropology, psychology, sociology, economics, and education to discover how youth navigate their worlds of families, peers, schools, and communities in identity development and pathways to adulthood. This multilevel model maps how individuals, relationships, institutions, and cultural communities can each serve as a bridge across worlds as students move along these pathways. Although past research on ethnic diversity and the pipeline problem has focused on dropouts, new research asks under what conditions immigrant, low-income, and ethnic-minority students persist and succeed in school. This model predicts that students who coordinate resources with challenges will be more successful navigating their personal, relational, institutional, and cultural pathways to college and adult work and family roles. Five key elements are highlighted in the model:

1. *Demographics along the academic pipeline*—of families' national origin, ethnicity, home languages, education, and occupation—reflect diversity and equity in access to education from childhood to college.
2. *Children's identity pathways* to college, careers, and family roles start in childhood and link generations.
3. *Children's math and language academic pathways* to college and careers start in childhood and emerge in five patterns: consistently high, declining, "back on track" (declining, then increasing), increasing, and persisting with low grades.
4. *Challenges and resources exist across children's worlds* of families, peers, schools, and communities.
5. *Cultural research partnerships* reach across lines of national origin, ethnicity, social class, and gender; they can boost resources across worlds for pathways to college and connect children, families, schools, community programs, and university staff all as researchers.

In collaboration with colleagues and students, we have conducted a series of studies to test, clarify, and apply the Bridging Multiple Worlds Model in communities with diverse cultural and ethnic groups, including American youth of African, Chinese, Filipino, Latino, European, Japanese, and Vietnamese descent as well as Japanese youth (Cooper 1999; Cooper et al. 2002). We traced math pathways from three samples (academically *inclusive* school-based samples, *selective* programs, and *competitive* programs) and mapped variation within cultural groups and similarities and differences across groups (Cooper 2001).

This chapter focuses on two of these studies. Study 1 involves an *inclusive* school-based sample of 100 low-income Mexican American and European American children whom we followed as they moved from elementary to middle school (Azmitia and Brown 2002; Azmitia et al. 1996; Azmitia and Cooper 2001). We traced continuity and change in the aspirations of the parents and children as well as parents' guidance toward attaining these goals. Study 2, part of the MacArthur Foundation California Childhoods Project, involves over 500 youth in the Cabrillo Advancement

Program (CAP), a *selective* community college outreach program that awards scholarships to sixth-grade students from low-income families and offers activities to help students stay on track to college (Cooper, Denner, and Lopez 1999). In this chapter we draw from these two studies to show how mixed-methods research advances science, policy, practice, and inclusiveness for successful pathways through childhood.

Inclusion and Mixed Methods: Two Approaches

In studying inclusion in educational opportunities among ethnically diverse youth and families, we have found two mixed-methods approaches especially valuable: linking longitudinal case studies to quantitative variable-based analysis and building *interpretive cycles* in cultural research partnerships. These partnerships reach across lines between community insiders and outsiders and among science, policy, and practice and across levels of analysis from cultural communities to institutions, relationships, and individuals over time (Cooper 1997; Denner et al. 1999). These two approaches not only build pathways to college for youth and families but, by using them together, strengthen *ecological validity* by considering local meanings and *external validity* by comparing within and across groups through statistical analyses.

Linking Variable- to Case-Based Analyses over Time

In comparing models of pathways through childhood, we have assessed group patterns through variable-based longitudinal analyses and developed longitudinal case studies to map configurations of demographics, identities, resources, and challenges across worlds in predicting each child's academic pathway. We draw on qualitative case study methods (Mertens 1994) to conduct theory-based work, in which scholars develop research questions from theoretical models; derive hypotheses from models; specify units of analysis; map the logic linking hypotheses to data and criteria to interpret findings; specify methods, including samples, measures, and data analysis; report results by mapping data in terms of hypotheses or questions; and discuss findings by linking data to the original model, refining the model, and comparing findings with other models. These steps are typical of quantitative analyses but are not always applied in case studies. We also use Qualitative Comparative Analysis (QCA; Ragin 1994) in Study 2.

Cultural Research Partnerships and the Interpretive Cycle

We conducted individual and group interviews to develop surveys that include open-ended questions, and we used multivariate statistical analyses with Prediction Analysis (von Eye and Brandtstadter 1988) and QCA (Ragin 1994) to examine students and families as cases. This cycle includes participants' and researchers' insights about both quantitative and qualitative findings. Participants' reflections deepen our understanding of poverty, immigration, racism, early parenting, incarceration, physical disability, and gender, and how, paradoxically, such obstacles are also resources for some youth when they operate—in the words of one program director—as "good burdens" that motivate students to succeed. We use these reflections in analyzing our initial qualitative and quantitative results. These mixed-methods strategies have led to productive revisions of our model, measures, and applications. Getting quantitative methods to capture what we know qualitatively as part of traditional science is usually not discussed in published articles. Although scholars have done this for years as pilot work, formalizing and presenting this cycle strengthen our science, policy, and practice (Greene and Caracelli 1997).

Study 1, Latino Immigrant Parents' Beliefs about and Guidance for Their Children's Good Path of Life

A recent study by members of our Study 1 research team focused on parents' concepts of the "good path of life (*el buen camino de la vida*)—first studied by Reese et al. (1995). (The following discussion draws extensively on Azmitia and Brown 2002.) The concept of the "good path of life" is common across many cultural communities. Reese and colleagues found that Latino parents spontaneously offered beliefs about the path of life when answering questions about their hopes and dreams for their children's futures. Parents mentioned challenges children faced staying on the good path of life and guidance they used to help them. They also held high aspirations for their children's education (Cooper et al. 1994; Goldenberg and Gallimore 1995; Henderson 1997) that were part of their beliefs about moral development (Delgado-Gaitán 1992; Reese et al. 1995; Valdés 1996). In particular, immigrant Latino parents articulated a concept of *educación* that was broader than what the English word "education" conveys, with moral development as its central component and school achievement only one element. Parents used the metaphor of following the good path of life,

el buen camino de la vida, to explain their goals as a set of beliefs that related moral development to schooling and more general positive and negative development. In figure 1.1, Goldenberg, Gallimore, and Reese (chap. 1, this volume) show the embedded nature of moral and academic well-being in the concept of the good path of life.

