

AN ABSTRACT OF THE DISSERTATION OF

Joni Weatherspoon for the degree of Doctor of Philosophy in Human Development and Family Studies presented on January 8, 2004.

Title: Analysis of High-Risk Hispanic Families in a Family Support Program: Characteristics, Factors Affecting Parenting Skills over Time, and Age-Paced Newsletter Efficacy

Abstract approved:

Redacted for Privacy

Sally R. Bowman

Redacted for Privacy

Clara C. Pratt

Two studies investigated the characteristics of high-risk Hispanic parents with young children who were enrolled in a primary prevention home visitation program targeting first birth families.

In the first study, more and less acculturated high-risk Hispanic families were compared to high-risk non-Hispanic White families on differences in demographic characteristics, risk factors associated with poor child outcomes, and parent behaviors related to infant health. Using the General Linear Model Univariate procedure, these characteristics were then related to level of parenting skills, measured after approximately one year of service. A total of 1005 families were included in the study.

There were important differences in parent psychosocial characteristics, health risks, and outcomes among Hispanic families. Hispanic mothers who were more acculturated, as measured by use of English in the home, were more likely to be at risk for substance abuse, mental illness, and family conflict. They were more likely to

smoke and less likely to breastfeed. Less acculturated Hispanic mothers were less educated and more likely to be isolated. Controlling for pretest scores and education level, there were significant between group differences on parenting skills after one year of service, however the effect was small and overshadowed by the significant interaction effect between partner status and household category. Scores for single Spanish-speaking Hispanic mothers were significantly lower than scores of Spanish-speaking Hispanics in partner households.

Risk factors that were positively associated with program progress included breastfeeding and mother's education level. Smoking, mental illness, and unrealistic expectations for the child were negatively associated with program progress.

The second paper addressed the efficacy of an age-paced parenting newsletter as part of a home-visiting program for Spanish-speaking Hispanic parents. Family Service Workers serving these families delivered the newsletter and used it as a curriculum guide and teaching tool for families. Parents reported reading the newsletter, learning from it, and changing their behavior in response to newsletter content. Home visitors reported that it was a useful tool to reach high-risk parents with important parenting information. They found that it was particularly useful to combat inappropriate or unhealthful parenting advice from well-meaning family members and friends.

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Analysis of High-Risk Hispanic Families in a Family Support Program:  
Characteristics, Factors Affecting Parenting Skills over Time, and  
Age-Paced Newsletter Efficacy

by  
Joni Weatherspoon

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APPROVED

Redacted for Privacy

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Co-Major Professor, representing Human Development and Family Studies

Redacted for Privacy

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Co-Major Professor, representing Human Development and Family Studies

Redacted for Privacy

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Chair of the Department of Human Development and Family Sciences

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Dean of the Graduate School

I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

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Joni Weatherspoon, Author

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## CONTRIBUTION OF AUTHORS

Co-authors of the second manuscript were Dr. Sally Bowman, Dr. Clara Pratt and Rebecca Hernandez. Dr. Bowman was involved with the research design, data collection, and provided valuable editing advice. Dr. Pratt was instrumental in conceptualizing, implementing, and analyzing the research. Ms. Hernandez assisted in data collection and translation.

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## DEDICATION

This is dedicated to the generations that inspired me and kept me on the path-- my mother, Margaret, and my children, Kristen and Andrew. And to Patti, who was always there.

Analysis of High-Risk Hispanic Families in a Family Support Program:  
Characteristics, Factors Affecting Parenting Skills over Time, and Age-Paced  
Newsletter Efficacy

General Introduction

Hispanics in the United States represent a large and rapidly growing segment of the population. The multiple nationalities and races that are part of this ethnic group share cultural traits, values, and language preferences that distinguish them from other racial and ethnic groups. Further, there are differences between more and less acculturated Hispanics, an important distinction in light of high immigration levels. Many of these ethnic and acculturation differences have implications for the provision of social services to Hispanic families, both in the nature and intensity of services required, as well as the use of culturally appropriate service delivery methods.

Two manuscripts are presented to elucidate the characteristics of high-risk Hispanic parents with young children and to investigate the effectiveness of parent education and family support programs for these families. Families included in both studies were enrolled in Oregon Healthy Start, a primary prevention home visitation program targeting first birth families in twenty-one Oregon counties. The first manuscript will investigate the connections between ethnicity, acculturation, and risk factors associated with negative child outcomes and explore how these factors are related to increased parenting skills. The second will examine the utility of a Spanish language age-paced parent education newsletter for Spanish-speaking Hispanic parents. The intent of both studies is to inform the development of more effective program delivery systems for this rapidly growing population.

The balance of this chapter will explore research related to Hispanic families and parent support. First, data on Hispanic population characteristics, socioeconomic attributes, language use, and immigration status will be reviewed. Cultural traits that are shared by Hispanics and issues associated with Hispanic acculturation in the United States will be described. Research findings regarding the impact of social support, parenting newsletters, and home visiting services on outcomes for families in general and Hispanic families specifically will be examined. These findings will then be discussed within the framework of the ecological theory.

### *The Hispanic Population in the United States*

#### *Population Characteristics*

The Hispanic population in the United States increased by almost 58% between 1990 and 2000 compared to an increase of 13.2% for the total population during the same time period (U.S. Census Bureau, 2001). This rapid increase is due both to higher fertility rates among Hispanics than non-Hispanics and to high levels of immigration (U.S. Bureau of the Census, 1996). In Oregon, the increase in the Hispanic population has been even more dramatic than the national growth rate. Between 1990 and 2000 the number of Hispanics in Oregon increased by 144% as compared to an increase in the total state population of 20%. By 2000, Hispanics accounted for 8% of the total population in Oregon.

Many Hispanics are recent immigrants. In 2000 almost 40% of all Hispanics were foreign born and of those born outside of the United States, 43% entered the country between 1990 and 2000 (Therrien & Ramirez, 2001). Many recent immigrants

have a limited knowledge of English. By 2000, 11% of the total U.S. population over the age of five, or 28 million people, spoke Spanish in the home, making Spanish the most common language used in the home after English. This is an increase of over 64% in just the past decade. During the same time period in Oregon, the number of persons speaking Spanish in the home increased by over 150% to a total of 7% of the population over the age of five (U.S. Census Bureau, 2003).

The age characteristics of Hispanics differ from the population as a whole. Hispanics are younger than other population groups with fewer older adults (Therrien & Ramirez, 2001; Guzmán, 2001). The median age of Hispanics is almost ten years less than the population as a whole, 25.9 years compared to 35.3 for the entire population. In 2000 35% of Hispanics were less than age 18 compared to 25.7% of the population as a whole (U.S. Bureau of the Census, 1996).

#### *Socioeconomic Characteristics*

Hispanics are more likely to have never been married than non-Hispanic Whites (Therrien & Ramirez, 2000). Of all Hispanic births in 2000, 42.7% were to unmarried women compared to 22.1% for non-Hispanic Whites and 68.7% for Black women (Martin, Hamilton, Ventura, Menacker, & Park, 2002). Childbearing during cohabitation is more acceptable for Hispanic women than other groups and Hispanic women are more likely to remain cohabiting after they become pregnant than non-Hispanic Whites (Manning, 2001). In 2000, more than one-quarter of Hispanics had less than a ninth grade education compared to only 4.2% of the non-Hispanic White population and over 40% of Hispanics have not graduated from high school, compared

to less than 12% of the non-Hispanic White population (Therrien & Ramirez). About half of the Hispanic women giving birth in 2000 had completed high school compared to over three-quarters of all women (Martin et al.).

Hispanics also differ from the non-Hispanic White population in income and employment characteristics. They are twice as likely to be unemployed (6.8% of Hispanics age 16 and older versus 3.4% of non-Hispanic Whites) and to earn less than non-Hispanic Whites (Therrien & Ramirez, 2001). Over the past two and a half decades the median income for Hispanic families has been consistently and substantially lower than non-Hispanic Whites (U.S. Bureau of the Census, 1996).

In 2001, 21.4% of Hispanics were living in poverty compared with 7.8% of non-Hispanic Whites (Proctor and Dalaker, 2000). During the same year, 28% of Hispanic children were living in poverty compared to 9.5% of non-Hispanic White children. One in five Hispanics experienced material hardship in 1995, a rate double that of the total U.S. population. The most frequently encountered hardships were medical need, food insufficiency, and telephone disconnection (Beverly, 2001).

#### *Birth Rates and Outcomes*

Hispanic women have higher fertility rates and tend to begin childbearing at younger ages than other groups (Zambrana, Dorrington, & Hayes-Bautista, 1995). At the same time, Hispanics have less access to health care than the general population (U.S. Bureau of the Census, 1996) and are significantly less likely to use or receive prenatal care (Martin et al., 2002). Despite this differential access to health care, Hispanic women have relatively positive birth outcomes compared to other U.S.

women. Infant mortality rates are lower for Hispanics than Blacks and non-Hispanic Whites. The proportion of Hispanics with low birthweight babies is lower than all other groups except non-Hispanic Whites. Mexican and Cuban mothers have the lowest percentage of low birthweight infants of all groups including non-Hispanic Whites. Hispanics continue to have preterm birth rates slightly higher than Whites but significantly lower than Blacks (Martin et al.)

