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## Family Responses to Young Children With Developmental Delays: Accommodation Activity in Ecological and Cultural Context

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In this study 680 accommodations or proactive efforts to sustain a family environment in 10 ecocultural domains were reliably scored for 102 Euro-American families of young children with developmental delays. The families reported substantial accommodation activity. Results showed that accommodations (a) in the domains of child care and service access were correlated with children's problems that impact the daily routine; (b) in the domains of subsistence changes, seeking information, and roles of fathers were related to parents' job and career circumstances, with more modest links to socioeconomic status; and (c) were not associated with child developmental test scores. Accommodation to children with delays and disabilities is a family-level variable that complements the more common research focus on individual parent stress and coping.

These are the words of parents talking about their life circumstances: Each has a child—age 3 or 4—who has developmental delays.

Case 624: Mother: We're going to be looking for a house pretty soon, and kind of in the back of our mind, we're thinking, "We've got to keep it near where her therapy is at, because it's got to be within driving distance twice a week."

Case 603: (Father is self-employed but puts the children's needs over finishing his work projects). Father: We are both providers always. . . It was never a mom and dad situation . . . if you know what I mean. The biggest change came (when) I stopped being so much a dad and more a mom. I became a Mr. Mom so that we wouldn't have to go through the

babysitting routine everyday and stuff like that.

Case 354: Mother: If we need to cancel [the child's appointment, social obligations, etc.], we cancel. Her needs are still very important, but we've made our family needs also very important, so there's just more of a balance [between what she needs and what we need to keep it all going]. . . I think my big concern is that 20 years from now, I want to be able to look back and say I did everything I could and not have any regrets.

Case 824: Father: She's very poor in any kind of change in routine. . . [when we've made changes] we always knew there was going to be trouble, and generally, there was—she would create a scene in the restaurant or just hit her brother, or spill the juice, or do things deliberately to get attention.

Mother: Her behavior is such that we are reluctant to do certain activities that we would probably normally do with just our son alone, or with a "normal" 4-year old . . . at the same time [we try to work things out] . . . we feel that they, we're, a family, we're going to do . . . we're just going to do things.

Many issues concern these parents. What concerns them most is something above and beyond specific problems, something more comprehensive. This more general adaptive problem appears again and again in parents' accounts of living with a child who exhibits developmental delays early in life: The creation of a sustainable and meaningful daily routine of family life (Bernheimer, Gallimore, & Weisner, 1990; Gallimore, Weisner, Kaufman, & Bernheimer, 1989; Weisner, Beizer, & Stolze, 1991; Weisner, Nihira, & Bernheimer, 1989). To create and sustain a daily routine, families must respond in various ways to their sometimes conflicting circumstances. *Family accommodation* is our term for this process.

The concept of family accommodation emerged from analysis of case histories of 102 Euro-American families who had a child with developmental delays (Gallimore et al., 1989). In this paper, we have continued our analysis of family accommodation by presenting quantitative as well as qualitative data from the same cohort of 102 families.

The idea that the social setting around a child and family is a powerful influence on children's development is a long-standing one in the social sciences (e.g., Bronfenbrenner, 1979). Our version of this idea is ecocultural (*ecological-cultural*) theory, which is derived from the psychocultural model developed by Whiting and Whiting (J. Whiting & Whiting, 1975; B. Whiting, 1976, 1980; B. Whiting & Edwards, 1988) and their students and associates (Munroe, Munroe, & Whiting, 1981; LeVine, 1977; Super & Harkness, 1980, 1986; Weisner, 1984).

Ecocultural theory emphasizes that a major adaptive task for each family is the

construction and maintenance of a daily routine through which families organize and shape their children's activity and development. The activities of the everyday routine create opportunities for development-sensitive interactions on which development partly depends. The conception of development-sensitive interactions and their activity contexts are derived from several sources, including the concept of "behavior settings" (B. Whiting, 1980; B. Whiting & Edwards, 1988) and the ideas of Vygotsky (1978) (e.g., zone of proximal development as elaborated by recent research [Gallimore & Goldenberg, in press; Rogoff, 1990; Tharp & Gallimore, 1988; Weisner, Gallimore, & Jordan, 1988; Wertsch, 1985; Wertsch, Minick, & Arns, 1984]).

The everyday routine and the development-sensitive interaction do not exist in a social vacuum; they are shaped by the surrounding ecocultural niche. Weisner (1984) proposed a list of features as an operational definition of the ecocultural niche of the family, which is an extension of the concept of "developmental niche" proposed by Super and Harkness (1980, 1986). A list of ecocultural features specific to families of children with developmental delays was presented elsewhere (Gallimore et al., 1989). The 10 accommodation variables and examples of accommodations are as follows:

1. *Family Subsistence and Financial Base:* (a) mother stayed home because child "needed" her; later went back to work to afford speech therapy; (b) father turned down contract for third year working abroad in part to get child services in Los Angeles.
2. *Accessibility of Health and Educational Services:* (a) mother drove child to intervention program, waited at grandmother's house; (b) parents each took time from work to make trips to doctor; it took split second timing to transfer child.
3. *Home and Neighborhood Safety and Convenience:* (a) family planned move to larger house to accommodate wheelchair;

father built special chairs and table; (b) home was child-proofed: nothing breakable in child's room.

4. *Domestic Task and Chore Workload for Family:* (a) mother put less priority on house and housework and higher priority on helping child; (b) mother got up at 4 a.m. to do laundry, housework, had no paid help.
5. *Child Care Tasks:* (a) child's older sisters voluntarily assisted—mother did not mobilize help outside family circle; (b) complex job assignments for child care were given to father, mother, grandmother, etc.
6. *Child Play Groups and Peers:* (a) child was allowed to play only inside with sibling's friend, not outside with neighbor children; (b) mother started play group for child in neighborhood.
7. *Marital Role Relationships:* (a) father left family partially because he could not accept child who had delays; (b) joint parent decisions (e.g., parents slept separately for 6 months due to child's sleeping problems).
8. *Social Support:* (a) extensive support networks: relatives, parents, church, boy scouts; (b) mother lived rent free with grandparents; grandfather helped teach child.
9. *Father's Role:* (a) father took over on weekends, as he commuted long distance and had long working hours during week; (b) father gave up drinking, went to church, was helping rather than adding to mother's workload.
10. *Sources of Parental Information and Goals:* (a) father's former girlfriend was speech therapist; she led family to transfer child to that clinic; (b) mother received advice from grandmother (RN), grandfather (special education teacher), and her own former special education teacher.