We built on the work of Reese and her colleagues to investigate two key questions. First, we examined parents' *descriptions and definitions* of the good and bad paths of life for their own children as they moved from childhood to early adolescence, parents' *explanations* for where and how they placed their children on the path of life, the *challenges* they saw ahead for their children, and what *guidance* they used along the path, through crossroads, or to help their children get back on the path. In contrast to Reese et al.'s interviews with parents of younger children, we focused on parents of older children in the transition to adolescence. This time is especially salient for immigrant Latino parents, who have expressed concern that in the United States, older children spend more time outside the family and under the influence of "malas compañías" (bad influences, typically peers) than in their home countries (Kroesen, Reese, and Gallimore 1998).

Second, we examined to what extent parents' beliefs and practices showed variation and change within a cultural community. Do parents' beliefs about the good path of life change over time? Previous research shows that parents' beliefs about development influence their guidance (Goodnow 1988; Sigel and McGillicuddy-Delisi 1992) and that shared values and beliefs also organize and motivate practices of cultural communities (Strauss 1992). Immigration, schooling, and knowledge about parenting can change parents' and communities' beliefs and practices (Harkness, Super, and Keefer 1992; Sabogal et al. 1987). Rather than assume uniformity across a community, we explored variation among Latino families (Leyendecker and Lamb 1999; Romo and Falbo 1996).

To do so, we asked to what extent parents held different beliefs for different children in the family. We anticipated similarities across parents in their general ideas about the path of life but variation in views of their own children, including where they saw each child on the path, challenges they saw ahead, and ways parents guided them. For example, if siblings had different peers or academic profiles, parents' beliefs about challenges their children faced and guidance to help them stay on the good path might also differ. We considered whether parents saw different challenges for their younger and older children and whether their guidance strategies changed when one child strayed off the good path or was at a crossroads. Just as parents' expectations for their children's achievement may change to reflect changes in their school performance (Goldenberg et al. 2001), parents may also reexamine other beliefs about development when problems arise. In sum, we elicited immigrant Latino parents' descriptions and definitions of the good and bad paths and asked them to explain where each child was on the path, challenges the child faced, and guidance the parent used. We examined parents' beliefs about younger and older siblings to assess whether children's age, gender, or experiences influenced parents' beliefs.

Methods

Research participants. Participating families were drawn from a larger study of the transition from elementary to middle school among 100 low-income Latino and European American families (Azmitia et al. 1996; Azmitia and Cooper 2001; Cooper et al. 1994). The 27 Latino families who are the focus of this report each had two siblings, the younger in the first year of middle school (the target child in the larger study) and the older also in school. The younger children were 11 or 12 years old at the beginning of the study, and older siblings ranged from 12 to 18. All but three fathers and all but two mothers were born in Mexico, with fathers averaging 7.6 years of education and mothers, 7.4 years. Most parents worked in semiskilled or unskilled occupations, typically in hotels, restaurants, factories, or canneries. All but three families had annual incomes of $40,000 or less, and children were receiving free or reduced-price lunches at school.

The path of life interview. Parents were interviewed at home in their language of choice, typically Spanish. Interviews were audiotaped and parents' answers transcribed and coded in the language of the interview. The interviewer showed parents two diagrams: (1) a straight path with lines showing crossroads and challenges and (2) a path forking into *el buen camino* (the good path) and *el mal camino* (the bad path), with the fork labeled *encrucijadas* (crossroads) and *retos* (challenges) and connecting paths between the forks to show that a person might stray from the good path but return to it (see fig. 11.1). Parents were asked to choose the path diagram that best fit their idea of the good path (*el buen camino*) for the interview. Most Latino parents chose the forked path.

Parents were then asked the following open-ended questions:

What does "the good path of life" mean to you? (¿Qué significa para usted "el buen camino de la vida"?) What does the "bad path of life" mean to you? (¿Qué significa para usted "el mal camino de la vida"?)

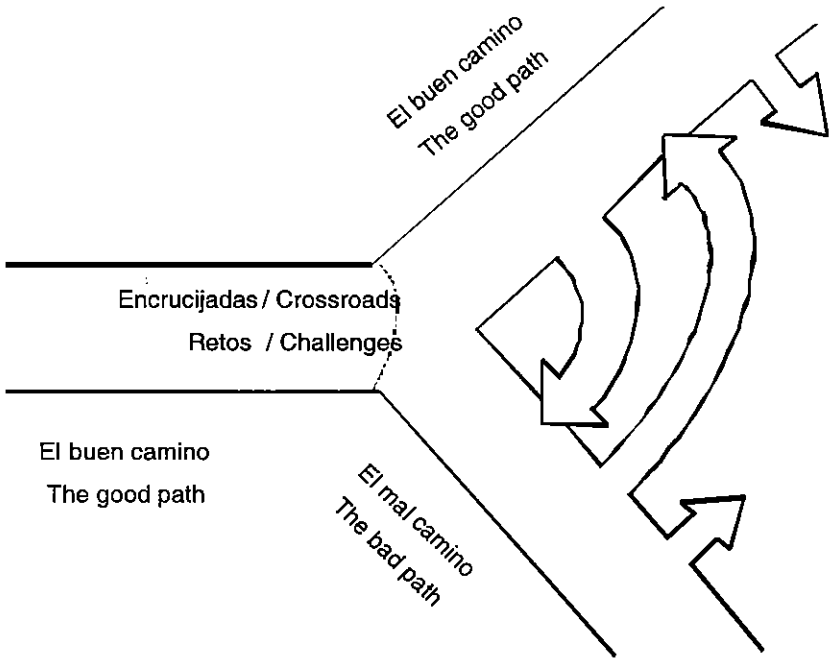

Figure 11.1. Diagram for the path of life interview (Azmitia et al. 1994, revised 1998)

Each of the following questions was asked about the younger and older siblings:

Thinking about your child and this idea of the good and the bad paths, could you point to the place where you would put him/her at this time? Why would you choose this place? (Pensando en su hijo/a y en esta idea del buen y el mal camino: ¿Podría usted decirme donde pondría a su hijo/a? ¿Por qué escogería usted ese lugar?) (The parent wrote the child's name on the diagram at the identified location.)

Has there been a time in the past that you thought that your child was on the bad path or at a crossroads? If yes, how old was he or she? Why do you think that he or she was there? (¿Ha habido alguna vez en el pasado que ud. penso que su hijo/a estaba en el mal camino o en las encrucijadas? Si es así, ¿qué edad tenía? ¿Porqué piensa que su hijo/a estaba allí?)

What do you think the challenges of staying on or choosing the good path might be for your child? (¿Cuáles piensa usted que son los retos que va a encontrar su hijo/a para que siga el buen camino o sobrepase las encrucijadas?)

Is there anything you are doing to keep your child on the good path?

(¿Está usted haciendo algo para que su hijo/a siga en el buen camino [o escoga el buen camino]?)