Positive birth outcomes among Mexican Americans were not associated with positive development in early childhood. Mexican American children scored substantially and significantly lower than non-Hispanic White children on tests of mental development at three to four years of age (Padilla, Boardman, Hummer, & Espitia, 2002). The most important predictor of the score of mental development was the mother's educational level. Lower scores were also associated with the amount of time the child had lived in family and social environments affected by poverty. Other research indicates that poverty is more strongly associated with IQ at age 5 than any other socioeconomic measure, including mother's education (Duncan, Brooks-Gunn, & Klebanov, 1994).

### *Hispanic Culture and Social Context*

Culture is a system of shared values that affects daily activities by influencing behaviors, beliefs, and attitudes (Dilworth-Anderson & Marshall, 1996). An emphasis on collectivism differentiates Hispanic cultural values from European American cultural values that are more oriented to the individual. This is reflected in patterns of social interaction that include the emphasis of interpersonal relationships over task



achievements; respect for the dignity and worth of the individual; a generalized respect for and deference to authority (Marín & VanOss Marín, 1991; Simoni & Perez, 1995; Triandis, Marín, Lisansky, & Betancourt, 1984); and *familism*, the expectation and obligation that the family will be the center of loyalty and support for individuals (Lindahl & Malik, 1999).

*Familism* is a fundamental feature of Hispanic culture and the family is the group to which Hispanic culture assigns the greatest importance (Marín & VanOss Marín, 1991). *Familism* prioritizes the family in daily life and promotes strong kinship bonds (Julian, McKenry, & McKelvey, 1994). The family is a source of warmth, stability, and security for its members. Family members tend to live in close proximity to one another (Bercerra, 1988) and are more important than friends as a source of support (Dilworth-Anderson & Marshall, 1996).

Hispanic families that are immigrants to the United States face the difficulties and stressors associated with language acquisition and acculturation. Acculturation involves changes in individual behaviors that result when minority group members participate in the culture of the dominant society. Because ethnicity and the cultural values associated with it are socially acquired they also can be altered through exposure to different cultural beliefs and practices. The individual, to varying degrees, accommodates to the new society. Immigrants may experience acculturative stress due to conflict between cultural values, isolation from their culture of origin, minority status, and inability to understand English (Dunkel-Schetter, Sagrestano, Feldman, & Killingworth, 1996).

There is evidence that higher levels of acculturation have negative effects for immigrants. Caetano and Clark (2003) report that higher levels of acculturation are positively associated with alcohol consumption among Hispanics, particularly among women born in the United States. Greater acculturation is also associated with higher levels of drug use for men and women (Bolger, Thomas, & Eckenrode, 1997; Caetano & Clark), greater likelihood of smoking for women (Acevedo, 1998) and decreased likelihood of breastfeeding ("Degree of Acculturation," 1995). In a study of adolescent mothers, acculturation was related to poorer educational outcomes and an increased likelihood of single parenthood (Wasserman, Rauh, Brunelli, Garcia-Castro, & Necos, 1990). Mexican Americans born in the United States generally have greater income and education levels than immigrant Mexican Americans, but they are more likely to have a psychiatric disorder and as length of residence in the US increases, the odds of developing psychiatric disorders, including substance abuse and depression, also increases (Vega, 1999).

### *Mexican Americans*

Although people from Mexico, Central America, and South America share some cultural elements and often language, they are far from homogeneous. Of all Hispanics in the United States, more identify themselves as Mexican in origin than any other nationality (Guzmán, 2001). In 2000 79% of the Hispanics residing in Oregon were of Mexican origin (U.S. Census Bureau, 1990; 2000c) and it is for this population that the findings from these studies will be most applicable.

Mexicans differ from other Hispanic groups on several key characteristics. Mexicans had the lowest median age of all Hispanic subgroups (Guzmán, 2000) and the highest proportion aged less than 18 (Therrien & Ramirez, 2000). Of all Hispanic groups, Mexicans had the lowest number of elders (U.S. Bureau of the Census, 1996), were the least likely to have graduated from high school, and were the most likely to have five or more people in the household (Therrien & Ramirez).

### *Parent Support*

#### *Social Support*

Social support has been generally associated with more competent parenting (Belsky, 1984; Dunkel-Schetter et al., 1996; MacPhee & Fritz, 1996; Webster-Stratton, 1990). Social support has been shown to be positively associated with secure infant-mother attachment (Crockenberg, 1981) and mothers with more social support have been found to be more sensitive with their babies than mothers with less social support (Crockenberg & McCluskey, 1986). Social support mediated levels of depression in postnatal mothers by positively affecting levels of self-efficacy (Cutrona & Troutman, 1986). In a study of African American women, social support buffered the negative effects of economic stress on psychological functioning (McLoyd, Jayaratne, Ceballo, & Borquez, 1994).

In Belsky's (1984) model of the determinants of parenting, social support enhances parenting by influencing overall psychological well-being which then leads to more positive parenting practices. In this model marital support is seen as relatively more important than social network support because of the greater emotional

investment and time spent in that relationship. Simons and Johnson (1996) are in accord with the distinction between marital support and social network support. They contend that the social network support will be much less influential in parenting than marital support due to the more distal interactions with relatives and friends compared to the more proximal interactions with a spouse.

*Familism* is important for understanding the function of social support for Hispanic families. In a qualitative study of immigrant social support networks, Menjivar (1995) found that for Mexicans, family was the most important source of support. Newly arrived immigrants usually live with a close relative or distant kin who provide monetary, instrumental, and emotional support, including childcare. MacPhee and Fritz (1996) replicated prior findings that Hispanic families have large, close-knit support networks but rely on close relatives and fictive kin for emotional support. The social support networks of all mothers in Sherradan and Barrera's (1997) study of second generation Mexican Americans consisted mainly of family members. Similarly, in her field study of Mexican American women in Texas, Williams (1990) found Mexican American women rely more on family for emotional support than non-Hispanic White women.

Familial social support in the Hispanic culture may act as a buffer for other risks (La Roche & Turner, 1995; McLoyd, Cauce, Takeuchi, & Wilson, 2000) and contribute to more competent parenting (MacPhee & Fritz, 1996). In a comparison of Mexican American women who had either high or low amounts of support from their families, Sherradan and Barrera (1997) found that women with little family support

were significantly more likely to have low birthweight babies than women with higher amounts of family support.

Immigration reduces the size of social networks at the same time that it introduces stressors. In their study of disadvantaged minority mothers, Wasserman and her colleagues (1990) found that more acculturated Hispanic adolescent mothers had larger social networks than less acculturated ones. The authors theorize that less acculturated women were more isolated due to their illegal immigration status and lack of fluency in English. In a study of more and less acculturated Mexican American women, all Mexican American women received a majority of their social support from spouses and family, but more acculturated women received more family support and less acculturated women received more spousal support (Dunkel et al., 1996). It is likely that a smaller family support network is available to immigrant families so they must rely more on a spouse for support. Because family is so important for Hispanics, attenuation of social support may leave Hispanics at greater risk than those from less collectivist cultures (Dinh, Roosa, Tein, and Lopez, 2002).

#### *Home Visitation Programs*

Institutionalized parent support programs are generally preventative in nature and use a variety of strategies to reduce levels of child abuse and injury and promote optimal child development. They are based on the belief that early intervention in child development is more effective when parents are involved and that quality of parenting is related to the social conditions and social support experienced by the family (Belsky, 1984; Powell, 1986).

Home visitation programs seek to improve outcomes for children and families by providing in-home informational and emotional support for parents. They commonly target new parents. The specific goals of the programs vary and include reducing low birthweight, increasing cognitive gains for children, and prevention of child abuse and neglect. In such programs there have been positive outcomes associated with specific subgroups. Olds et al. (1999) found that positive effects on the rates of child abuse and child injury were highest among new mothers who had the fewest psychological resources. Specifically, mothers who had high mental health symptoms, limited intellectual functioning, and little belief in control of their lives were most likely to benefit from the home visitation parent support. In a review of home visitation program evaluations, Gomby, Cuross, and Behrman (1999) found that the benefits that were demonstrated were generally modest in size and often accrued only to a specific subset of families and not for all program goals. They also found that the subgroups that benefited the most were not consistent across programs.

Duggan et al. (1999) found no evidence that the Hawaii Healthy Start home visiting program increased access to community services, improved the home social environment, increased parenting competence, parent education, or work goals or changed rates of protective service reports for enrolled families. The treatment mothers did report greater use of non-violent discipline. Wasserman and her colleagues (1990) found no evidence of increases in the child's cognitive performance, positive change in the home environment, or changes in child or parent behavior as a result of home visitation. The families who benefit most from family support programs

are those who are most at risk because that group has the most room for improvement (Gomby, Cuross, & Behrman, 1999; Olds et al., 1999).

Research that has attempted to relate demographic and risk characteristics to family outcomes in family support programs has been mixed. Chaffin, Bonner, and Hill (2001) related the pretreatment risk characteristics of families in family support programs to events involving child maltreatment. They identified the following variables as most related to future failure: higher number of children in the family, higher pre-test scores on a scale to measure propensity for abuse, history of ever having a child removed by the court, less education, and lower income. In contrast, a study of Australian families in a home visitation program found no association between demographic characteristics and measures of adjustment to the parenting role (Fraser, Armstrong, Morris, & Dadds, 2000).

In a study utilizing data from 17 home visiting programs, McCurdy, Gannon, and Daro (2003) found that Hispanics were more receptive to home visiting services than non-Hispanic Whites. They speculate that Hispanic families may be more amenable to home-based services and/or Hispanic families are more amenable to support programs than non-Hispanic Whites. Results from the Parents as Teachers Program (PAT), a parent-education program that includes home visiting services, found that benefits from the program accrued only to Hispanic parents (Wagner & Clayton, 1999). This receptivity to home visitation programs may be related to cultural value for social support.