In addition, ecocultural theory incorporates an explicit social constructivist perspective (Bruner, 1989; Scarr, 1985). The theory treats families as more than hapless victims of implacable social and economic forces. Although they are

affected by very real constraints and pressures, families can take individual and collective action to modify and counteract them in order to sustain a desired, valued daily routine. They can be proactive as well as reactive. Through their management of daily routines, families can influence the impact of their ecocultural niche on children's participation in development-sensitive activities and interactions. From a mix of ecological constraints and resources, and personal and cultural values, families construct a sustainable, meaningful, and coherent everyday routine. To do this requires them to make many accommodations (Bernheimer et al., 1990; Gallimore et al., 1989; Weisner et al., 1991).

*Accommodation* is a process common to all families. It occurs frequently, although it may occur more in some periods of family life than others, and the level and focus of activity varies from family to family. What accommodations are made depends on many factors, including ecological constraints/resources and cultural belief and custom. Accommodations can be made in one or more ecocultural niche features, and in varying degrees of intensity (see pp. 186–187 for examples at each level of the ecocultural niche).

In a recent analysis of case studies, we found that parents of children with developmental delays readily provided examples of many different kinds of accommodation activities that take account of *all* family members, not just the child with delays (Gallimore et al., 1989). For example, to sustain a daily routine that included a child with delays, some parents gave up careers or changed jobs, work schedules, residences, and doctors. Many learned new child-rearing skills, joined support groups, changed support groups, changed how they treated siblings, sought support of relatives, avoided relatives who were judgmental, redistributed domestic chores among family members, adopted different beliefs and values, and joined or left religious groups.

Indeed, a full description of all the accommodations the families reported might well include most of the social and cultural "tools" available in the United States to families in all social strata who are adapting to children with developmental delays. It would also include other tools used by all families with children without delays or disabilities.

Ecocultural theory predicts that parents of children with developmental disabilities and delays do not necessarily accommodate in dramatically different ways from other families in North American society. Indeed, our previously reported case studies suggest that most accommodations are common to many families whether or not a child with developmental delay is present (Bernheimer et al., 1990). A study of parents' concerns regarding siblings (Weisner, 1993) supports this view. Although families readily talk about what we call accommodations (Gallimore et al., 1989), it is not necessary to assume their actions are completely intentional or that they are conscious of their activities or see themselves as dramatically different or special.

In addition, we do not assume that accommodation occurs only in response to the stresses, disturbances, or problems of having a child with delays or that family accommodation is sensitive only to such a child. Family accommodation is theoretically presumed to be occurring in response to both serious concerns and mundane problems of daily life and does not require individual or family stress to be activated nor does it always result in a changed psychological state of family members.

In summary, ecocultural theory proposes that the key adaptational problem—in the face of the constraints and opportunities families experience in the world around them—is the organization of the daily routine so that it is sustainable, meaningful, and congruent with individual needs of all family members. To organize that routine, family accommodations are required.

The broader perspective of ecocul-

tural theory—that the child and family are parts of a system of connected proximal and distal circumstances—is well-appreciated in the field of developmental disabilities (Farber, 1986; Vincent, Salisbury, Strain, McCormick, & Tessier, 1990). Indeed, such a perspective is crucial to effective assessment and intervention (Landesman & Ramey, 1989). In the past decade, family ecology and systems theories have been identified as sources for a broader framework for studying family adaptation in general and adaptation to disability in particular (e.g., Bailey & Simeonsson, 1986; Bronfenbrenner, 1979; Carter & McGoldrick, 1980; Fewell, 1986; Minuchin, 1974; Seligman & Darling, 1989; Turnbull, Summers, & Brotherson, 1986). Hill's ABCX model of family crisis (McCubbin & Patterson, 1983) has guided researchers on families with children who have handicaps (Bristol, 1984; Wikler, 1986). Nonetheless, some suggest that usable conceptions and methods have not yet been fully developed, thereby limiting wider adoption of ecological and system perspectives (Vincent et al., 1990).

One exception has been studies of social support and its impact on family adaptation, improved physical health, and better parent-child relations (Cohen & Syme, 1985; Crnic, Friedrich, & Greenberg, 1983; Dunst & Trivette, 1990; Dunst, Trivette, & Deal, 1988). Social support is an important domain of accommodation activity (Weisner, 1984), yet case studies of families responding to developmental delays suggest that there may be nearly a dozen other domains in which accommodation takes place (Gallimore et al., 1989).

Moreover, much of the work on social support has focused on its role in coping with psychological stress, which has often been treated as the principal adaptive problem of parents with children who have delays or disabilities (Krauss & Jacobs, 1990; Pearlin & Schooler, 1978; Schilling, Gilchrist, & Schinke, 1984). This partly reflects the long-standing emphasis on individual psychopathological

reactions that obscures social processes involved in family adaptation to children with disabilities and delays (Murphy, 1982). The continuing preoccupation with individual psychopathological reactions is a reminder of the psychoanalytic origins of many ideas in the social and behavior sciences.

Crnic et al. (1983) noted that most investigators of families with children who have disabilities have focused on individuals and not often considered the family, meaning that most of them have featured psychological as opposed to social forms of adaptation. The conception and definition of *accommodation* is explicitly a family-level, social unit of analysis; it is not an alternative to psychological units, but rather a complementary family unit of analysis. The aim is a construct that reflects family adaptation process rather than individual family member adaptation.

First, what kinds and amounts of accommodation are reported by families with a child 3 to 4 years of age who exhibits significant developmental delays? We asked 102 families of children with delays to describe their child's history and what they did in response to their child's delay. Transcriptions of these semi-structured interviews were assessed for accommodation activity, within the 10 ecocultural domains mentioned earlier in this section (see pp. 186–187), (Gallimore et al., 1989; Weisner, 1984). A coding scheme was developed to quantify parents' accounts of daily routine construction and maintenance. In this paper we have presented evidence on the amount and nature of accommodation activity across families and reported a test of whether it is randomly or nonrandomly distributed within our sample.

Second, to what is family accommodation related? To address this question, we correlated accommodation activity to child cognitive functioning level, child health/developmental history data, number and type of child problems, and the family's job/career values and socio-

economic status (SES) and presented case materials to illustrate major statistical findings.

A caveat is appropriate here. Accommodation activity as we have measured it is neither positive nor negative in its presumed effects on the family or child. For instance, the fact that a father stayed with a job to retain medical insurance, even though he would have left the job had it not been for the child's problems, is not scored as "positive" or "negative." It is scored for the amount and intensity of activity that the family reported as a response to the child with delays. Accommodation may or may not be a positive action of the family: that must be determined from independent evidence.