Inductive thematic coding of interviews. Themes from parents' responses were derived inductively from transcripts on four topics: parents' *descriptions* of the good and bad paths of life, their *explanations* for where each child stood relative to the good path, *challenges* parents anticipated for their children's progress along the good path, and *guidance* parents used to encourage their children to stay on the good path or return to it if they strayed.

Parents' descriptions of the good path included four themes: (1) respect for values and morals reflecting aspects of the concept of *educación,* included showing proper demeanor, living a moral and responsible life, behaving as parents had taught, being responsible to home and family, being a respectful person, and developing oneself spiritually; (2) avoiding bad influences, drugs, vices, and bad companions; (3) education and work, including realizing one's goals and performing well in school and work; and (4) marriage and family, without mentioning family values or obligations.

Parents' descriptions of the bad path included six themes: (1) alcohol and drug use; (2) bad companions; (3) poor character; (4) being estranged from home; (5) illegal activities; and (6) abandoning goals.

Explanations for why parents placed their children at a particular place on the path included four themes: (1) peer influence, (2) developmental stage, (3) behavior, and (4) character or attitude.

Up to three themes were coded in parents' answers concerning the challenges they anticipated for each child: (1) peer influence, including boyfriends or girlfriends; (2) school-related, including academic and social challenges and violence or gang activity at schools; (3) adolescence; (4) drugs; and (5) personal character (including mood or attitude).

Up to three themes were coded for each parent's response to the forms of guidance they used, with five themes emerging: (1) *consejos* (advise and teach values); (2) role model; (3) emotional support; (4) monitor or restrict; and (5) involve outside assistance, including school, therapists, or church.

Coders made global ratings of whether or not parents expressed concern about each child's progress on the good path, with particular attention to where parents indicated the child was on the path diagram and whether they believed the child had ever strayed off the good path or been at a crossroads. Parents were also asked explicitly how often each child made them proud, whether always, often, occasionally, or never.

The two coders who developed the coding system coded all transcripts and resolved differences by consensus. Reliability was established using

transcripts from nine families. The percent agreement and modified kappa for each code were Good Path (0.89, 0.83), Bad Path (0.95, 0.94), Explanations (0.94, 0.93), Challenges (0.88, 0.87), Guidance (0.88, 0.87), and Concern (0.95, 0.90).

Key Findings

Latino parents' beliefs and guidance about their children's life pathways, consistent with the ecocultural models of Reese and her colleagues, emphasized the encompassing moral qualities of these pathways. In addition, consistent with the Bridging Multiple Worlds Model, although parents saw peers as the greatest challenge for children staying on the good path, most indicated their fears had not yet been realized. For children at a crossroads or on the bad path, peers were a major factor in parents' views of what had derailed them. Parents were more concerned about older than younger siblings. *Consejos* (advice) was the most frequently used guidance strategy, although parents experiencing difficulties with their children also restricted and monitored their activities.

The good and the bad paths. Table 11.1 presents themes parents most frequently expressed in defining the good and bad paths of life. The most frequent concerned being respectful and maintaining high morals and values and avoiding bad influences, or *malas compañías* (bad company), typically peers. Education and work were always associated with morality. Some parents emphasized studying or working hard, while others stressed achievement. Several parents linked education with moral development, as when one explained that without an education one was more likely to follow a bad path. Marriage and family themes were cited by parents of both girls and boys. Descriptions of the bad path were more specific behaviors and activities, with alcohol and drug use most frequent. Multiple activities were often cited, including *andar en la calle* (hanging out in the streets), associating with *malas compañías* (bad company), and engaging in gang activity.

Table 11.1. Themes from Parents' Descriptions of the Good and Bad Paths of Life Following Child's Transition to Junior High School

Theme	Percent (frequency)
Good path:	
Respect, morals, and values	81 (22)
Avoiding bad influences	33 (9)
Education and work	33 (9)
Marriage and family	11 (3)
Bad path:	
Alcohol and drug use	56 (15)
Bad companions	33 (9)
Poor character	26 (7)
Being estranged from home	15 (4)
Illegal activities	19 (5)
Abandoning goals	14 (4)

Source: Azmitia and Brown 2002.
Note: The sum of percentages exceeds 100 because parents could cite more than one theme. No parent's descriptions included more than two themes.

To explain where their children were on the path, parents cited their children's behavior, their peers, and children's character or attitude; parents cited peers as challenges for their children more than three times as often as school. Parents gave *consejos* about three times as often as monitoring or restricting children's activities. Interestingly, emotional support was less frequently cited as a strategy for keeping children on the good path, and seeking outside assistance was rare.

Age and gender patterns. Table 11.2 compares the patterns of parents' explanations, challenges, and guidance on the good path for the younger and older siblings. When the number of parents citing different themes in explanations, challenges, and guidance was compared with McNemar's chi-square test for related samples (Siegel and Castellan 1988), more parents cited peers' influence on older than younger siblings in their explanations (40% vs. 14%, $z = 2.83$, $p < .01$) and as challenges for daughters (37% vs. 22%, $z = 2.64$, $p < .01$). Parents of daughters more often said they monitored or restricted activities than did parents of sons (35% vs. 19%, $z = -3.18$, $p < .01$).

Similarities and variation in parents' concern and pride. Similarities in parents' beliefs about the good path, challenges, and guidance may reflect enduring cultural belief systems (D'Andrade and Strauss 1992) or more universal concerns that children live a moral life and avoid bad peers. Among our sample of 27 families, 5 expressed concern about younger and 16 about older siblings. Parents who did not express concern were more likely to report using advice (*consejos*) (73% vs. 62%, $z = -2.56$, $p < .05$), but parents who did so were more likely to monitor or restrict their children (43% vs. 13%, $z = -2.00$, $p < .05$). Thus, parents used more direct interventions when their children were already engaging in behaviors that concerned them.