*Parent Education Newsletters*

Parent education newsletters represent a universal prevention effort that seeks to reach all families regardless of risk factors. Early research on the use of newsletters and other reading materials for family life education found that nearly all parents of any generation read some childcare literature, either books or articles (Clarke-Stewart, 1978). In the late 1970's a series of learn-at-home packets, or newsletters, were developed by the University of Wisconsin to meet the needs of young families. Each newsletter presented information written by an expert, lending credibility to the publication and increasing the likelihood that it would be used as a model for behavior. Hennon and Peterson (1981) surveyed the young, well-educated, middle class non-Hispanic White parents who received these newsletters and found that they preferred reading materials to educational meetings or audiotapes. Almost all the young families surveyed reported finding the newsletters an effective and useful way to receive information. When Nelson (1986) surveyed a sample of recipients of a newsletter for single parents, almost all reported finding it useful and most said that it had affected how they interacted with their children.

The newsletter model of education was refined to include an "age-paced" format. Age-paced newsletters provide parents with information on child development and care that is keyed to the age of their child. This format is particularly appropriate for the first two years of life when children change rapidly from month to month. Parents receive information about a child's development at the approximate time it is happening. In this way, age-paced newsletters address the learning style of most



adults. That is, adults learn best when information that they need is presented in an accessible and understandable fashion (Cudabeck et al., 1985).

In 1985 Cudabeck and her colleagues explored the use of age-paced newsletters in 19 states and found that parents who received the newsletters reported that they were useful in increasing their self-confidence as parents, improving their knowledge of child development, and increasing their ability to be nurturing and effective parents. Similarly, in a survey of parents of kindergarteners who received an age-paced newsletter, most parents reported reading at least a majority of the newsletter issues and a significant number reported positive changes in their parenting behavior as a result of reading the newsletter (Garton et al., 2003). In their study of an age-paced newsletter for parents of adolescents, Bogenschneider and Stone (1997) compared a control group of parents who had not received the newsletter with a group who received a series of three newsletters. The treatment group had higher levels of parental monitoring, although the effect size was small.

*Parenting the First Year* is an age-paced newsletter series developed at the University of Wisconsin. There are twelve eight-page newsletters in the series. It is written at a fifth grade reading level and available in both English and Spanish. Each issue contains information corresponding to a specific month of the first year of life. During the first twelve months of their child's life, parents receive information relevant to the developmental milestones commonly occurring at each month as well as practical information on medical issues such as immunizations, age-appropriate parent and child activities, and tools for parenting. Information on general parenting

topics, such as choosing quality childcare and coping with stress, is also included. By structuring the newsletters to provide information specific to the child's age, information arrives at a "teachable moment."

Two studies have examined the impact of this particular newsletter on self-reported parent behavior. The first study found that parents who received the newsletter reported the newsletter to be a very useful source of information more often than any other source, including physicians, relatives, and other parents. In addition, 70% of the survey respondents reported sharing the newsletter with other parents and first time parents reported more behavior change from the newsletter than experienced parents (Riley, Meinhardt, Nelson, Salisbury, & Winnett, 1991). In their investigation of the relationship between mothers' involvement with their social network and the impact of *Parenting the First Year*, Walker and Riley (2001) found that mothers who reported reading the newsletter more and discussing it more with others also reported greater change in parenting behavior. Only parents receiving the English version of the newsletter were included in these studies.

#### *Parenting and Parent Support for Hispanic Families*

Evidence that Hispanic parenting practices differ significantly from other groups is mixed. Studies comparing cultural groups have suffered from confounding of socioeconomic status and ethnicity effects, use of culturally biased research instruments and methods, and inadequate samples (Garcia Coll, 1990). Cardona, Nicholson, and Fox (2000) found small, but significant differences between scores of Hispanic and non-Hispanic White mothers on the Parent Behavior Checklist. The

scores of Hispanic mothers reflected increased use of corporal punishment and discipline and decreased nurturing. This was particularly true for those Hispanic mothers identified as higher socioeconomic status. In a study of African American, Dominican, and Puerto Rican adolescent mothers, Hispanic mothers reported more strictness than Blacks (Wasserman et al., 1990). However, Bradley, Corwyn, McAdoo, and Garcia Coll (2001) report that poor Hispanic and European American mothers were almost twice as likely to express positive affection to their 3 to 5 year old children than were poor African American mothers. Another study found that Hispanic adolescent mothers who were more acculturated in English language use had higher levels of maternal expressivity in interactions with their child (Contreras, Mangeldorf, Rhodes, Diener, & Brunson, 1999). Mexican American women were more likely than non-Hispanic White women to hold adverse parenting beliefs in a study of low-income women enrolled in a home visitation program. Spanish-speaking Mexican American women were most likely to hold such beliefs (Acevedo, 1998).

Other studies have found few or no cultural differences in parenting once socioeconomic or educational status was controlled (Fox & Solís-Cámara, 1997; Julian et al. 1994; Laosa, 1980; Solís-Cámara & Fox, 1995). In a review of results of the aspects of home environments likely to affect the development of young children, poverty had a greater effect on the home environment than ethnicity and the effects of poverty were proportional across all ethnic groups. For all ethnic groups and for all ages of children, parents living in poverty were more likely to spank their children and less likely to monitor them (Bradley et al., 2001). Julian and colleagues found that for

children under five, there were no differences in parenting attitudes or involvement of Hispanic and non-Hispanic White mothers and fathers.

There is some evidence that cultural characteristics influence how Hispanic parents prefer to receive parenting information. DeBord and Reguero de Atilas (1999) surveyed 760 Hispanic parents regarding their parenting information needs and preferences. They found that the largest number preferred to receive information from family and friends and doctors or nurses. Home visiting, magazines, newsletters, pamphlets, videotapes, and audiotapes were all ranked lower. When asked to name the type of person they would most like to receive parenting information from, "someone they know and trust" was rated highest. The authors report that learning in a group with a trained parent educator as the leader was the most preferred method for learning and almost half reported that they were not comfortable in a group with parents they did not know. In another study, Mexican American women rated reading as the least helpful source of information (Powell & Zambrana, 1990). In general, in a group setting, Hispanic parents preferred to have parenting information presented by experts in the field rather than by peers (DeBord & Reguero de Atilas; Powell, 1995; Powell & Zambrana, 1990; Simoni & Perez, 1995). Other authors have identified successful strategies to involve Hispanic families in parenting programs, including personalized recruitment, content that emphasizes specific parenting skills or child development information, face-to-face communication in a small, familiar group, and inclusion of spouse or extended family (Espinosa, 1995; Inger, 1992).

### *Theoretical Framework*

Ecological theory delineates the contexts that affect parents and children (Bronfenbrenner, 1977; Bronfenbrenner & Crouter, 1983). These intersecting contexts illuminate the special circumstances of minority parents who are both transitioning to parenthood and socializing their children within a culture that reflects values that are different from those with which they were raised. The dynamics of dual cultural and linguistic influences must be considered to understand how minority and newly immigrated families interact with societal institutions and how the interaction of social class, culture, and ethnicity that is unique to Hispanic families may facilitate or inhibit development (Garcia Coll et al., 1996).

Microsystems are settings in which a child encounters experiences directly affecting his or her development. The most important microsystem relationship for the very young child or infant is the parent-child dyad (Garbarino & Barry, 1997). It is not clear from the research if Hispanic parenting practices differ from those of other groups once socioeconomic factors are taken into account. Home visitation programs and parenting newsletters attempt to affect the interactions that occur in the parent-child dyad by teaching and encouraging nurturing and developmentally appropriate parenting skills.

Parent-child interactions can also be affected by the psychological well-being of the parent. The stress that parents experience under difficult social and economic circumstances, such as those experienced by many Hispanic families, put them at risk for child maltreatment (Wasserman et al., 1990). The stress level of Hispanic parents

may be increased by difficulties associated with immigration and acculturation, but mitigated by supportive kin networks. Lack of support and isolation can adversely affect the parent-child relationship (Gabarino & Sherman, 1980; Salzinger, Kaplan, & Artemyeff, 1983) and families who do not have access to kin networks due to immigration may be at greater risk. The stability or instability of a marital or partner relationship and the social support provided by such a relationship could buffer or enhance other risk factors (Bolger et al., 2003). Immigrant Hispanics are more likely to live with the father of their child than are Hispanics born in the United States and are thus more likely to have increased social support.

Exosystem structures include the major institutions of the society that do not contain the child but that indirectly influence the child's development. Thus, formal or informal settings that affect the parent, such as home visiting agencies, are relevant exosystems for the child. They are posited to be most influential when the primary values embedded in them are congruent with values in the microsystem. The transmission of parenting information often occurs between exosystem structures and the parent. When exosystem structures support parents, either instrumentally or emotionally, better outcomes should result for children. The exosystem structures encountered by Hispanic families are likely to be a mix of the dominant and minority cultures. Structures that incorporate Hispanic culture and values, such as culturally appropriate parenting materials, should be more supportive of parents. Parents dealing with different cultural exosystems may receive contradictory parenting information that will have to somehow be integrated with existing parenting attitudes and skills.