To confound "goodness of accommodation from the child perspective" with the accommodation activity itself would preclude ever assessing the valence for the child. The "valence" of an accommodation must be determined by its correlation with other variables. An accommodation could eventually be judged positive for the child but negative for the mother or siblings. Parents and their children's interests often, perhaps always, will be in partial conflict (Weisner, 1987). The "goodness" of accommodations will depend on long-term outcome assessments for parents as well as children. That determination goes beyond our purpose here, which is cross-sectional, necessarily more limited, and focused on accommodation activity and its covariates, not its valence.

## Method

### Sample

Our longitudinal study is focused on families with a young child who exhibits developmental delays of unknown or uncertain cause (Bernheimer & Keogh, 1982, 1986, 1981; Gallimore et al., 1984; Gallimore et al., 1983). *Developmental delay* is a term of relatively recent vintage and lacks definitional specificity (Bern-

heimer & Keogh, 1986). It is essentially a nonspecific "clinical" term with less ominous overtones for the future than "mental retardation." Although some children with early delays "catch up," the majority continue to lag behind age norms on standardized tests of development and cognition, and the majority are placed in special education classes once they enter school (Bernheimer & Keogh, 1988).

In their study of 37 children with developmental delay, Bernheimer and Keogh (1986, 1982) excluded from their sample any children known to have chromosomal abnormalities and/or genetic conditions associated with mental retardation or delays associated with either known prenatal drug or alcohol usage or with postnatal neglect or abuse. We elected to adopt the same exclusionary criteria for two reasons. First, we wished to maximize similarity of our cohort with the Bernheimer/Keogh cohort. Second, Bernheimer and Keogh (1982) had reported some informal observations that families dealing with ambiguous diagnoses and prognoses showed considerable variance in adaptation to developmental delay; although it was not the focus of their study, their informal observations suggested such a cohort was particularly well-suited for a study of family adaptation.

Over a course of approximately 16 months, we successfully recruited 103 children in 102 European-American families into our cohort. Each family had a child (one family had twins) who had been judged to be developmentally delayed by a professional or an agency. Seventy-three different agencies in the greater Los Angeles metropolitan area assisted in the assembly of the cohort. Public schools and private intervention programs constituted two thirds of the agencies. A total of 313 children were reviewed or discussed for entry into the cohort. Of that number, 103 children (58.3% boys) matched our sampling criteria, and the parents consented to participate.

Of the 210 children not included, 95% did not match our sampling criteria, a fact established by discussions with agency personnel; the remaining 5% met our sampling criteria but either an agency employee "selected them out" or the parents declined to participate. This suggests that "selection bias" is present in the cohort but at an acceptable level. In other words, the 102 participating families constituted virtually the entire population meeting our sampling criteria and who were being served by 73 different agencies in the Los Angeles metropolitan area at a given period in the mid-1980s.

At entry, the mean child chronological age (CA) was 41.8 months (standard deviation [*SD*] = 6.2; range = 32 to 55). The mean Gesell Developmental Quotient (DQ) was 72.32 (*SD* = 15.97; range = 38 to 117). Gesell Developmental Schedules subscale and Vineland Adaptive Behavior Scales results are presented in Table 1. All but 18 of the children had DQs below 90, and all 103 had significant delays in one or more areas (motor, speech, behavior, or cognition) in spite of some relatively high DQs.

**Table 1**  
Means, *SD*s, and Ranges of Scores by Measure  
(*N* = 100)

Measure	Mean	<i>SD</i>	Range
<b>Gesell</b>			
Gross Motor DQ*	73.33	21.72	25.71-123.68
Fine Motor DQ	71.57	21.58	31.91-123.08
Adaptive DQ	73.82	16.89	29.79-116.67
Language DQ	69.17	18.29	27.27-116.67
Personal Social DQ	72.85	16.62	38.30-113.33
<b>Vineland</b>			
Communication			
Standard Score	72.55	10.58	53-111
Daily Living Skills			
Standard Score	71.72	11.29	52-111
<b>Child age*</b>			
Parents first noticed	9.84	9.07	0-36
First diagnosis	15.81	11.62	0-48
First entry into intervention	22.75	11.29	3-45

\*Developmental quotient. \*In months.

The 102 families consisted predominantly of middle-class, married couples in their 30s; however, there was a

wide range of variation in family composition. For example, 11% were mothers living independently due to divorce, separation, widowhood, or having never married or in a variety of other residential and marital circumstances (e.g., living with parents). Altogether, 19.4% of the children were in a single parent household (mother, father, grandmother, or other relative).

Nearly two thirds of the mothers (63.1%) were between 25 and 34 years of age, with another 25.2%, 35 to 40. The remaining mothers were roughly divided between those under age 24 and those older than 41 (4.9% under 24; 6.8%, 41 and older; 2.9%, unknown). Fathers were slightly older: 35.9% were between 25 and 34; 42.7%, between 35 and 50; 2.9% were 24 and under; and 6.8% over 50 (11.7% age unknown).

Families' total incomes reflect the wide range of SES represented in our sample: 10.2% of families had incomes under \$10,000 (many of these were families on welfare and/or living with their own parents); another 8.2% had incomes between \$10,000 and \$20,000; 19.4%, between \$20,000 and \$30,000; 34.6%, between \$30,000 and \$50,000; 16.3%, between \$50,000 and \$75,000, and 11.2%, over \$75,000 a year. Further details on the cohort and sampling procedure were presented elsewhere (Gallimore et al., 1989; Weisner et al., 1991).

## Interview Procedure

All 102 families were visited by an experienced interviewer who conducted a 2- to 3-hour semi-structured interview with principal caretakers (mothers, with few exceptions). The interview provided an opportunity for each family to "tell its story" in accordance with evidence that adults organize and recall personal experiences in narrative form (Bruner, 1989). Participants were encouraged to talk about "how it is going for you," or "for your child," in their own terms, using

their own framework

To ensure uniform coverage of vital topics, we provided interviewers with specific questions and topics to be covered. In addition, they were trained to use probes to ensure that equivalent material was obtained for all families. Using these probes, interviewers obtained first-person accounts of the problems and experiences families had in creating and sustaining a daily routine. If in telling their "story" parents did not address all topics identified as vital to the research, the interviewers raised the issue to reduce the chances of false negatives. All interviews were audiotaped and later transcribed.

With a few exceptions when fathers were also present, mothers were the participants in the interview and rating procedures. Although Beckman (1991) has argued for the need to distinguish between mothers' and fathers' perceptions in order to obtain an accurate picture of the effect of the child on the family, research on differences between mothers and fathers of children with developmental delays has been focused on parental self-esteem and stress levels (Beckman, 1991; Cummings, 1976; Goldberg, Marcovitch, MacGregor, & Lojkasek, 1986). Given our focus on social, rather than psychological factors of adaptation, we were comfortable relying on mothers as primary informants. Mothers (and the few fathers present at interviews) occasionally reported differences of opinion among couples regarding the child's diagnosis or prognosis or the extent to which the child should be integrated with peers who were developing normally. Reports of the daily routine, however, were factually based and not subject to the same interpretations.