To look more closely at similarities and variation within families, we used Prediction Analysis (von Eye and Brandtstadter 1988). Prediction

Table 11.2. Themes in Parents' Explanations for Placement of Younger and Older Siblings on the Path of Life, Child's Challenges in Staying on the Good Path, and Parents' Guidance

	Percent (frequency)		
Theme	Younger	Older	Total
Explanations:			
Behavior	71 (15)	44 (11)	56 (26)
Peer	14 (3)	40 (10)	28 (13)
Personal character or attitude	33 (7)	24 (6)	28 (13)
Developmental stage	24 (5)	12 (3)	17 (8)
Other	9 (2)	16 (4)	13 (6)
Challenges:			
Peers	74 (18)	73 (19)	74 (37)
School related	17 (4)	32 (8)	24 (12)
Drugs	13 (3)	4 (1)	8 (4)
Personal character or attitude	13 (3)	2 (1)	8 (4)
No challenges	8 (2)	4 (1)	6 (3)
Adolescence	4 (1)	0	2 (1)
Other	17 (4)	15 (4)	16 (8)
Guidance:			
Consejos (advice)	64 (16)	73 (19)	69 (35)
Monitor or restrict	28 (7)	23 (6)	25 (13)
Emotional support	20 (5)	19 (5)	19 (10)
Role model	16 (4)	4 (1)	10 (5)
Outside assistance	9 (2)	8 (2)	8 (4)
Other	4 (1)	15 (4)	10 (5)

Source: Azmitia and Brown 2002.
Note: The sum of percentages exceeds 100 because parents could give more than one response; up to three were coded per parent.

Analysis tests specified relations among cross-classified categorical data to assess hypothesized associations between two or more categorical variables or attributes. Like chi-square analysis, computation is based on cross-classifying predictors with criteria and tests the difference between observed and expected frequencies, but unlike standard chi-squares, prediction analysis compares estimated with observed cell frequencies only for particular cells specified a priori rather than across all cells. These "hit cells" contain events confirming the prediction. The success of a prediction is defined by a proportional reduction in errors, represented by "del" (von Eye 1990; von Eye and Brandtstadter 1988). Del is a descriptive statistic that indicates "strong" or "weak" support for a hypothesis evident in a data matrix and hit cell pattern. Prediction Analysis can generate a

measure of statistical probability (z), but because z depends on sample sizes (power), strong descriptive evidence can support a particular hypothesis yet not be statistically significant.

We used Prediction Analysis to examine parents' concerns about one or both children, expressed during their path-of-life interview, in relation to pride in their younger child. Parents' interviews were rated as not concerned about either child, concerned about the older sibling only, or about both. Parents' reported pride in their younger child was coded as "always," "often," or "occasional-to-rare." We tested the hypothesis that those parents not concerned about either child would be more likely to report they were always proud of their younger child, those concerned about the sibling would be more likely to report they were often proud of the younger child, and those concerned about both children would be more likely to be occasionally-to-rarely proud of their younger child. Prediction Analysis (see table 11.3) yielded strong support for the hypothesis that parents' pride in their younger child was tempered by concern about both children on the path of life ($z = 2.75$, del = .38). As part of our interpretive cycle, we continue to learn about interrelations of feedback about one child for parents' views of other children and how the family as well as individual children may be key units of analysis for understanding successful pathways through childhood.

Longitudinal case studies. When we conducted follow-up case studies, parents who saw their children on the bad path or crossroads saw school

Table 11.3. Prediction Analysis: Is Parents' Pride in the Younger Child Tempered by Concern about One or Both Children on the Path of Life?

	Make you proud?		
Concern on path interview	Always	Often	Occasional-to-rare
Neither	6*	2	3
	3.67	*4.07*	*3.26*
Sibling only	2	7*	2
	3.67	*4.07*	*3.26*
Both	1	1	3*
	1.67	*1.85*	*1.48*

Note: Asterisks (*) represent the "hit cell" pattern for this hypothesis, and expected frequencies are shown in italics in each cell. Prediction Analysis indicated "strong support" for this hypothesis (del = .38, $z = 2.75$), with a 35% reduction in the proportion of errors observed by applying the prediction to the model. These findings point to how feedback and adaptation regarding one child are linked to parents' views of others, with the family a key unit of analysis in successful pathways.

as key to children's protection and safety, while parents of children more clearly on good paths saw greater continuity across families and schools in promoting longer-term moral, school, and career goals. Although there were not enough European American families in the sample with two adolescent children to conduct the analyses reported in this chapter, we still asked these families to place their adolescent children on the path and answer the same questions as we asked the Latino parents.

The interpretive cycle in cultural research partnerships. In the bilingual newsletter from this project to participating families, Azmitia conveyed findings by combining quantitative and qualitative insights about the path of life:

> We asked parents to tell us where on the path of life they saw their children and what challenges they might face in the future. Here's what they said: 84% believed their children were on the good path; 15% placed their children at the crossroads of the path of life and one parent thought her child was already on the bad path; 19% reported they believed their children had been on the bad path . . . because they were hanging out with the wrong crowd of friends, doing poorly in school or ditching school, or had been caught using drugs (typically boys) or shoplifting (typically girls); and 70% said bad friendships and peer pressure were the most serious challenges their children would face. Ways parents keep children on the good path or help them through the crossroads included talking, giving advice, and teaching values about right from wrong, monitoring their activities, praising them or doing something special when they behaved well, and keeping them busy so they wouldn't have time to stray.

Following the distribution of the newsletter, Azmitia conducted workshops for parents and teachers at the participating schools to discuss these findings, where parents expressed concern about their children's safety at school with peers and asked for greater supervision by teachers on the playground. The concordance of parents' and teachers' concerns about peers led us to continue our work with them and with the children on peers as challenges and resources on the path of life.

Thus, longitudinal case studies and the interpretive cycle of interviewing parents as cultural insiders, inductive coding and statistical analyses by researchers, and continued exchanges with families and youth helped us understand how immigrant parents guide their children as they adapt to a new country. This work strengthens partnerships with families and schools by illuminating both similarities and differences in guidance strategies in other ethnic-minority and ethnic-majority families.

Study 2, Sixth-Grade Summers: A Cultural Research Partnership with a Community College Outreach Program

In this partnership, which began in 1995, we trained ethnically diverse college students working in community programs as researcher-practitioners, enhancing their mentoring skills, educational leadership, and university studies. We built on their roles as front-line staff of programs and as students. In the project, we embedded Bridging Multiple Worlds measures in program activities and interviewed youth, young adults, parents, teachers, program executives, and funders to map factors that create resources for students as they move across their worlds of families, peers, and school and along the academic pipeline.

We helped the program in monitoring indicators of success with research tools and data analysis systems to foster students' progress, gain feedback about program effectiveness, and sustain program funding. With the director, we set up a longitudinal database for children's program attendance, grades, and demographic data as well as program essays so staff could ask questions useful to them, such as: What "kind of kid" participated and who did not? Who attended particular activities such as tutoring? Did students' grades rise and fall or were they stable? What did graduating students believe were the most valuable program components and what did they suggest for improvement? The database also included responses to the annual Summer Institute activities based on the Bridging Multiple Worlds surveys (Domínguez et al. 2001).