The socioeconomic status of Hispanic families is part of the exosystem context that affects parenting. Social and economic circumstances are important predictors for child maltreatment. Economic status, education level, access to health care, and the degree of neighborhood disorganization contribute to enhancement or inhibition of positive parenting practices. In their model for the study of development of minority children, Garcia Coll and colleagues (1996) emphasize the importance of recognizing the role of family and kin networks as protective factors against the risk factors resulting from the adverse living conditions of many minority children. The potential detrimental effects of isolation and loss of social support as is sometimes experienced by immigrants should also be recognized.

The macrosystem reflects the overarching cultural and belief system forces that shape all the other systems. Problems may arise when macrosystem beliefs differ significantly from individual beliefs, such as when Hispanic parents from a collectivist background must function in an individualistic culture. This will be intensified during the acculturation process, when immigrants begin to more fully integrate into the dominant society. The macrosystem forces, such as racism, classism, and discrimination, that influence minority families will be experienced more immediately as members of ethnic minorities begin to directly participate in societal institutions such as schools. For Hispanic families, the effect of the macrosystem may be buffered by the support of the family and ethnic community in the exosystem.

The Oregon Healthy Start home visitation program is designed to provide support and assistance to families with young children. It is an exosystem structure

with the goal of improving child outcomes by influencing parents. With the rapidly growing Hispanic population in the United States, programs such as Healthy Start must determine how to provide services for high-risk Hispanic parents and attempt to find affordable, effective, and culturally appropriate parenting materials for Spanish speaking Hispanic parents. To best serve these parents it is important to know what other exosystem structures and forces are impinging on the parents as well as identifying microsystem parent characteristics and parenting variations associated with cultural and acculturation differences.

It is clear that Hispanics differ from non-Hispanic Whites culturally as well as demographically. Further, more acculturated Hispanics differ from less acculturated Hispanics. The following investigations have attempted to use the knowledge of these differences in the framing of research questions and the design of culturally appropriate methodologies. By giving careful consideration to the cultural, linguistic, and socioeconomic characteristics of this population, these studies hope to produce a greater understanding of the needs and characteristics of high-risk Hispanic parents.



## Acculturation, Risk Factors, and Partner Status of Hispanic Families in Relation to Increased Parenting Skills in a Family Support Program

### Introduction

Home visiting programs for families with young children have proliferated in the past decade (Gomby, Culross, & Behrman, 1999). Although the specific goals of the programs vary, they share the common goal of improving the lives of children by providing in-home informational and emotional support to parents. Many explicitly seek to prevent child abuse and neglect, and generally either provide services universally to all families or target services to families at higher risk for child maltreatment. Those that target services typically screen families using checklists that assess demographic and psychosocial characteristics thought to be associated with negative child outcomes. Risk characteristics include such things as poverty, single parenthood, isolation, poor educational achievement, substance abuse, low self-esteem, depression, and negative perceptions of the child (Guterman, 2001). Families deemed at-risk are offered intensive home visiting services. The services provided are designed to respond to the needs of individual families and will, to some extent, be predicated on the type of risk characteristics exhibited (Daro & Harding, 1999).

Risk level for negative child outcomes is often reported as a composite score, but patterns of risks may vary between subgroups of the population. Such variation has consequences for the type of services required. This is of particular interest when considering the cultural and acculturation differences among Hispanic groups and non-Hispanic Whites in the United States. These issues are growing in importance as the Hispanic population in the United States is increasing rapidly, from both

immigration and high birth rates (U.S. Bureau of the Census, 1996). Hispanics are more likely to be parents than other groups and are more likely than non-Hispanic Whites to experience adverse conditions such as low educational achievement, poverty, and isolation that would put them at risk for negative child outcomes (Guzmán, 2001; Proctor & Dalaker, 2002; Therrien & Ramirez, 2001). Determining differences between Hispanics and other groups is further complicated by differences within the Hispanic population, including both nation of origin and acculturation level.

The risks faced by Hispanic families are conditioned by their culture of origin as well as the conditions experienced in the culture of residence and the stress of immigration and acculturation. For Hispanic families with a greater degree of acculturation, there will be a greater mix of influences, with increasing effects from the culture of residence. Research in other settings has shown that physical and mental health risks vary in important ways between Hispanics and non-Hispanic Whites and among Hispanics depending on degree of acculturation (Amaro, Whitaker, Coffman, & Heeren, 1990; Pérez-Stable, Marín, & VanOss Marín, 1994; Zambrana, Srimshaw, Collins, & Dunkel-Schetter, 1997). An examination of aggregate risk scores may reveal differences in overall risk levels between ethnic groups but does not uncover variations in patterns of risk factors that may arise from cultural differences and acculturation status. Further, no attention is paid to protective factors that might moderate the risk effects.

Using data collected as part of a home visitation program for first birth families in Oregon, this paper explores differences in demographic characteristics and risk

factors by ethnicity and acculturation status among parents assessed as higher risk for negative child outcomes. Whether parent characteristics, including presence or absence of risk factors, have predictive value for measures of progress toward program goals will then be addressed. Given the importance of familial support, including marital support, in the Hispanic culture, particular attention will be paid to partner status as a protective factor.

### *Theoretical Basis*

The risks experienced by families will vary by parents' personal characteristics as well as by socioeconomic and cultural context. Ecological theory describes and integrates the multiple contexts that affect parents and children (Bronfenbrenner, 1977). It provides a useful framework to consider the interaction of culture, socioeconomic location, and behavior. In addition, the ecology of an immigrant family includes the interaction of dual cultures and languages. All must be considered to understand the processes underlying family functioning.

For the very young child the microsystem containing the parent-child dyad is the most important setting (Garbarino & Barry, 1997). Parent-child interactions are affected by the psychological well being of the parent and the contexts that parents operate within affect their well being and their parenting practices. The ecological niche occupied by parents who are transitioning to parenthood and socializing their children within a culture different from the one in which they were raised will present unique challenges. The immigration process can weaken the family ties that serve as a buffer for the individual against adverse circumstances and the stressors associated

with immigration and acculturation. This lack of social support may adversely affect the parent-child relationship (Garbarino & Sherman, 1980; Salzinger, Kaplan, & Artemyeff, 1983). Lack of access to kin networks due to immigration may increase the importance of support from a stable marital or partner relationship. Partner support has the potential to buffer or enhance other risk factors (Bolger, Thomas, & Eckenrode, 2003).

Home visitation interventions attempt to impact the family ecology by strengthening the links between the social systems impacting families as well as supporting the parent/child microsystem by enhancing parenting practices. In order to increase positive parent-child interactions and promote children's healthy growth and development in higher risk families, many home visiting programs are designed to increase parents' knowledge of child development and change their attitudes toward parenting (Gomby, Culross, & Behrman, 1999). With greater understanding of how the ecologies of non-Hispanic Whites and more and less acculturated Hispanics differ, home visiting programs will be able to tailor their services to better meet families' needs.

## Literature Review

### *Hispanics in America*

Today, one of every eight Americans is of Hispanic origin (Therrien & Ramirez, 2001) and by 2050 this proportion is expected to increase to one in four. Although the term Hispanic can refer to persons of any race and of multiple nationalities, there are generally shared values, cultural traits, socioeconomic characteristics, immigration patterns, and language preferences that distinguish Hispanics from other racial or ethnic groups in the United States.

Hispanic women have higher fertility rates and tend to begin childbearing at younger ages than other groups (Zambrana, Dorrington, & Hayes-Bautista, 1995). Nationwide, teenage birth rates were highest for Mexican American teenagers (Martin, Hamilton, Ventura, Menacker, & Park, 2002). However, among all Hispanic women, Mexican American women have the most positive birth outcomes and among all Mexican American women, immigrants have healthier birth outcomes than those women born in the United States (Padilla, Boardman, Hummer, & Espitia, 2002). Cultural traits brought from Mexico, such as lower rates of smoking and drug and alcohol use, are thought to buffer the effects of low socioeconomic status and poor prenatal care that contribute to less favorable birth outcomes (Martin et al.)

Additionally,

Padilla and her colleagues (2002) investigated whether the positive birth outcomes experienced by Mexican American women contribute to continued positive development in early childhood. They found that despite the early life birthweight

advantage, Mexican American children scored substantially and significantly lower than non-Hispanic White children on tests of mental development at three to four years of age. The most important predictor of scores of mental development was the mother's educational level and lower scores were associated with the amount of time the child had lived in family and social environments affected by poverty.

Hispanics are more likely to have lower education levels and to have never been married than non-Hispanic Whites (Therrien and Ramirez, 2001). About half of the Hispanic women giving birth in 2000 had completed high school compared to over three-quarters of all women. Of all Hispanic births in 2000, 42.7% were to unmarried women compared to 22.1% for non-Hispanic Whites and 68.7% for Black women (Martin et al., 2002). Hispanics also differ from the non-Hispanic White population in income and employment characteristics. They are much more likely to be unemployed and to earn less than non-Hispanic Whites (Therrien & Ramirez). Hispanics are more likely to live in poverty and to experience material hardship than non-Hispanic Whites (Proctor & Dalaker, 2002). In 1995, one in five Hispanics experienced some type of material hardship, a rate double that of the total United States population (Beverly, 2001).

#### *Culture and Acculturation*

Through transmission of shared ways of living, culture affects beliefs, attitudes, expectations, and behaviors (Dilworth-Anderson & Marshall, 1996). Hispanic culture emphasizes collectivism as contrasted to the individualism emphasized in European American culture. In collectivist cultures the goals of the

individual are subordinated to the goals of the group. This is reflected in Hispanic patterns of social interaction including *familism*, the expectation and obligation that the family will be the center of loyalty and support for individuals (Lindahl & Malik, 1999).