Case materials were assembled for each family using a standard procedure (see Kaufman, 1988, for a recent example). The case materials presented here were selected, analyzed, and reported according to systematic case study procedures (Bernard, 1988; Levine, Gallimore, Weisner, & Turner, 1980; Spradley, 1979).

## Reliability of Interview Ratings

The measures of accommodation and ratings of child problems that follow were based on transcriptions of the interviews described in the preceding section. Reliability was established by independent, "blind" rating of transcribed audio interviews for 13 randomly selected families (13% of the total sample). Each case was coded by at least two "blind" raters, trained by the second author. Items with less than 70% agreement have been excluded from subsequent analyses. Most had over 80% agreement. This includes all measures based on interview ratings. The overall average was 82% simple rater agreement, within one adjacent scale point.

## Measures of Accommodation

The ecocultural niche domains have been proposed as salient in the lives of Euro-American families with a child who has developmental delays (Gallimore et al., 1989). They were developed by adapting the ecocultural domains proposed by Weisner (1984) to case materials collected by Bernheimer and Keogh (1988, 1982) in their study of families of children with developmental delays. Each of the resulting domains has been proposed as a potential focus of family accommodation activity. Brief definitions and illustrative examples of accommodations in each of 10 domains are provided on pages 186 and 187. Originally, we had proposed 12 domains (Gallimore et al., 1989) based on Weisner's (1984) cross-culturally derived list, but we successfully measured only 10. One domain (Sources of Child Influence) was dropped due to low coder reliability, and another was eliminated from further analysis due to lack of variance (Sources of Cultural Heterogeneity—there was too little cultural heterogeneity in our Euro-American sample to use this domain). This left 10 domains of accommodation for analysis.

For each domain listed on pages 186

and 187, each of the 102 families was coded for amount of accommodation activity that was related to the child with developmental delays. This coding occurred as soon as possible after the interview and home visit with each family. The coding scale of 0 to 8 was as follows: *low accommodation*—0, 1, or 2 = little or no evidence of accommodation activity that was related to the child with delays; *moderate accommodation*—3, 4, or 5 = some evidence of accommodation that was related to the child with delays; not a dominant theme; *high accommodation*—6, 7, or 8 = dominant theme of accommodation that was related to the child with delays.

For each of the 10 domains presented on pages 186 and 187, coders judged whether the amount of accommodation due to the child with delays was low, moderate, or high; then they judged how low, moderate, or high accommodation activities were by assigning a numerical value. For example, if a coder considered an activity to be of a moderate level, the next step was to assign either a 3, 4, or 5 to the activity. To be coded as an accommodation for the purposes of this study, there had to be evidence that the activity was at least partially related to the child with developmental delays. If the father changed jobs, this act received an accommodation coding only if there was direct evidence that this was at least partly related to the child's problems (e.g., father would earn more money to help with costs of therapy or had a shorter commute to be more available for domestic chores to relieve mother who was busy with child).

Each accommodation activity was examined to determine what, if any, implications it had for each of the 10 ecocultural domains. Thus, for example, a father who changed jobs to have a more flexible schedule could be coded for a subsistence, child care, and role accommodation, depending on the direct evidence in the record. To be coded for more than one domain, there must be explicit evidence that an accommodation in each

additional domain was at least partly related to the developmental delay of the child.

Coders were also instructed to code accordingly for any "changes or steps not taken" due to the child's delays. For instance, if a father remained in a less desirable job in order to retain highly desirable medical insurance that provided assistance to the child with delays, this would be coded as an accommodation under the subsistence domain, and possibly the child care workload domain, depending on the details provided by the parents' account. All accounts were considered for coding under one or more of the domains listed on pages 186 and 187 in order to fully reflect all the features of the niche that were involved.

## Measures of Child Status

Measures of child status were selected to represent the following four dimensions of interest and potential impact on the family: (a) child cognitive status, (b) child's medical/health status, (c) parent report of child's problems, (d) independent ratings by project staff of the number and type of child's problems that create difficulties or "hassles" for the parents. All child and family data were collected by trained project staff members; no data from existing medical or other files were used.

Child status measures included: (a) Gesell Developmental Schedules and the Communication & Daily Living Subscales of the Vineland Adaptive Behavior Scales (see Table 1); (b) child's health and developmental history (see Table 1): age at which parent first noticed delay, age of child at entry into first intervention program, total identified diagnoses, age at first diagnosis, total hospitalizations since birth, parent report of high day-to-day variability, stigmatized appearance; (c) total number of child problems parents identified in response to a card (presented during the interview) listing child "problems" (physical, motivational, emotional,

learning, behavior, & speech); and (d) child "hassle levels": 9-point ratings (by interviewers) of medical (e.g., unusual care demands, cardiac problems); behavioral (e.g., tantrums, difficult, uncooperative); communicative (hard to understand, nonverbal, points, grunts); activity rate (e.g., extremely active, needs constant monitoring); responsiveness (e.g., ignores, does not respond to others); and social appropriacy (e.g., inappropriate, tiresome overtures) hassle levels.

Gesell and Vineland scores were obtained from testing sessions within a few weeks after each family was interviewed. The testing was conducted by qualified psychometrists on a fee-for-service basis. Orientation meetings for the psychometrists were conducted to standardize their procedures, which involved visiting the homes of each child where the testing was conducted. Health and developmental histories of the children were obtained from parents during the interview procedure described previous. No medical personnel or records were used.

Reliability of the child problems and hassle-level ratings was determined in the manner described before for the accommodation variables. The percentage agreement averaged 75% blind rater agreement. Total parent report of problems is the number of problems that parents identified for their child after they inspected the card presented to them during the interview that listed various problems. Child hassle-level variables were rated by project staff members with reliability of coding as reported previously. These ratings were designed to tap specific child hassles (medical, behavioral, social, and communicative). *Hassle-level* was distinguished from *child problems* in this way: A parent might report that the child has a problem, but it may not be a hassle for the parents in the sense that it does not impact on the family's daily routine. The aim of the hassle measures was to independently assess the contextual effects of a child. The

term *hassle* was frequently used by parents in our interviews and is, therefore, what anthropologists call an “emic” or “folk” category.

### Job/Career and SES

Four different job/career and SES variables were assessed based on information collected during the interview with parents. Two of these were traditional SES variables: total family income and the Hollingshead (1975) Four Factor Index of Social Position.