Methods

Research participants. In one analysis from this larger study (Denner et al., in press) we traced the experiences of 116 students, 76 girls and 40 boys (typical for college outreach programs, girls outnumbered boys), who entered the program from 1995 to 1997. Students were mostly Latino and almost all of Mexican descent. As part of selection, students were considered low-income by their eligibility for free and reduced-price school lunch programs. Participants were chosen by teachers and the program director based on application essays as well as their potential, motivation, and

grades. Among those chosen, parents' formal education, usually in Mexico, was typically less than high school, and for many was at the elementary (*primaria*) level. They primarily worked picking strawberries or lettuce, on factory lines, or cleaning houses and hotels.

Measures. In this study we used indicators occurring naturally in the community, such as application essays, attendance records, and school transcripts, as well as measures tapping the five dimensions of the Bridging Multiple Worlds Model: demographic portraits, identity pathways, math and English pathways, challenges and resources across worlds, and cultural research partnerships.

Key Findings

Children's identity pathways linked generations. When we analyzed 116 children's essays written when they were in the sixth grade (Denner et al., in press), we found they described dreams of college-based careers: becoming doctors, lawyers, nurses, and teachers as well as secretaries, police officers, firefighters, and mechanics. Like children in the low-income Mexican immigrant families in Study 1, children in the program dreamed about college and college-based careers rather than following their parents' careers of physical labor and about contributing to their communities and families.

One case can be traced over time in the reflections of Soledad Rosas, a student in the program. At age 12, she wrote on her application:

> I would like to be a writer for children's stories that will teach children many things, like becoming interested in reading. I want to help my community by finding economical resources so that the children don't leave their studies. . . . With my determination and effort I will successfully accomplish my goal to obtain these careers. My obstacles are that I have cerebral palsy. Another obstacle is the English language.

At age 13, during the career exploration activities of the program's Summer Institute, she wrote:

> I want to be a writer and a DJ [disc jockey] at a radio station. I have decided to go to [the University of California at] Berkeley because it has a program for disabled people and I have problems like that. The college is close but not that close. I want to live on campus. The subjects I want to take are the ones I need for my career. . . . My challenges are my disability, working to pay for college, and having problems in college. . . . My resources are my teachers, college, books, and DJ's of other radio stations.

At age 17, she celebrated the second anniversary of her own radio show and still retained her dream of becoming a DJ (although she had begun to think of television as well) and of college studies in broadcasting.

When we interviewed young adult tutors and mentors in the program, we found they bridged across generations and from home to college. Like the Latino parents in Study 1, these young adults defined success in life in terms of morality and schooling. They helped children with homework and linked families, schools, and communities with their dreams and fears for the future. The young adults also gave children a chance to talk and write about their dreams for careers, education, families, and communities (Cooper, Denner, and Lopez 1999). They valued children's home communities and many shared home languages and, sometimes, family histories. Many had learned to be bicultural and could help children understand how to retain community traditions while succeeding in school, college, and community.

The program director, Elizabeth Domínguez, was also a cultural broker, linking families, schools, peers, and communities. She explained her own theory of how Latina godmothers (*comadres*) promote children's pathways to success by describing her own family history, in which her parents' *comadre* was a bridge between her family and school:

> My parents immigrated from Mexico to Los Angeles in search of a better life for their children. They made sure we did our homework and maintained frequent contact with school, and nine of their thirteen children completed college. Most of my peers dropped out before they reached high school. Their parents also came to the U.S. to give their children a better life, with dreams for their children to obtain a college degree. But like many non-educated immigrant parents, they did not feel comfortable helping their children with school because they did not understand the system. My parents had a *comadre* [godmother] who took them under her wing, explained how U.S. schools function, and reassured them their participation was demanded for us to be successful. (Domínguez 1995, cited in Cooper, Denner, and Lopez 1999)

Thus, in helping children and youth find pathways to success in the eyes of their families, communities, and schools, the program's young adult staff

and director forged links across generations, including senior staff, young adults, and the families and children they served. These intergenerational pathways appeared to foster skills children need if they are to succeed in their increasingly diverse worlds along their pathways to college, careers, and adult family and community roles.

Challenges and resources across worlds. Children's family, peer, and school worlds were both challenges and resources. In the yearly activities based on the Bridging Multiple Worlds Model (the materials are entitled *It's All about Choices/Se Trata de Todas las Decisiones;* Domínguez et al. 2001), the most frequently named resource was the family, and the most controversial (both resources and challenges) was peers. Children saw peers, families, and teachers as both challenges and resources in reaching their dreams. Both in 1997 (when we heard from 77 children) and 1998 (84 children), students listed peers as challenges and resources at comparable rates (30% vs. 40% of the students in 1997 and 50% vs. 55% in 1998). For example, students described their challenges by listing boyfriends, girlfriends, peer pressure, "temptation of friends dropping out," "friends as bad examples," gangs, "bad friends," "bigger students," "illegal friends" (i.e., friends engaged in illegal activities), and "enemies." Many also listed "drugs," "sex," "having babies," or "pregnancies." As resources, students also listed friends, boyfriends, "bigger students," girlfriends, and "leave your boyfriend if he takes too much time." In contrast, students were much more likely to list their families as resources than as challenges (70% vs. 10% in 1997 and 73% vs. 10% in 1998).

These findings replicate other research on the challenges peers pose for students' school engagement and also point to how central families are to children on their pathways to college even though many parents had completed only elementary school.

A closer look with longitudinal case studies: The regulars. We followed 28 students from the year they entered the program at sixth grade through ninth grade (Azmitia and Cooper 2001). Many were immigrants, learning English during these years. When we analyzed their school transcripts, we found that their math and English pathways to college diverged early but some got back on track. We found math pathways ranged from consistently high to slowly declining, rapidly declining (and dropping out, including youth becoming incarcerated or becoming parents), moving into remedial math, and delaying taking any math. By ninth grade, more than half had taken and passed Algebra, a key step to eligibility for four-year colleges and universities. Of the remaining students, each was eligible for

community college, where Algebra 1 is the only math required for an associate arts degree. These pathways diverged early: students who passed Algebra 1 at ninth grade had made higher grades in sixth grade than students who failed Algebra or took remedial classes. But some students moved back on track after challenging personal events, and others moved up from remedial math to Algebra, sometimes retaking Algebra before more advanced classes in high school. These findings go beyond group differences in school achievement toward understanding variation and change within groups as well as similarities across them. Tracing more than one pathway to more than one kind of college helps build inclusive opportunities for college and college-based careers.