Acculturation involves changes in individual behaviors that result when minority group members participate in the culture of the dominant society. Because ethnicity and the cultural values associated with it are socially acquired they can also be altered through exposure to different cultural beliefs and practices. The individual, to varying degrees, accommodates to the new society. Hispanic families that are immigrants to the United States face the difficulties and stressors associated with acculturation and language acquisition. Immigrants may experience acculturative stress due to conflict between cultural values, isolation from their culture of origin, minority status, and inability to understand English (Dunkel-Schetter, Sagrestino, Feldman, & Killingsworth, 1996).

The issue of acculturation is not a minor one. In 2000, almost 40% of Hispanics in the United States were foreign-born compared to 3% of non-Hispanic Whites. Of those Hispanics born outside of the United States, 43% entered the country between 1990 and 2000 (Therrien & Ramirez, 2001). Many recent immigrants have a limited knowledge of English. By 2000, 11% of the total U.S. population over the age of five, or 28 million people, spoke Spanish in the home, making Spanish the most common language used in the home after English. This is an increase of over 64% in just the past decade.

Research in different fields of inquiry has begun to identify the differences between more and less acculturated Hispanics. It appears that acculturation does not always result in positive outcomes for families, as protective cultural characteristics may be lost at the same time that acculturation stress increases. When acculturation is accompanied by lower education and poverty, the individual may be “marginalized”, having lost the protective components of the native culture but having not yet been fully integrated into the dominant society. This puts the individual at risk for poor mental health outcomes (Vega, 1999). Mexican Americans born in the United States generally have greater income and education levels than immigrant Mexican Americans, but they are more likely to have a psychiatric disorder and to abuse illegal drugs or alcohol (Amaro et al., 1990). Additionally, as length of residence in the United States increases, the odds of developing psychiatric disorders, including substance abuse and depression, also increase (Vega). Higher levels of acculturation are positively associated with alcohol consumption, particularly among Hispanic women born in the United States (Caetano & Clark, 2003). Acculturation has also been related to an increased likelihood of single parenthood (Wasserman, Rauh, Brunelli, Garcia-Castro, & Necos, 1990), greater likelihood of smoking (Acevedo, 1998) and decreased likelihood of breastfeeding (“Degree of Acculturation,” 1995).

#### *Partner Status and Social Support*

Social support is generally associated with more competent parenting (Belsky, 1984; Dunkel-Schetter et al., 1996; MacPhee & Fritz, 1996; Webster-Stratton, 1990) and more secure infant-mother attachment (Crockenberg, 1981). Marital support is



seen as relatively more important than social network support in Belsky's (1984) model of the determinants of parenting. This is due to the greater emotional investment and time spent in that relationship. The same social support effect attributable to a spouse could be expected from another adult in the household, including a partner (Simons & Johnson, 1996). Both intimate (spouse or partner) and spousal support have been shown to be positively related to parental well being (Cmic, Greenberg, Ragozin, Robinson, & Basham, 1983; Voydanoff & Donnelly, 1998).

Family has been found to be the most important source of support for Hispanics in general (MacPhee & Fritz, 1996) and Mexicans in particular (Menjivar, 1995; Sherradan & Barrera, 1997; Williams, 1990). The social support engendered by family may act as a buffer for other risks (La Roche & Turner, 1995; McLoyd, Cauce, Takeuchi, & Wilson, 2000), but social networks reflect both cultural and ecological constraints. Immigrants who have moved away from kin will have different network compositions. One study found that although all Mexican American women received most of their social support from spouses and family, those who were immigrants received more spousal support and those who were second-generation received more family support (Dunkel-Schetter et al., 1996). With a smaller family support network available to immigrant families, spousal support becomes more important.

Cultural experiences of marriage and cohabitation also lend particular importance to the relationship between intimate support and parental well being. Hispanic women are less likely to be married than non-Hispanic Whites, but childbearing during cohabitation is more acceptable for Hispanic women than other

groups. Hispanic women are more likely to remain cohabiting after they become pregnant than non-Hispanic Whites (Manning, 2001). Mexican-immigrant women were more likely to live with and be married to the baby's father than were non-immigrant Mexican American women. They were also more likely to receive more support from the baby's father. For both groups, father support was positively associated with positive pregnancy conditions such as less stress and substance abuse (Dunkel-Schetter et al., 1996).

#### *Home Visiting Programs*

There has been research conducted regarding the relationship of demographic characteristics and risk factors to home visiting program outcome. Positive outcomes for families enrolled in home visiting programs have been associated with specific psychosocial and risk characteristics. The greatest benefits from home visitation programs are thought to accrue to those at highest-risk, in particular, low-income, unmarried new mothers with more pronounced mental health symptoms, limited intellectual functioning, and little belief in control of their lives (Olds et al., 1999). To compare outcomes for different types of family preservation and support services, Chaffin, Bonner, and Hill (2001) related pretreatment risk characteristics to events involving child maltreatment. They identified the following variables as most related to future failure: higher number of children in the family, higher pre-test scores on a scale to measure propensity for abuse, history of ever having a child removed by the court, less education, and lower income. In contrast, research assessing a self-report screening tool used in a home visitation program found no association between

demographic characteristics and measures of adjustment to the parenting role (Fraser, Armstrong, Morris, & Dadds, 2000).

Characteristics of Hispanics and Hispanic subgroups in home visitation programs have been reported in several research studies. Hispanic mothers have been found to be significantly more likely than non-Hispanic White mothers both to engage in home visitation programs (McGuigan, Katzev, & Pratt, 2003) and to remain in these programs (McCurdy, Gannon, & Daro, 2003). Results from the Parents as Teachers Program (PAT), a parent-education program that includes home visiting services, showed that PAT produced benefits only for Hispanic families and children and that children in Spanish-speaking families benefited the most. There were differences in this program among non-Hispanic White, English-speaking Hispanic, and Spanish-speaking Hispanic families. Specifically, Hispanics were significantly younger, less well educated, less likely to be employed, and less likely to be married. Compared to English-speaking Hispanic parents, the Spanish-speaking parents were older, more likely to be married, and less well educated. In measures of parenting knowledge, Hispanic parents were less likely than non-Hispanic White parents to be well informed about parenting and child development and Spanish-speaking parents were less informed than English-speaking Hispanic parents (Wagner & Clayton, 1999). In a study of low-income European American and Mexican American women enrolled in a home visitation program, Mexican American women were more likely than European American women to hold adverse parenting attitudes, including more belief in physical punishment and a greater likelihood of unrealistic expectations for child

behavior. Among Mexican American women, Spanish speakers were the most likely to hold these adverse parenting beliefs (Acevedo, 2000).

### *Research Questions and Hypotheses*

The research questions for this study include:

Do Hispanic and non-Hispanic White families identified as higher risk for child maltreatment differ on demographic and socioeconomic measures and on assessed risk factors? Are there differences between more and less acculturated Hispanic families on these factors? Specifically, are more acculturated Hispanic families more similar to non-Hispanic White families than less acculturated Hispanic families?

Is progress in a home visiting program associated with ethnicity, acculturation, and specific risk factors?

Is partner status associated with program progress and does this association differ according to ethnicity or acculturation status?

Associated with these research questions are a number of hypotheses. It is predicted that Hispanic families enrolled in a home visiting program for high-risk parents will differ from non-Hispanic White families as a function of their unique cultural and demographic attributes, including the likelihood of recent immigration. On demographic measures, Hispanic mothers are expected to be younger and to be less well educated than non-Hispanic White mothers. They are expected to be more likely to be living with a partner and less likely to be married. Hispanic mothers are expected to be less likely to smoke. Hispanic families are also expected to differ on

psychosocial risks, specifically; they are expected to have lower rates of substance abuse, family conflict, and mental illness, but to be more likely to lack social support than non-Hispanic White families. Hispanic families are expected to have greater levels of economic risks, including job instability, unstable housing, and lower income levels. Hispanic mothers are expected to be more likely to exhibit harsh discipline practices and to have unrealistic expectations for child behaviors.

More acculturated Hispanic women are expected to differ from less acculturated Hispanic women on demographic characteristics, health practices, and risk factors. Specifically, they are expected to be more similar to non-Hispanic White mothers. This would include higher rates of smoking, substance abuse, and mental illness, as well as higher education and social support levels. They are expected to be younger, less likely to breastfeed, and less likely to be married than less acculturated Hispanic women.

Previous research has shown that those families in home visiting programs with higher levels of risk factors coming into a program generally achieve higher levels of program progress because they have further to go. On the other hand, more positive child outcomes are associated with higher levels of income and education and more competent parenting is associated with higher levels of social support and mental well-being. By accounting for initial levels of parenting competence using data analysis that controls for regression to the mean, we hope to clarify characteristics associated with program progress. Certain factors are predicted to be associated with progress toward program goals independent of ethnicity or acculturation. That is,

higher levels of income and mother's educational attainment are predicted to be positively associated with progress. Mother's mental illness and lack of social support are predicted to be negatively associated with progress. However, mothers living with a partner or spouse are predicted to show greater program progress and partner status is predicted to have more effect for Hispanic families than non-Hispanic White families.