Two additional job/career-related variables were assessed: mother’s employment status (full-time employed, part-time employed, temporarily unemployed, and unemployed) and mother’s description of her employment (career-minded/employed, a job only/no plans to quit, only a job/hopes to quit, and homemaker). The latter represents not only a description of the nature of the mother’s job but a reflection of her implicit values regarding employment outside the home.

We included both conventional measures of SES and the mother job/career variables for theoretical reasons. By itself, the Hollingshead SES index measures a status or a static position in a standard ranking hierarchy. It is presumably a proxy for resource availability as well as social prestige and achievement. In an ecocultural theory approach, parents’ values and beliefs regarding jobs, careers, and status must also be considered because the parents’ social construction process includes beliefs and values, such as those that relate to mother’s career orientation, as well as status and resource measures.

In our sample, variance in job/career orientation and status was minimal for fathers, but moderate for mothers, which is why these variables were included for mothers only. The addition of these

variables means a family could be scored “higher” in job/career, not because of its income or occupational status alone but because of parents’ individual or collective values regarding jobs and careerism.

## Results

### Nature and Variety of Family Accommodation

On pages 186 and 187, examples of family accommodation activity are given that were coded “high” (6, 7, or 8) for each of 10 ecocultural niche domains. These illustrate the accommodations parents reported that they made to maintain or adapt their daily routine to a child with delays. Aside from the variety, one quality of the reported accommodations was evident—only a few appeared to exceed the bounds of cultural and social propriety in American society. Euro-American families with young children who are delayed actively accommodate and do so in ways that are culturally available and generally endorsed. Even those that are unusual (e.g., father quits job to conduct therapy exercises) are not proscribed by United States norms and invite comment only because they are infrequent rather than culturally discrepant. In the absence of comparison data, however, this must remain a tentative conclusion.

### Amount of Accommodation

For the 102 families in the sample, a total of 680 different accommodations were coded, which averages to 6.67 accommodations per family. Another way to consider amount of activity is to use the coded level of accommodation on the 9-point rating system (from *low* to *high*). Figure 1 presents an overview of the amount of moderate and high accommodation distinguishing those families coded as high in accommodation (scores 6, 7, or 8) from those coded as moderate (3, 4, or

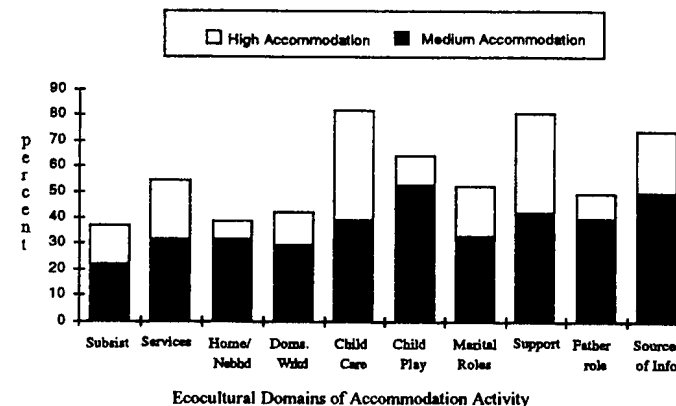


Figure 1. Percentage of families making moderate (medium) and high accommodations to child with developmental delays in 10 ecocultural domains (see pp. 186–187).

5) for each of the 10 ecocultural niche domains. The variance among domains was considerable, and the total amount of accommodation activity was substantial. Thirty to 40% of the families were coded as engaging in moderate to high activity in domains such as subsistence, alterations in home or neighborhood, and changes in domestic workload. In some domains as many as 75% of the families were scored as moderate or high (e.g., alterations in child care; changes in social support; searches for sources of information).

The varying frequencies across domains shows how wide-ranging and pervasive accommodation is among families. No domain failed to have fairly substantial accommodation activity, and a few did not dominate, leaving the rest only minor roles. This result is consistent with the theoretical expectations from our prior reviews: that these features would be salient and meaningful domains (Weisner, 1984).

Another consideration was the number of niche domains for which a family was coded as making accommodations. There was not a single family coded as reporting zero accommodation activity.

Most of the families (85%) made high or moderate accommodation in at least one or two domains. Nearly as many families (80%) made high or moderate accommodations in at least 3 but no more than 5 domains. Even with a more demanding criterion of 6 or more domains—fully 35% of families were coded as high or moderate. However, less than 10% of the families were coded as having high accommodation activity in 6 or more domains. These data suggest that families make substantial accommodations to their children but are selective in the domains in which they make them. There also seem to be limits to how much activity any family undertakes.

### Computer-Simulated Randomization Experiment

Although it is commonplace knowledge that variability is necessary for a construct to have value, variability by itself is no assurance of either construct meaningfulness or nonrandom selection of accommodations. Indeed, Figure 1 could well reflect random selection of accommodations by families. We assumed that the

probability of doing any single accommodation was the same as that observed among our 102 families. Next, we inquired as to whether families differed in likelihood of reporting more or fewer numbers of accommodations across the 10 domains than would be expected if they selected accommodations at random. To test this, we generated accommodations made by 1,000 computer-simulated "families." First, we determined the proportion of the 102 observed families that were scored as having made low, moderate, or high accommodations in each of the 10 possible domains of activity. These proportions were used as marginal probabilities for generating the accommodations of the 1,000 simulated families.

Each simulated family chose to make each of the accommodations independently with probability equal to the observed proportions. This process yielded a distribution reflecting random numbers of accommodations per family. We then compared the simulated distribution of number of accommodations compared with the actual observed distribution of 102 families. The distributions differ substantially,  $\chi^2(2) = 32.648, p < .001$ . The 102 observed families had higher frequencies of both low accommodation activity (46.6 observed vs. 35.1% simulated) and high accommodation activity (17.5 observed vs. 5.5% simulated) than would be expected if a random selection process were operating. The observed families exhibited nonrandom accommodation patterns. In the following section we have attempted to identify these patterns in terms of correlates of family accommodation.

### Correlates of Accommodation Activity

To determine and interpret the association between family-child characteristics and accommodation activity required that the large number of variables measuring the two domains be summarized. We therefore applied canonical correlation (Johnson &

Wichern, 1988). A *canonical correlation* is defined by finding the combination of variables from one domain that correlates maximally with combinations from another domain. A statistically significant canonical correlation produces combinations representing features of the two domains that are significantly associated. *Canonical loadings* are the correlations between each of the component variables of a domain and the chosen combination; loadings greater than 0.25 were reported as meaningful contributions in the following sections.