To examine these issues over time with longitudinal case studies, we wanted to see if family and peer resources and challenges predicted who among the regulars was on a math pathway to Algebra. Capital models would predict that children with more resources would do better, and challenge models, that those with challenges who also had resources would do better.

Qualitative Comparative Analysis (QCA; Ragin 1989) is a statistical software program designed to analyze and link case- and variable-based data in order to build theory. Its goal is to "find patterns or configurations of variables within cases and show how, across many cases, such patterns are associated with a given outcome of interest." Based on Boolean logic, in which each variable within each case is coded as present or absent, the QCA analysis program sorts cases with similar configurations of predictors into "families," thereby testing the possibility of multiple pathways to the same outcome. For our work on how demographic portraits, career identities, challenges, and resources across children's worlds of families, schools, peers, and communities may interact in pathways to college, we have used QCA to build our model by preserving the cases of individual students while testing the Bridging Multiple Worlds Model in the context of capital, ecocultural, and alienation models.

For example, when we conducted a QCA analysis of the challenges and resources from families and peers of the 28 regulars, we found two patterns that predicted students who took and passed Algebra 1 in ninth grade. One group reported only resources: one subgroup reporting a family resource and the other subgroup reporting a peer resource. The second group, consistent with the challenge hypothesis from the Bridging Multiple Worlds Model, indicated that a subgroup of students not only had resources but also challenges. We have more to learn about the kinds of challenges

students find motivating and those challenges that derail their pathways. We have also begun to consider how different students may exemplify different models (e.g., "challenge cases" and "capital cases") rather than that all cases exemplify only one model. These findings indicate that the models may offer complementary accounts of children's pathways through school.

The interpretive cycle: Sustaining cultural research partnerships. Coordinating cultural research partnerships—both with the families in Study 1 and the families, schools, and program in Study 2—reflects vulnerabilities and institutional fragility of key participants and partnerships, but long-term, sustained engagement—instead of a "project" mentality—fosters ongoing partnerships. For example, in our ongoing partnership with the community program, the economic downturn motivated our collaborating on a grant proposal that stimulated us to write a Memorandum of Understanding about the next phase of the work. We use the term "program analysis" to distinguish our research activities from formal program evaluations, which are valuable but can also trigger worries, particularly in new or small programs. And we built on these findings in developing the Bridging Multiple Worlds Tool Kit as a no-cost, multi-user resource in Spanish and English that allows families, schools, and community programs to help children map assets across their worlds and pathways through school. For example, it helps them write about their dreams for the future and see if they are off track in math, and it shows them how to get back on track and find and use resources across their worlds. These activities for elementary, middle, and high school students are being used for teacher training, in school classrooms, and in statewide evaluations of outreach programs. They also help researchers to understand what factors support and impede youth pathways to college and to design further research.

Conclusions and Implications

Intergenerational Research Partnerships as Assets

As policies involving diversity, immigration, and inclusion continuously change, stakeholders value monitoring diverse children's pathways in both quantitative and qualitative terms. Analyses of programs deemed effective appear to sustain parents' and other adults' beliefs that schooling will benefit children (Adger 2001). We have observed partnerships with students, families, community organizations, schools, districts, and universities at local, regional, state, and national levels. Some partnerships build "vertical teams" to support ethnically diverse children and youth navigating from kindergarten through college. We have seen partners become increasingly interested and sophisticated in thinking about longitudinal analyses of qualitative and quantitative data.

This work has involved building innovative partnerships among youth, families, schools, and community organizations. Children and youth have commented that the activities help them think about the future. Families may hold high educational values and goals but may be less familiar with the language and practices of schools and need ways to become involved. They find these activities useful not only for helping their children but also for developing their own understanding of the U.S. educational system, community support systems, and relationships with other families, researchers, and program staff. Community organizations often seek partnerships with families and schools and can provide academic skills, information, high expectations, and a sense of moral goals to achieve on behalf of families and communities, but changes in funding pressure them for program evaluation. School staff tell us they are seeking ways to include families with diverse literacy and linguistic backgrounds but often lack tools to use in this endeavor. Our work with intergenerational partnerships and our attending to the feedback and concerns of all our constituents led to our developing the Bridging Multiple Worlds Tool Kit, which includes activities for schools and programs which tap the elements of the model, graphing templates for quantitative work, and materials for longitudinal case studies so partners can link qualitative and quantitative methods. Our tool kit is available on the Web and has also been incorporated in printed workbooks used by schools and community agencies.

Reaching across Disciplines: Capital, Alienation, Ecocultural, and Challenge Models

These two studies reveal how families, schools, peers, and community programs can bridge to careers for youth entering university and community college. These patterns indicate that families, peers, schools, and programs can support both college-bound and remedial students, whom scholars often find to be increasingly pessimistic, disengaged, and alienated as they move through school (Fordham and Ogbu 1986; Gibson 1997). Selective programs may help keep these students engaged in school and

continuing through the academic pipeline. Although some of the students we studied were not initially eligible for a four-year university, with few exceptions they all graduated from high school and were eligible for community colleges. Many of these students aimed to transfer to four-year institutions after completing their degree in community college.

These findings indicate that future studies of capital, alienation, ecocultural, and challenge models will benefit from probing the configurations of students' lives over time with families, peers, schools, and community programs. That is, rather than a "one-model-fits-all" approach, researchers will benefit from understanding and explaining the links between each model and particular subgroups of families and youth.

Immigrant children and families who are new to a nation's schools and who had limited formal education in their home countries face similar challenges. Our studies of Mexican immigrant families (the largest immigrant group in the United States) show that parents hold high hopes that their children will move up from their parents' lives of physical labor picking strawberries or lettuce, standing on factory assembly lines, or cleaning houses and hotels to technical or professional careers (Azmitia et al. 1996). In essence, we found that they seek to "beat the odds" and disprove theories of social reproduction—that each society's social-class hierarchy tends to be reproduced from generation to generation. However, we also found that each cultural group experiences unique challenges and resources and that how they adapt to their circumstances can lead to variation in students' educational and career pathways.

Linking the International and the Local for Inclusion in Multicultural Democracies

With colleagues in several nations, we are working to coordinate concepts of families, peers, schools, programs, and community organizations; link demographic, institutional, relational, and individual levels of analysis; and thereby unify our writings and recommendations. This has engaged local, state, national, and international partners on ethnic diversity and inclusion. For example, the Bridging Multiple Worlds Model and tools are being used by the federal GEAR UP program (Gaining Early Awareness and Readiness for Undergraduate Programs) serving all middle school students in Watsonville, California, to enhance access to college.