## Methods

As the intent of this study was to investigate differences resulting from culture and acculturation, steps were taken to improve the data analysis through awareness of how these differences might be operationalized. Previous research has shown that the comparison of Hispanic and non-Hispanic White families is refined when acculturation status is considered. This study has attempted to address this concern by separating results for more and less acculturated families, as assessed by language use. Although acculturation involves changes in multiple areas of functioning, language use is heavily relied upon in more complex acculturation scales and has become an acceptable means of assessing acculturation in Hispanic populations (Dinh, Roosa, Tein, & Lopez, 2002; Marín & VanOss Marín, 1991).

With continuing increases in interethnic marriages (Fields & Casper, 2000), care should be taken to clearly identify household ethnicity when attempting to detect ethnic differences. Thus, only households that were of homogeneous ethnic composition were included in the study to accentuate differences between groups. Studies commonly compare married families to non-married. Ignoring those who cohabit may be a particularly questionable approach with Hispanic families who are more likely to cohabit and to bear children within a cohabiting relationship. When possible, three categories of partner status were used: single, living together but not married, and married. When necessary for analysis purposes, those not married but living together were combined with those married to create a category of those living with a partner.

This study uses data collected as part of the evaluation of Oregon Healthy Start, a primary prevention home visitation program targeting first birth families in twenty-one Oregon counties. The program is designed to enhance parenting practices by providing informational and emotional support and assistance to families with newborn children. Using the 15-item Hawaii Risk Indicators (Breaky & Pratt, 1991) intake workers screen all first-birth families in the hospital shortly before or after birth for characteristics that are related to poor outcomes for children and families. Information for the Hawaii Risk Indicators is gathered either from birth records or through parent interviews. Mothers who have no or inadequate prenatal care, a history of substance abuse, an unemployed partner, inadequate income, are single, or who have two or more of any other risk characteristics such as low education, unstable housing, and depression are further assessed by a specialized Family Assessment Worker using the Kempe Family Stress Inventory (KFSI). The KFSI is a ten-item scale that uses a semi-structured interview format to measure risk for parenting difficulties (Korfmacher, 2000).

Long-term intensive family support services are offered to families deemed as higher risk for poor outcomes. Parents may receive information and support, including referrals to needed services. Oregon Healthy Start offers these higher-risk families regular home visits for up to the first five years of their child's life. Home visits are weekly at first but gradually decrease to monthly visits as parents gain skills and access to needed resources. Goals of the program for higher risk families include encouraging positive parent-child interactions, promoting healthy growth and



development for children, and enhancing family functioning in order to decrease the likelihood of child abuse and neglect.

### *Participants*

Outcomes of the program are tracked only for higher risk families and it is these families that are included in the study. From a population of 3384 higher risk families enrolled in intensive services from 1999 to 2001, a subset of 1323 cases with 11 months or more of service was selected. The 11 month duration was selected because this was the first date at which one-year program evaluations were regularly available. The number of families enrolled at 11 months reflects a substantial reduction from the original sample size. This level of attrition is common in home visiting programs (McCurdy & Daro, 2001) and those who stay in programs have been shown to differ from those who leave (Duggan, 1999).

A previous study utilizing Oregon Healthy Start data found that Hispanic mothers were much more likely to engage and stay in the program than non-Hispanic White mothers (McGuigan et al., 2003). Therefore, it is not surprising that the sample of families with at least 11 months of service was comprised of a higher percentage of Spanish-speaking Hispanic families than the original sample, an increase from 20.1% to 25.6%. The percentage of non-Hispanic White families decreased from 74% of the total sample to 68.7% of the final sample while the percentage of English-speaking Hispanic families remained the same. Overall, families who remained in the program had significantly higher incomes, and mothers were significantly older and less well-educated than those who were no longer enrolled. While acknowledging that there

may be important differences between high risk families who dropped out and those who remained in this program, the intent of this study was to investigate factors related to program outcomes, necessitating a focus on families who remained in the program long enough to measure treatment effect. When interpreting results it will be important to keep in mind not only that the families represent a special subset of identified high risk families, but that those subsets may vary by ethnicity and acculturation.

#### *Household Types*

The clarification of differences between ethnic families and within more and less acculturated Hispanic families was a primary focus of this study. Therefore, only those households with homogeneous ethnic composition were included. Three household types were created: English-speaking non-Hispanic White households, English-speaking Hispanic households, and Spanish-speaking Hispanic households. Households in which mothers were white, English was spoken in the home, and the partner or spouse was also white or the mother lived alone, with parents, or other adult non-relatives were classified as non-Hispanic White households. Households in which the mothers were Hispanic, English was spoken in the home, and the partner or spouse was also Hispanic or the mother lived alone, with parents, or other adult non-relatives were classified as English-speaking Hispanic households. Finally, households in which the mothers were Hispanic, Spanish was spoken in the home, and the partner or spouse was also Hispanic or the mother lived alone, with parents, or other adult non-relatives were classified as Spanish-speaking Hispanic households. This procedure

removed from the sample non-Hispanic White households where English was not the language spoken at home and households in which the mother and partner or spouse were of different races or ethnicities (180) and cases missing the necessary data to establish household type (138). This eliminated the necessity to assign a specific ethnic group to bicultural households and also excluded non-Hispanic White households that did not use English in the home on the basis of questionable acculturation status.

Missing data was of concern. The process of list-wise deletion analysis would have reduced the number of available cases by 22% to 692 cases. To determine if the data were missing at random,  $\chi^2$  and  $t$  tests were conducted for household type, partner status, income, and mother age and education levels to compare cases with and without missing data. No significant differences were discovered. The Expected Maximization (EM) algorithm based on maximum likelihood estimation was used to impute missing data. This method has been found to be preferable to listwise deletion and mean substitution or regression methods of imputing data. It avoids the potential bias of case deletion and the problems of diminished statistical power resulting from loss of sample size (Little & Rubin, 1987). Data imputation resulted in a final sample of 1005, including 250 Spanish-speaking Hispanics, 58 English-speaking Hispanics, and 697 non-Hispanic Whites.

### *Measures*

Demographic data and measures of health behavior and risk status were collected from three instruments administered at assessment and intake: the Hawaii

Risk Indicators (HRI), the KFSI, and the Healthy Start Family Intake form. Program progress was assessed from observations recorded on the Healthy Start Family Intake and Family Update forms (Pratt, Katzev, Ozretich, & Henderson, 1997). Family or household level data were used when appropriate, such as for income or unstable housing. For items measuring individual constructs, such as substance abuse or mental illness, only mother data were used as not all households included fathers or partners.

The HRI and the KFSI were completed as described above. Healthy Start Family Service Workers assigned to visit the family completed the Family Intake and Family Update forms. The Family Intake was completed during the first month of service and the Family Update at or near 12 months of service. Workers collected information on family demographics, health, stresses and strengths, service and resource needs, parent-child interactions, and family progress towards goals.

Demographic data used in the analysis included mother's age, education level, and family income level. Partner status was assessed as: single; living with partner, not married; and married. Income level was measured on an 8-point monthly gross income scale measured in units of \$400 with *1 = under \$400* and *8 = \$3,001*. Ethnicity and language use were included as part of the household types as described above. Health behavior factors affecting the child that were measured included "*mother smokes*" if the mother smoked during pregnancy or at the time of intake, rated 1 for smoking, 0 for not; and "*mother breastfeeds*", rated 1 if the mother breastfed at intake, 0 if she did not.

Risk variables were constructed for eight parent or family characteristics identified as associated with poor child and family outcomes by the Healthy Start program (Pratt et al., 1997). All were binomial measures with 1 indicating the presence and 0 indicating the absence of the risk factor. These items included factors related to living conditions, social support, psychosocial risks, and parenting attitudes. Living condition variables included “*unstable housing*” and “*job instability*”, defined as job instability of mother or partner or partner unemployed. Social support was measured by “*isolated*”, specified as mother’s lack of supportive adult friends or family members. Psychosocial factors that were reported included “*substance abuse*”, mother’s history of alcohol or drug abuse, “*family conflict*”, marital or family problems or violence among adults in household, and “*mental illness*”, mother’s history of psychiatric care or current treatment for depression or other mental illness. Parenting variables were “*rigid expectations*”, mother’s rigid or unrealistic expectations for the child and “*harsh discipline*”, mother’s view of harsh punishment or yelling as appropriate discipline for an infant or young child.

Parenting skill levels, as assessed by Family Service Worker observations, were used to measure family progress toward program goals. At intake (after one month of service), and update (near 12 months of service), Family Service Workers assessed overall parent progress by reporting the frequency of observed family behaviors on 11 items. Answers ranged from one (“*Not at this time*”) to five (“*Almost always*”) on a Likert scale. All items as assessed at update were included in a principal-component analysis with varimax rotation for each household type.

Principal-component analysis differed for each household type but four items related to parenting behaviors loaded together strongly for all three groups. These items were: provide nurturing care for the child(ren); engages in positive parent-child interactions; uses positive guidance and discipline strategies; and creates a developmentally appropriate learning environment for child. Taken together, these items measured overall positive parenting skills thought to be important for positive child outcomes. These items were moderately correlated with bivariate correlations ranging from .77 to .56. The reliability analysis yielded an acceptable coefficient alpha of .85. A Parenting Skills Score was created by calculating a mean score for each participant from the four items. Scores were available at two times, intake (Time One) and update (Time Two).