*Gesell and Vineland Scales.* The canonical correlation between child developmental test scores and family accommodation was not statistically significant,  $R = .526$ , suggesting that accommodation activities undertaken in response to a child's early delays (ages 3 to 4) are not statistically related to these measures of developmental status. The absence of a relation parallels what many parents have told us about family accommodation (and the case materials would confirm): Test scores, and the levels of child functioning they reflect, are not really the issues that drive what families "do" in response to children with delays in the ranges we sampled (DQs of 38 to 117). This does not mean there is no reaction to test scores: Many parents in the sample have been very distressed in the past when their child scored low or showed little "catch-up" to age norms. Although the parents recognize scores are an attempt to document their child's developmental progress and identify delays for program planning, what these tests measure is not associated with family accommodation activity at child ages 3 and 4.

*Child Health and Developmental History.* The canonical correlation between health/developmental history measures and family accommodation revealed a trend sufficient to warrant examination of simple correlations,  $R = .626, \chi^2(70) = 88.57, p < .066$ . Eleven of 70 correlations were statistically significant: 3 exceeded .30,  $p < .001$ , 3 exceeded .25,  $p < .01$ , and

5 exceeded .19,  $p < .05$ . Two principal findings emerged.

First, the largest single correlation was a negative relation between age of entry into first intervention program and the amount of accommodation in the domestic workload,  $r = -.369, p < .001$ . In addition, age of entry was negatively related to home/neighborhood and child care accommodations,  $r_s = -.266$  and  $-.287$ , respectively,  $p_s < .01$ . These relations indicate that early entry into intervention is weakly associated with family accommodations that relate to child care and to implementing intervention recommendations. The earlier that serious child problems were recognized and required intervention, the more families had to deal with, such as moving and changing their residence, adjusting their domestic arrangement, and making child-care arrangements. Because "accommodation" is measured as a neutral variable, the increased activity associated with early intervention should not be interpreted as a negative impact. A judgment of positive or negative must be suspended until longitudinal data are available and independent assessments are available for both child and family outcomes assessed in multiple ways. At this point, these findings only clarify what varieties of proactivity families display when their children are in intervention, not whether any particular pattern of accommodation is "good" or "bad."

Second, the total number of diagnoses the child had received since birth was positively related to 3 of the 10 accommodation domains: child care,  $r = .349, p < .001$ , instrumental/emotional support,  $r = .238, p < .05$ , and sources of information,  $r = .218, p < .05$ .

Overall, these health and developmental history data suggest that professionally diagnosed problems and early intervention tend to be associated with particular kinds of family accommodation: parents are locating child care, identifying and using social support, and seeking information about the child's condition

and possible services. Although these kinds of associations are not surprising, the absence of relations to some other accommodation domains are interesting. As we shall see, other domains of accommodation, not related to age at intervention and numbers of diagnoses, are related to number and nature of child problems.

*Child Problems and Hassle Levels.* Table 2 illustrates the significant canonical correlation of child problems/hassles and family accommodation activity. Only variables with a canonical loading of .25 or greater are included in the table. A complete listing of the child problem/hassle levels and accommodation variables that were included in the canonical analysis was presented in the *Method* section. The canonical correlation indicates that child problems and child medical and activity-rate hassles were significantly associated with accommodation, principally in the domains of service accessibility, child care, and father's roles.

Table 2  
Canonical Relation of Child Problems and Hassle Level and Accommodation Activity

Dimension/Item	Canonical loading
Child problem	
No. of parent reported problems	0.811
Medical hassle level	0.595
High activity-rate hassle level	0.307
Accommodation activity	
Accessibility of services	0.622
Childcare structure & arrangements	0.619
Role of father/spouse	0.349
Marital roles	0.284
Domestic workload	0.275
Sources of family information	0.261
Home/neighborhood safety & convenience	-0.259

Factor scores based on the canonical correlation were computed for each family. For the top 20% on the canonical factor scores (families high on both child problems/hassles and accommodation), the most frequently reported problems were speech, physical, behavior, and learning problems (76, 52, 43 and 43%, respectively). The 20% of families with the lowest canonical factor scores (low child problems and low accommodation) were



less likely to report speech, physical, behavior, and learning difficulties (45, 25, 25, and 15%, respectively).

Families with high canonical factor scores on both child problems and accommodation had children who presented many difficulties in everyday life. A common thread in their accounts was the struggle to sustain a meaningful everyday routine, given the impact of a child with developmental delays on the family. The canonical analysis suggests that the most frequent accommodations to problems and hassles were in the areas of child care, accessibility of services, and subsistence. For example, these 3 domains were featured in one low income, single mother's description of the accommodations she has made: Her account included accommodations in child care arrangements, service access, and subsistence base in response to a child whose delay was mild but who presented many serious medical and behavioral problems:

Case 224: Mother: At the time she was born and sick and everything, I had planned on going back to night school after having her, [but] that was impossible. . . . I could not work, because no one would babysit her or watch her. . . . instead of getting into a career and stuff, I was taking her to doctors every day, so [I had to] change my goals from getting ahead in life to just taking care of her; making sure she survived, and—what was important, at the time, was just taking [care of] her and . . . keep finding out what they could do for her, and what I could do, making sure her needs were met every day. [The mother reported applying for a job with the Sheriff's Department]: . . . to make that much money without education and without previous training, it's about the only thing that I could go directly into, and make that [much] money [and get good benefits] to support my kids, other than the Fire Department, but their testing is brutal [laughs] and I doubt very much that I'd pass the Fire Department's testing. Those two are about the only ways I found I can really be able to support my kids and have a future.

In other cases, accommodations in the child-care domain were worked out

between two parents. Both of the following cases depict the everyday difficulties and decisions made by parents with regard to child care, their child's problems, and securing services; these complex series of decisions illustrate the processes that lie behind the canonical correlations across all our families:

Case 134: In this low-middle income conjugal family, the stepfather worked in a family business. The mother was a secretary in a law firm. The child had cerebral palsy with poorly controlled seizures, no speech, fell a lot, had some screaming behaviors. Mother was very angry that the biological father of the child was not providing more support; he was non-cooperative in getting more therapy. Mother was a dynamic, voluble, forceful woman. The stepfather, a quiet, steady man, was heavily involved in caring for the child, who required extraordinary care levels. The couple had been in therapy to adjust to this second marriage with a handicapped child. The stepfather delivered and picked up the child, took her to therapies, cooked dinner for her until mother got home after a long commute. Parents used friends and family for respite and some child care. Mother used church and stepfather for support, plus counselling. Both parents were working partly to pay for the child's therapy, which was given priority over paying household bills.