Our common goal is to enhance access to college and legal employment for children of diverse ethnic, racial, economic, and geographic communities. And our capacity to be nations "where diversity works" rests on customizing programs for communities while staying attuned to common goals and collaborating among diverse stakeholders: students, families, schools, community programs, legislators, the business sector, and media. Achieving these goals is fostered by building clear models of change, testing them with evidence, and sustaining partnerships among stakeholders as intergenerational research partnerships.

Reflections on Mixed Methods

This partnership with families and community programs created intergenerational pathways through which children became tutors, undergraduates became staff, staff returned to college, and partners of all ages, including undergraduate and pre- and postdoctoral students, played key research roles. We include children and youth as members of the research team, and their insights can benefit the work. For example, when children were learning to graph their math pathways toward their career dreams in the community college outreach program, one 12-year-old girl, the daughter of Mexican immigrants, looked up at her peers and exclaimed, "So these are the beginnings of our math roads!" She later told us her career goal is to become a psychologist.

Longitudinal case studies and interpretive cycles are, in our view, essential for work on including families in multicultural democracies. We do not regard any single data analysis technique as essential and use Prediction Analysis, QCA, and other qualitative and quantitative approaches (Miles and Huberman 1994). Prediction Analysis, a variation on categorical analyses, allows specifying target patterns and testing longitudinal models with small samples with inferential statistical tests. Although QCA can be cumbersome and must be linked to other programs for inferential statistical tests, we agree with Weitzman and Miles:

> [QCA's] real strength is in helping you think clearly about a few key variables and their configural relationships within cases—but seen across as large a number of cases as you have. In qualitative research, it is no longer rare to have multiple cases, sometimes ranging up to 20, 30, or more. But your mind usually goes blooey when it's faced with the patterns within more than a dozen or so cases. QCA successfully combines "case-oriented" and variable-oriented views of your data, enabling a coherent understanding: you can both build and test theory. It achieves this power

at some costs, of course: forcing the values of your case-level variables into a present/absent mode or at best, a high-medium-low mode. Still you can learn a lot that way. (1995: 265)

Mixed-Methods Tools for Science, Policy, and Practice in Multicultural Nations

We see a five-element cycle valuable in mixed-methods work: linking guiding questions from local questions to general models; using demographic data to compare local with representative samples; using interview, survey, and group activity formats to link career and college dreams across generations for research, schools, and programs; making math and English pathway graphs linked to students' career goals for youth and other stakeholders; and developing longitudinal databases, codebooks, and graphing templates to link cases and variables over time for regular stakeholder conferences and communication. Taken together, these activities help youth navigate to college and careers while adults in families, schools, and programs learn about students' realities. Materials for them appear in the Bridging Multiple Worlds Tool Kit, available at no cost via our Web site http://www.bridgingworlds.org. More generally, we see longitudinal case studies and interpretive cycles, more than particular data analysis methods, as helping cultural research partnerships engage and sustain science, policy, and practice toward diversity and equity in multicultural nations.

Acknowledgments

Study 1 and Study 2 were supported by grants to Margarita Azmitia and Catherine R. Cooper from the U.S. Department of Education Office of Educational Research and Improvement through the Center for Research on Education, Diversity, and Excellence, Santa Cruz, California. Study 2 was supported as well by grants to Catherine R. Cooper and Barrie Thorne from the John D. and Catherine T. MacArthur Foundation Research Network on Successful Pathways through Middle Childhood. The authors thank the students, families, schools, and community program for participating and Gregory Thrush for assisting with data for Study 1, as well as Elizabeth Domínguez, Jill Denner, Edward M. Lopez, Nora Dunbar, and Wendy Rivera for their many contributions to Study 2.

References

Adger, C. T. 2001. "School-Community-Based Organization Partnerships for Language Minority Students' School Success." *Journal for the Education of Students Placed at Risk* 6:7–26.

Azmitia, M., and J. R. Brown. 2002. "Latino Immigrant Parents' Beliefs about the 'Path of Life' for Their Adolescent Children." In *Latino Children and Families in the United States*, ed. J. M. Contreras, K. A. Kerns, and A. M. Neal-Barnet, 77–10. Westbrook, CT: Praeger.

Azmitia, M., and C. R. Cooper. 2001. "Good or Bad? Peers and Academic Pathways of Latino and European American Youth in Schools and Community Programs." *Journal for the Education of Students Placed at Risk* 6:45–71.

Azmitia, M., C. R. Cooper, E. E. Garcia, and N. Dunbar. 1996. "The Ecology of Family Guidance in Low-Income Mexican-American and European-American Families." *Social Development* 5:1–23.

Azmitia, M., C. R. Cooper, L. Rivera, E. M. Lopez, A. Ittel, and N. Dunbar. 1994. *The Path of Life Interview*. Santa Cruz: University of California. (Revised 1998.)

Coleman, J. S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology Supplement* 94:95–120.

Cooper, C. R. 1997. "When Diversity Works: Cultural Partnerships for Science, Policy, and Youth in Democracies." *Society for Research in Adolescence Newsletter*, pp. 1–7.

———. 1999. "Multiple Selves, Multiple Worlds: Cultural Perspectives on Individuality and Connectedness in Adolescent Development." In *Minnesota Symposia on Child Psychology: Cultural Processes in Child Development*, ed. A. Masten, 25–57. Hillsdale, NJ: Erlbaum.

———. 2001. "Bridging Multiple Worlds: Inclusive, Selective, and Competitive Programs, Latino Youth, and Pathways to College; Affirmative Development of Ethnic Minority Students." *CEIC Review: A Catalyst for Merging Research, Policy, and Practice* 10:14–15, 22.

Cooper, C. R., M. Azmitia, E. E. Garcia, A. Ittel, E. M. Lopez, L. Rivera, and R. Martinez-Chávez. 1994. "Aspirations of Low-Income Mexican American and European American Parents for Their Children and Adolescents." *New Directions in Child Development* 63:65–81.

Cooper, C. R., R. G. Cooper, M. Azmitia, G. Chavira, and Y. Gullatt. 2002. "Bridging Multiple Worlds: How African American and Latino Youth in Academic Outreach Programs Navigate Math Pathways to College." *Applied Developmental Science* 6:73–87.

Cooper, C. R., and J. Denner. 1998. "Theories Linking Culture and Psychology: Universal and Community-Specific Processes." *Annual Review of Psychology* 49:559–584.

Cooper, C. R., J. Denner, and E. M. Lopez. 1999. "Cultural Brokers: Helping Latino Children on Pathways to Success." *When School Is Out: The Future of Children* 9:51–57.