#### *Data Analysis*

Chi-square and one-way ANOVA were used to test for between group differences of the three household types on demographic and risk factors. Means of the three household types on Parent Skills at Time One and Time Two were compared using ANOVA with Duncan's multiple range procedure to test for differences between groups. The General Linear Model (GLM) Univariate procedure was used to test for the effect of household type and partner status on the Parent Skills Scores at Time Two while controlling for key demographic characteristics and risk factors. The GLM Univariate procedure allows the use of regression analysis and analysis of covariance with one dependent variable. To ensure a sufficient sample size in each cell, partner status was recoded to combine the categories of "*living with partner*" and "*married*". Partner status was now configured as either "*single*" or "*spouse/partner*". Parenting

Skill Scores at Time Two were entered as the dependent variable, household type and partner status were entered as fixed factors, and Parenting Skill Scores at Time One, demographic variables, and risk factors were entered as covariates.

## Results

Parent demographic and risk characteristics by household status are shown in Table 1 with chi-square and one-way ANOVA test statistics and significant between group differences indicated. Economic risk factors are generally shared across groups, with no significant group differences for income, unstable housing, or job instability. Monthly income for all groups fell between \$651 and \$1000, well below the federal poverty guidelines for a family of three.

For other risk factors, percentages for household types differ in a predictable fashion, with values for English-speaking Hispanics falling between those for Spanish-speaking Hispanics and non-Hispanic Whites. This is true for mother's education level, percentage of mothers smoking and breastfeeding, and percentage of isolated mothers, mothers experiencing substance abuse or mental illness, and families in conflict. Non-Hispanic Whites have higher education levels, are more likely to smoke, and are more likely to experience substance abuse, mental illness, and family conflict. Spanish-speaking Hispanics are more likely to breastfeed and to lack supportive friends.

For other characteristics, non-Hispanic Whites were more similar to Spanish-speaking Hispanics than were English-speaking Hispanics. This was the case for mother age and percentage married and single. Spanish-speaking Hispanic mothers were older, were most likely to be married, and least likely to be single. There were no



Table 1  
Parent Characteristics and Risk Factors at Intake by Parent Ethnicity and Language Use

Variable	Household Composition			Statistic x2 or ANOVA
	Non-Hispanic White ( <i>n</i> = 697)	English-speaking Hispanic ( <i>n</i> = 58)	Spanish-speaking Hispanic ( <i>n</i> = 250)	
<b>Demographic Characteristics</b>				
Mean age in years ( <i>SD</i> )	20.98 (4.2)	18.57 (3.9)	21.54 (4.9)	9.327***
Income level ( <i>SD</i> )	3.6 (1.6)	3.28 (1.4)	3.76 (1.2)	2.67
Mean education in years ( <i>SD</i> )	11.39 (1.8)	9.98 (2.6)	8.33 (2.8)	7.226**
<b>Partner Status</b>				
% Single	46.3	48.3	25.6	33.9***
% Partner	31.1	36.2	33.2	.877
% Married	22.5	15.5	41.2	36.7***
<b>Health Risks</b>				
% Mother Smokes	31.4	5.2	1.6	104.46***
% Mother Breastfeeds	52.2	56.9	84.0	77.99***
<b>Economic Risks</b>				
% Unstable housing	33.9	31.0	29.6	1.59
% Job Instability	39.6	41.4	35.6	1.425
<b>Psychosocial Risks</b>				
% Isolated	25.1	32.8	56.0	79.145***
% Substance Abuse	44.6	22.4	6.4	123.653***
% Family Conflict	49.6	32.8	22.4	58.203***
% Mental Illness	23.4	15.5	6.4	35.322***
<b>Parenting Behaviors</b>				
% Rigid Expectations	20.2	8.6	14.4	7.954*
% Harsh Discipline	18.9	20.7	21.2	.643

Note. \**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

differences between groups in percentage living with a partner. Fewer English-speaking Hispanics were assessed as having unrealistic child expectations than either non-Hispanic White or Spanish-speaking Hispanics. There were no differences between groups in use of harsh discipline.

Scores on Parent Skills at Time One and Time Two were compared for the three household groups using one-way ANOVA. A group effect was found at Time One,  $F(2,1002) = 7.23, p = .001$ . Post-hoc analysis using Duncan's multiple range procedure revealed significantly lower means for Spanish-speaking Hispanics than non-Hispanic Whites. No significant group difference was found for Parent Skills Score means at Time Two,  $F(2,1002) = 2.26, p = .105$ .

To determine the combined effects of risk factors, demographics, household type, and partner status on increased parent skills, a GLM Univariate procedure was utilized with Parent Skills Score at Time Two entered as the dependent variable, household type and partner status entered as fixed factors, and Parent Skills at Time One, demographic characteristics (age, education, income), health characteristics (breastfeeding, smoking), and risk factors (unstable housing, job instability, substance abuse, mental illness, family conflict, social support, rigid expectations and harsh discipline) entered as covariates. Since there was little indication from the literature as to which risk factors or health characteristics would be associated with increased parent skills they were all included in the model. The model was significant,  $F(17, 1005) = 15.01, p < .001$ . A reduced model utilizing only significant variables was then analyzed in the same way. The results are displayed in Table 2.

Table 2

GLM Univariate Results Using Posttest Parent Skill Scores as the Dependent Variable with Pretest Scores and Parent Characteristics at Entry as Covariates and Household Category and Partner Status as Between-group Factors

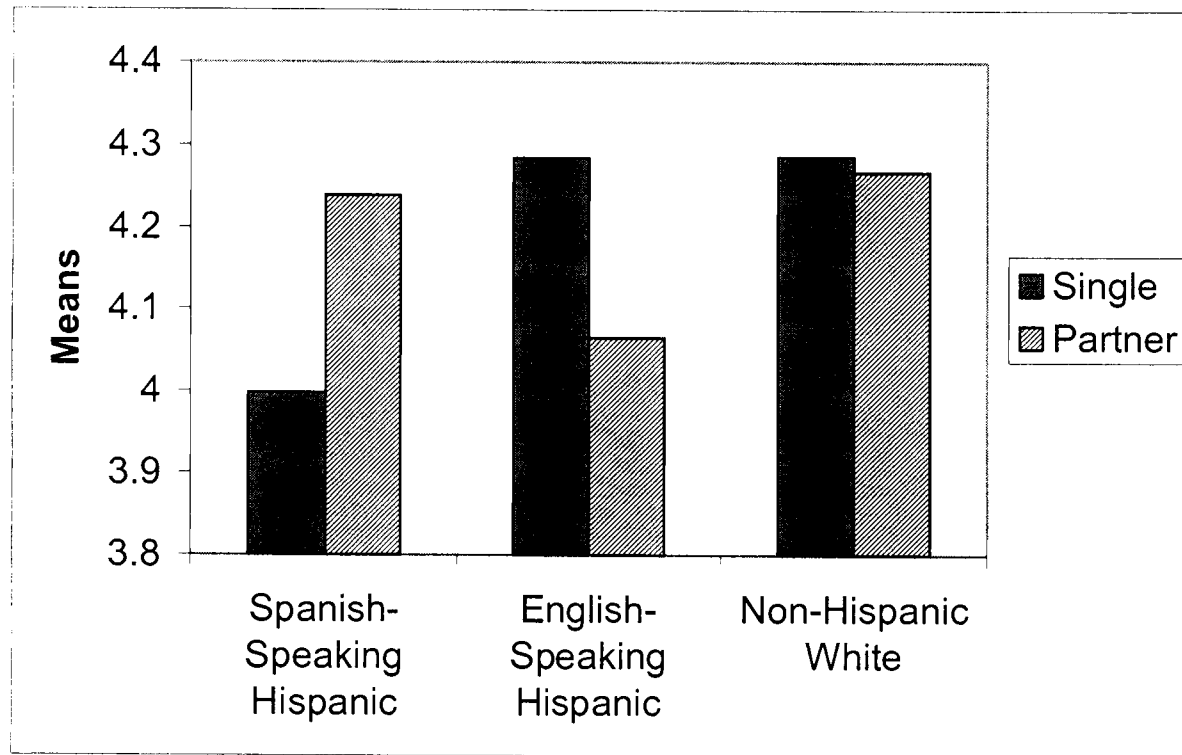
Source	B	Std. Error	Type III Sum of Squares	df	Mean Square	F	Significance	Partial Eta Squared
Corrected Model			89.385	11	8.126	22.472	0.000	.199
Intercept	3.160	.139	226.734	1	226.734	627.036	0.000	.387
Parent Skill Score Time 1	.237	.022	43.389	1	121.238	121.238	0.000	.109
Maternal education	.024	.009	2.348	1	2.348	6.495	0.011	.006
Mother smokes	-.205	.049	6.286	1	6.286	17.385	0.000	.017
Mother Breastfeeds	.124	.041	3.251	1	3.251	8.99	0.003	.009
Mental Illness	-.122	.050	2.147	1	2.147	5.938	0.015	.006
Rigid Expectations	-.189	.050	5.113	1	5.113	14.141	0.000	.014
Household Category			2.71	2	1.355	3.747	0.024	.007
Partner Status			.002	1	.002	.005	0.944	.000
Household x Partner Status			3.73	3	1.243	3.439	0.016	.010
Error			359.066	993				
Total			1854.771	1005				
Corrected Total			448.451	1004				

Note. R Squared = .199 (Adjusted R Squared = .190)

Covariates with significant effects included Parent Skills Score at Time One, mother's education level, mother breastfeeds, mother smokes, mother's mental illness, and unrealistic expectations for child. In addition, there was a significant main effect for household type but no significant main effect for partner status. There was a significant interaction between household type and partner status, indicating that partner status moderated the relationship between ethnicity and parenting skills. Post hoc comparisons using a Bonferroni correction indicated that single Spanish-speaking Hispanics had significantly lower adjusted Time Two means than married Spanish-speaking Hispanics. The relationship of estimated marginal mean scores for single and partner groups for each household type are shown in Figure 1.