Case 054: In this religious family with middle income, the handicapped child's (1 of 5) low-functioning status drove the accommodations. Child had to be monitored constantly, and the principal load fell on the mother. One of the reasons they remained in California was the child's programs; if it weren't for them, they would have moved to another state. The principal accommodation was increasing the workload of mother, but she enlisted help of siblings and father. The mother emphatically listed the father as providing babysitting, etc., indicating the importance and salience of this for her.

Our interpretation of these results centers on the impact of the child with developmental delays on the everyday routine of the family. However the child's impact is assessed—direct parent report or independent ratings—it relates meaningfully to family proactivity as reflected in

the level of accommodation activity.

However, not all ecocultural domains of family life are equally or globally impacted when a child is young. Impact is specific, not general. During the preschool years, child care, service access and transportation, domestic work and routines, marital roles, and father/spouse participation are all more likely to be strongly impacted by a child with many problems; these domains are sensitive to child problems that involve issues of time, scheduling, division of labor in the family, and getting and keeping child care. Other domains are not involved. Families accommodating to child problems and hassles were not active in the domain of social and instrumental support or child play groups.

**Job/Career Status Variables.** Table 3 presents a significant canonical correlation between job/career variables and accommodation. All four job/career and SES variables met the .25 criterion, and their loadings are reported. Six of the 10 accommodation variables met the criterion.

Table 3  
Canonical Relation of Dimensions

Dimension	Canonical loading
Job/career and socioeconomic variables	
Mother is employed	0.831
Mother is career oriented	0.543
Family income	0.519
Family SES	0.385
Accommodation activity	
Family subsistence	0.885
Sources of family information	0.533
Role of father/spouse	0.418
Marital roles	0.356
Accessibility of services	0.353
Domestic workload	0.281

The canonical relation (see Table 3) suggests that, in some families, mother's employment and career decisions are related to several domains of family accommodations to the child with delays, in addition to the subsistence domain. Those domains include sources of information, role of father/spouse, marital roles, and accessibility to services.

Twenty-two percent of families

changed parents' employment status or manipulated work hours as a subsistence accommodation—regardless of their overall income or SES status. In 19 cases these changes involved mothers, 2 cases involved fathers, and 1 case involved both parents. These families either had sufficient resources or felt they had the flexibility to reduce or alter their subsistence base. These 22 families made accommodations that involved a parent working at home and finding flexible work hours (10 cases) and either quitting work or reducing hours (12 cases). One mother worked nights to be available during the day, another mother quit work to take the child to appointments, a father closed his automobile repair shop and began a business at home so he could conduct exercises prescribed for the child.

Our data also show that seeking higher SES and income alone cannot account for subsistence accommodation. Fifteen percent of families responded to their child with developmental delays by making financial sacrifices or staying in a less desirable job. For instance, 5 families were coded as having the mother working to support the child's services, and another 4 were coded for fathers remaining in a less desirable job to pay for child services or retain medical insurance. Another 6 families were making sacrifices in lifestyle and standard of living in order to accommodate the child with delays.

The following 4 case examples of families of varying SES and income status were scored high on both dimensions reflected in the canonical analysis presented in Table 3 (job/career and accommodation). These excerpts illustrate the kinds of job/career issues that arise in families high on both dimensions: Presence of the mother at paid work or in the home most of the day, the complementary roles of the father, and mother's values regarding career and employment.

Case 803: In this lower middle class family, the father was a technician, and the mother



worked at home because no employer offered the flexible hours she needed for the child with delays. The mother loved children (did paid child care in the home) and drove the child to and from school everyday. The father was totally uninvolved. Accommodations were driven by child's (and older brother's) needs for transportation.

**Case 123:** In this two-parent middle class family, the child with delays was a frail little girl. At first, accommodations were driven by programs, therapies needed for the child. The mother stayed home because the child "needed her." But the mother then returned to work to pay for the therapies—and to pay for the new house, the purchase of which was related to the child's needs for a separate room and a yard for unsupervised play.

**Cases 523 & 044 (twins):** These parents were married upper-middle class parents of twins with cerebral palsy and severe visual impairment. Values drove this family's accommodations. The mother had faith in the efficacy of "bombardment" of the twins with programs. She continued to be employed, but for months had a night job and went without sleep during the day in order to do therapeutic exercises with the twins; later on she changed to a day job with flexible hours so she could drive the kids to their appointments and therapies. The father was uninvolved, and the marriage was threatened.

**Case 914:** In this upper-middle SES, two-parent family, the child with delays was the younger of two children. The child with delays had many life-threatening medical problems, and her delay drove the bombardment of services that parents arranged. Both parents continued working, but they had job hours they could juggle to get her to all appointments. The mother was a networker—she sought out experts who could inform her and provide her with emotional support—which she did not get from family. The mother's career was more important than father's insurance sales job.

Not surprisingly, income and SES were associated with accommodation activity. These features of any family's ecocultural niche are powerful influences on the structure and maintenance of the everyday routine. However, as Table 3

indicates, and our qualitative case data illustrate, income and SES are far from the whole story. Parental values and beliefs regarding maternal employment (e.g., job vs. career) are powerful influences on accommodation activities and patterns. For example, we can distinguish (a) families in which mothers' careers are considered important, but they have delayed work in order to accommodate to a child with delays from (b) families in which mothers are not working and have no desire for a career, regardless of the child's status. In the former case, subsistence accommodation scores for mothers' job/career decisions would be coded higher, whereas in the latter they would be coded lower. The SES and income, however, would be similar in both cases, assuming the fathers had similar levels of income and employment. Similarly, we can distinguish (c) families in which mothers work to support the child with delays but do not desire a career from (d) families in which mothers work in order to have a career, regardless of having a child with developmental delays. Again, accommodation due to the child with delays is high in the former case, but not the latter.

In addition, job/career and SES features are related to accommodations focused on marital roles and father participation (see Table 3 for marital roles and father involvement loadings) that can be sources of accommodations as well (e.g., developmental delay increases mother's domestic workload, but because she must now work due to expenses related to the child's problems [subsistence accommodation], the father becomes more involved in housework and child care [role of father/spouse and marital role accommodations]).

Socioeconomic factors play an important but ecoculturally embedded and complementary role in the accommodation process. However, accommodation activities are more than a mere proxy for income and SES status because proactivity is available to virtually all families no mat-

ter what their social and economic circumstances are, it is available to less affluent families in many cases through their use of mothers' paid work as a source of accommodation. Such effects are revealed because values and beliefs were included along with conventional SES variables.