D'Andrade, R., and C. Strauss, eds. 1992. *Human Motives and Cultural Models*. Cambridge: Cambridge University Press.

Delgado-Gaitán, C. 1992. "School Matters in the Mexican-American Home: Socializing Children to Education." *American Educational Research Journal* 29:495–513.

Denner, J., C. R. Cooper, N. Dunbar, and E. M. Lopez. In press. "Access to Opportunity: How Latino Students in a College Outreach Program Think about Obstacles and Resources." *Journal of Latinos and Education*.

Denner, J., C. R. Cooper, E. M. Lopez, and N. Dunbar. 1999. "Beyond 'Giving Science Away': How University-Community Partnerships Inform Youth Programs, Research, and Policy." *Society for Research in Child Development Social Policy Report* 13:1–17.

Domínguez, E., C. R. Cooper, G. Chavira, D. Mena, E. M. Lopez, N. Dunbar, J. Denner, and R. Marshall. 2001. "It's All about Choices/*Se Trata de Todas las Decisiones:* Leadership and Career Development." In *Bridging Multiple Worlds Toolkit,* ed. C. R. Cooper. Available online: http://www.bridgingworlds.org.

Fordham, S., and J. U. Ogbu. 1986. "Black Students' School Success: Coping with the 'Burden of Acting White.'" *Urban Review* 18:176–206.

Gibson, M. A. 1997. "Exploring and Explaining the Variability: Cross-National Perspectives on the School Performance of Minority Students." *Anthropology and Education Quarterly* 28:318–329.

Goldenberg, C., and R. Gallimore. 1995. "Immigrant Latino Parents' Values and Beliefs about their Children's Education: Continuities and Discontinuities across Cultures and Generations." In *Advances in Motivation and Achievement: Culture, Ethnicity, and Motivation,* vol. 9, ed. P. R. Pintrich and M. Maehr, 183–228. Greenwich, CT: JAI Press.

Goldenberg, C., R. Gallimore, L. Reese, and H. Garnier. 2001. "Cause or Effect? A Longitudinal Study of Immigrant Latino Parents' Aspirations and Expectations and Their Children's School Performance." *American Educational Research Journal* 38 (3): 547–582.

Goodnow, J. J. 1988. "Parents' Ideas, Actions, and Feelings: Models and Methods from Developmental and Social Psychology." *Child Development* 59:286–320.

Greene, J. C., and D. J. Caracelli. 1997. "Crafting Mixed-Method Evaluation Designs." In *Advances in Mixed-Method Evaluation: The Challenges and Benefits of Integrating Diverse Paradigms,* ed. J. C. Greene and V. J. Caracelli, 19–32. New Directions for Evaluation, vol. 74. San Francisco: Jossey-Bass.

Harkness, S., C. M. Super, and C. H. Keefer. 1992. "Learning to Be an American Parent: How Cultural Models Gain Directive Force." In *Human Motives and Cultural Models,* ed. R. D'Andrade and C. Strauss, 163–178. Cambridge: Cambridge University Press.

Henderson, R. W. 1997. "Educational and Occupational Aspirations and Expectations among Parents of Middle School Students of Mexican Descent: Family Resources for Academic Development and Mathematics Learning." In *Social and Emotional Adjustment and Family Relations in Ethnic Minority Families,* ed. R. D. Taylor and M. C. Wang, 99–131. Mahwah, NJ: Erlbaum.

Kroesen, K., L. Reese, and R. Gallimore. 1998. "Navigating Multiple Worlds: Latino Children Becoming Adolescents in Los Angeles." In *Diasporic Identity,* ed. C. A. Mortland, 197–223. Selected Papers on Refugee and Immigrant Issues, vol. 6. Washington, DC: American Anthropological Association.

Leyendecker, B., and M. E. Lamb. 1999. "Latino Families." In *Parenting and Child Development in "Nontraditional" Families,* ed. M. E. Lamb, 247–262. Mahwah, NJ: Erlbaum.

Mertens, D. M. 1994. *Research Methods in Education and Psychology: Integrating Diversity with Quantitative and Qualitative Approaches.* Newbury Park, CA: Sage.

Miles, M. B., and A. M. Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook.* Thousand Oaks, CA: Sage.

Ragin, C. C. 1989. *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies.* Berkeley and Los Angeles: University of California Press.

———. 1994. "Introduction to Qualitative Comparative Analysis." In *The Comparative Political Economy of the Welfare State,* ed. T. Janoski and A. M. Hicks, 299–319. Cambridge: Cambridge University Press.

Reese, L., S. Balzano, R. Gallimore, and C. Goldenberg. 1995. "The Concept of *Educación:* Latino Family Values and American Schooling." *International Journal of Educational Research* 23:57–81.

Romo, H. D., and T. Falbo. 1996. *Latino High School Graduation: Defying the Odds.* Austin: University of Texas Press.

Sabogal, F., G. Marin, R. Otero-Sabogal, B. VanOss Marin, and E. J. Perez-Stable. 1987. "Hispanic Familism and Acculturation: What Changes and What Doesn't?" *Hispanic Journal of Behavioral Sciences* 9:397–412.

Siegel, S., and N. J. Castellan. 1988. *Nonparametric Statistics.* 2nd ed. New York: McGraw-Hill.

Sigel, I. E., and A. V. McGillicuddy-Delisi, eds. 1992. *Parental Belief Systems: The Psychological Consequences for Families.* 2nd ed. Hillsdale, NJ: Lawrence Erlbaum.

Strauss, C. 1992. "What Makes Tony Run? Schemas as Motives Reconsidered." In *Human Motives and Cultural Models,* ed. R. D'Andrade and C. Strauss, 197–224. Cambridge: Cambridge University Press.

Valdés, G. 1996. *Con Respeto: Bridging the Distances between Culturally Diverse Families and Schools: An Ethnographic Portrait.* New York: Teachers College Press.

von Eye, A., ed. 1990. *Statistical Methods in Longitudinal Research.* Vol. 2. New York: Academic Press.

von Eye, A., and Brandtstadter, J. 1988. "Application of Prediction Analysis to Cross Classifications of Ordinal Data." *Journal of Biometrics* 30:651–665.

Weisner, T., R. Gallimore, and C. Jordan. 1993. "Unpackaging Cultural Effects on Classroom Learning: Native Hawaiian Peer Assistance and Child-Generated Activity." *Anthropology and Education Quarterly* 19:327–351.

Weitzman, E. A., and M. B. Miles. 1995. *Computer Programs for Qualitative Data Analysis: A Software Sourcebook.* Thousand Oaks, CA: Sage.