## Discussion

Ecocultural theory proposes that the creation and maintenance of an everyday routine is an adaptation problem common to all families. Like all others, families with young children who exhibit developmental delays engage in accommodations—in substantial amounts and diversities. These accommodations are nonrandom, meaningful to families, and occur across 10 ecocultural domains proposed by ecocultural theory to be especially salient in the lives of families with young children. In response to 3- and 4-year-old children with delays, most accommodation activity occurs in the domains of child care, sources of parental information, and social support, but all ecocultural domains are well-represented.

Although the stress and psychological impact of having a child with delays and disabilities can be substantial, and poses difficult adaptive problems, casual inspection suggests that the families' accommodations do not seem unusual, deviant, or "pathological." Of course, this conclusion remains preliminary until confirmed using appropriate comparison samples. Nonetheless, its face validity is striking: The list of 680 reported accommodations includes few that our research staff, students, or other colleagues found surprising or strange or failed to recognize as actions American families sometimes take. In this sense, the observed accommodations are culturally familiar in a way that a list of accommodations from, for example, East Africa or South India would not be (i.e., from other cultural places where the ecocultural context and concept

of childhood—let alone delay and disability—are different enough that whole ranges of family accommodation activities occur that are completely absent in Euro-American reports [Weisner, 1984, 1993]). In addition, none of the reported accommodations seem overtly deviant or pathological to experienced clinical psychologists and developmentalists who are members of our research team. Albeit still a clinical impression and in need of formal verification, it appears that most families dealing with delay frequently draw from the same pool of cultural activities—the same set of cultural tools—chosen by Euro-American families to solve adaptational problems.

However, ecocultural theory predicts that there are likely to be some accommodations unique to developmental delay and disability. Because delay and disability can have specific effects on the daily routine, their impact should be reflected in selected aspects of family accommodation. This prediction must be tested using contrast groups of families, a step that we have not yet completed; but it is worth raising here in order to define what constitutes proper contrast or control groups in an ecocultural approach.

Ecocultural theory suggests that identifying accommodations unique to families dealing with delay depends on contrasting them with families dealing with some other child-related goal that also may impact the daily routine (e.g., maximizing gifted children's academic, athletic, or musical achievements; coping with serious but short-term medical problems). This is a more sound research strategy than relying only on developmental test scores for selecting comparison samples to identify family responses associated with disability and delay (Bernheimer et al., 1990; Gallimore et al., 1989). It is one response to Stoneman's (1989) call for theory-driven comparison group designs.

There was no evidence that family accommodations were associated with psychometric measures of child develop-

mental status (within, of course, the DQ range of our sample). Rather, family accommodations were linked to ratings of the child's impact on the daily routine, suggesting that family service planning might be improved with data on the impact of a child on the family's daily routine and accommodation activities in response to specific impacts. It is likely that any family service plan will be difficult to implement if it fails to consider the family's daily routine, the particular impact of the child on it, and the accommodations that they have tried to make to sustain the routine. For example, our results indicate that some domains are more impacted than others by the number and nature of child problems. Those most sensitive to child problems at ages 3 and 4 involve issues of time, scheduling, division of labor in the family, and long-range decisions by parents about delaying work, seeking work to meet child-related expenses, and getting and keeping child care. To the extent that these responses are generalizable to other families of children with delays, prudence dictates considering these features of the family context during assessment and intervention planning.

More economic and social resources on which to base accommodations (greater income, higher occupational status, or higher formal education) do not, by themselves, account for accommodation activity, although resources certainly affect options. However, accommodations are made by low as well as middle and upper income families. Our cases provided varied examples within and between social and economic groups, which share the common problem of creating and sustaining a daily routine that a family regards as the best it can achieve for all concerned. Finding so much variation in accommodation within all social classes adds to the cautions so often expressed regarding the inadequacies of single-value, "packed" indices of SES (White, 1982; B. Whiting, 1976, 1980). It reminds researchers again to be careful not to stereotype whole

classes of families on the basis of a single score, category, or status.

Both our qualitative analyses and statistical analyses suggest that less income and lower social status do not restrict families to either passivity or limit the forms of accommodations they make. Accommodation as a process is not social class dependent, although the nature of the accommodations may be expected to vary, depending on ecological resources and constraints and on personal and cultural values. All things equal, greater income, higher job status, or more formal education cannot account for most accommodation activity or even most subsistence accommodations in families. This conclusion is consistent with White's (1982) meta-analysis suggesting considerable variance in practices from home to home within any social class; it echoes Bloom's (1981) conclusion that "It is what parents *do* rather than their *status* that accounts for the learning development of their children" (p. 92).

There is also considerable variance within family composition and marital categories, just as for social class categories. This is consistent with McLanahan's (1983) review of family research suggesting that the overall *quality* of the family lifestyle, including the role of mediating contextual circumstances (e.g., income, race, or parental expectations and values), rather than simply the *state* of being single or unmarried that matters for child outcomes (McLanahan, 1983, 1985). It is what single parents *do*, not merely their household type and marital status, that seems to matter for accommodation. Analyzing accommodation within cultural and ecological context is one way of conceptualizing and understanding within-family status variations as well as within-social class differences. Accommodation activity is a dimension that avoids the often implicit assumption that more status and income, better education, or living in a two-parent married family arrangement invariably produces "better" developmental circumstances and conse-

quences.

More generally, ecocultural theory argues that accommodation occurs within the context of a larger ecological system and has meaning for families within their cultural goals and values (hence "ecocultural"). In related research, Nihira, Weisner, and Bernheimer (1991) have constructed an Ecocultural Scale assessing the wider ecological and cultural context. One component that surfaced in its psychometric development was the amount of accommodation activity, which independently supports the conclusion that accommodation is a dimension of some utility in ecological analyses of families. Our view is that the two kinds of assessments—accommodation processes and wider ecocultural context—are complementary. The fact that we have been able to systematically measure both, and that each is related to the other, although retaining independent contributions to other outcome measures, suggests that both will be needed in comprehensive analysis of family adaptation.

In no way do these results indicate that stress is absent in the lives of families of children with early delays. Rather, they suggest that creating and sustaining a daily routine is also a substantial adaptive problem of the families. Individual psychological factors, such as responses to stress, are important aspects of adaptation, but inclusion of social-level factors and processes is necessary for a complete accounting (Crnic et al., 1983). A full and balanced, empirical account of family adaptation—in those with and without a special child—must include family-level ecocultural accommodations as well as individual-level strategies for coping with stress.

Finally, these results confirm the importance of listening more closely to parents' accounts and concerns and what they do to adapt to their children. What they talk about so readily is the "stuff" of which family accommodation is constructed. Their stories make sense, if we look for the social as well as the psycho-

logical meaning of what they tell us. Theory and practice will be the better for it if we do so.

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Received: 4/5/91; first decision: 10/14/91; accepted: 12/12/91.

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