Figure 1

Parent Skill Score Estimated Marginal Means at Time Two



## Discussion

The pattern of risk factors for poor child outcomes differs in this sample among non-Hispanic Whites, English-speaking Hispanics, and Spanish-speaking Hispanics. These differential patterns can be traced to cultural differences and degree of acculturation and, in general, fit the pattern of previous research findings. In many areas, including smoking, breastfeeding, family conflict, and incidence of mother's mental illness and substance abuse, fewer Hispanic families exhibit risk characteristics than non-Hispanic White families. Moreover, in these same areas, Spanish-speaking Hispanics are less likely to exhibit risk characteristics than English-speaking Hispanic families. In these areas of risk, the Hispanic culture apparently exerts a protective influence that is weakened with exposure to the dominant culture. It appears that the process of acculturation has produced a bicultural effect, with both cultures contributing to propensity for risk. What is evident here is that Hispanic families assessed as at-risk also bring with them protective characteristics that are substantially impacted by acculturation.

Hispanic mothers are more likely to be isolated and are less well educated than non-Hispanic White mothers, with Spanish-speaking Hispanic mothers the most isolated and least well educated. Differences in social support are expected due to attenuation of kin networks resulting from immigration. Education differences are likely attributable to nation of origin, as most Hispanics in Oregon are of Mexican origin and Mexican Americans are the least well educated of all Hispanics. Again,

however, there is a continuing bicultural effect for more acculturated English-speaking Hispanics.

In other respects, such as mother's age and marital status, the patterns are less obvious. We expected to find that Hispanics of both groups were more likely to cohabit and were less likely to be married than non-Hispanic Whites. Instead, groups were equally likely to live with a partner. As expected, Spanish-speaking Hispanics were more likely to be married than English-speaking Hispanics, but they were also more likely to be married than non-Hispanic Whites. Of all the groups, English-speaking Hispanics were the least likely to be married. This finding may reflect different rates of risk factor occurrence between high-risk families and the general population for different groups. That is, there may be more variation in risk factor occurrence between higher and lower-risk non-Hispanic Whites than between higher and lower-risk Spanish-speaking Hispanics. This would also explain why measures associated with economic difficulties, such as job instability and income, do not reflect the between group differences observed in the larger population.

Variation between higher and lower-risk groups may be particularly significant for English-speaking Hispanics who have acculturated, as least partially, to the dominant culture. Sherradan and Berrera (1997) point out that second generation Mexican Americans may be especially vulnerable, lacking the protective effects of their parents' culture but at the same time experiencing marginalization from the dominant culture. They found, however, that second generation mothers with supportive families had more positive outcomes than those with less supportive

families. The more acculturated Hispanics seen in this study may well represent the most marginalized and vulnerable of the more acculturated families.

There were differences among groups in percentages of parents with unrealistic child expectations, English-speaking Hispanic mothers being the least likely to have unrealistic child expectations and non-Hispanic White mothers being the most likely. No differences were found among groups in percentages of parents utilizing or advocating harsh discipline. These findings are inconsistent with results from a previous study in which Spanish-speaking Hispanic women were most likely to exhibit both unrealistic and harsh parenting attitudes (Acevedo, 2000). However, in general, evidence that Hispanic parenting practices differ from those of other groups is limited and is overshadowed by other variables, including poverty and education level (Bradley, Corwyn, McAdoo, & Garcia Coll 2001; Cardona et al., 2000; Wasserman et al., 1990). Other studies have also found little or no cultural differences in parenting once socioeconomic or educational status were controlled (Fox & Solís-Cámara, 1997; Julian, McKenry, & McKelvey, 1994; Laosa, 1980; Solís-Cámara & Fox, 1995). Wagner and Clayton (1999) found in their evaluation of the PAT program that Spanish-speaking Hispanic women were least likely to be informed about child development and parenting. This may have some bearing on the differences between Spanish-speaking and English-speaking Hispanic mothers but does not explain why non-Hispanic Whites are most likely to have unrealistic child expectations.

Unrealistic expectations by parents for child behavior were negatively associated with higher parenting skills at Time Two. However, parents' view of harsh



discipline parenting as appropriate was not associated with parenting scores. This may indicate that these adverse parenting behaviors are tied to different underlying parental attitudes, with unrealistic expectations being less amenable to change.

Mother behaviors known to affect infant health were included in the model because they were critical parent behaviors known to differ by ethnicity and acculturation. Their significant association with program progress was unexpected, but of interest. Smoking during pregnancy or with a small infant may be an indicator of poor parenting attitudes, reflected in lower Parent Skills Scores. Likewise, breastfeeding may be an indicator of a positive parenting attitude and reflected in higher Parent Skills Scores. Additionally, the experience of breastfeeding may contribute to greater mother/child attachment and indirectly contribute to higher scores. This is an area of interest for future research as these factors may be indicators of underlying parenting attitudes.

As expected, maternal education was positively related to Parent Skills Scores at Time Two. Maternal education has consistently been found to be related to positive child outcomes. In this study, a negative relationship was observed between mother mental illness and increased parent skills. Prior research (Olds et al., 1999) indicated a positive relationship between mother mental illness and home visiting program progress. This was part of a reported overall pattern of mothers who were least well off at program entry showing the most program progress. However, there is also a well-documented association between mother emotional well being and competent

parenting. It may be that by statistically controlling for entry level parenting skills, we were able to clarify the association between mother mental illness and parenting skills.

Social support can be thought of as more important for Hispanics due to the collectivist orientation of the culture. Immigrants may rely more on partners for this support because their kin network has been attenuated by immigration. This is supported by the results of this study showing the interaction of household type and partner status with increased Parent Skill Scores. Single Spanish-speaking Hispanic mothers had significantly lower scores on the Parent Skills measure at Time Two than Spanish-speaking partner households. Although the social support provided by home visiting workers may have more significance for Spanish-speaking Hispanics, the effect size of weekly home visits could not be expected to match that of spousal support. Lacking some of the protective factors of social support, single Spanish-speaking mothers may be especially vulnerable to risk factors and service providers may want to accord this group particular attention.

Absence of significant effect of partner status on Parent Skills for non-Hispanic White parents and for English-speaking Hispanic families is contrary to previous research linking partner support and competent parenting. It may be that, for these parents, the quality of the partner or spouse relationship is such that support is negligible or actually functions as a detriment to positive parenting. Lack of a measure of relationship quality inhibits our ability to adequately account for these findings.

### *Limitations*

We were not able to identify national origin of the Hispanic participants in this study. It may be assumed that a majority was Mexican American as over three-quarters of the Hispanics residing in Oregon are of Mexican origin (Guzmán, 2001). This limits applicability of results to other Hispanic groups, such as Puerto Rican and Cuban families. On the other hand, since more Hispanics in the United States identify themselves as Mexican in origin than any other nationality, there is applicability to a wide group of Hispanics in the United States.

The Parent Skills Score used to measure family progress in this study has not been shown to be related to more distal family outcomes, such as potential for child maltreatment. The mean change score on the five point scale was only one-half of a point. This may indicate measurement unreliability, a small treatment effect, or both. It may be that 11 months was insufficient time in the program to show progress. Strength of the score is that it was based on observation rather than self-report.

### *Implications for Practice and Future Research*

There are a number of conditions and processes that distinguish Hispanics from other population groups and that are important for families. First, immigration and high birth rates have contributed to a population profile of Hispanics that is comprised of proportionately more children and people of child-bearing age than other groups. Second, Hispanics as a whole are generally less well off than non-Hispanic Whites in areas such as education and poverty that contribute to negative child outcomes. Third, the Hispanic culture has distinct qualities, particularly in valuing

families, which set it apart from the dominant U.S. culture. Fourth, the immigration process can have a profound effect on families. Diminished family support may compound the stresses of immigration, and the acculturation process can weaken the protective influences of the culture of origin while at the same time increasing the susceptibility to risks from the dominant culture. Finally, Hispanic value for family, immigration status, and social acceptance of cohabitation may increase the salience of both spousal and partner support for Hispanic immigrants.

The above factors emphasize the importance of expanding the social address model to include the processes and contexts that impact family functioning as explicated in the ecological model. Families may be impacted by the dominant culture in vastly different ways depending upon their ecological niche, which includes cultural and linguistic influences and their degree of exposure to the dominant culture. By attending to these factors it is possible to gain a greater understanding of family strengths and vulnerabilities and how these are related to forces within the larger society.

Examination of differences between non-Hispanic Whites and more and less acculturated Hispanics revealed that Hispanics are not a homogeneous group, and in some respects more acculturated Hispanics more closely resemble non-Hispanic Whites than less acculturated Hispanics. Less acculturated Hispanic high-risk families exhibit protective characteristics that should be recognized and encouraged in family support activities. Additionally, service providers should look for ways to maintain these protective influences as families become more acculturated.

If high Hispanic immigration levels continue as projected, Hispanic family needs will continue to vary by degree of acculturation level. This has implications for both researchers and service providers. Researchers should take care when aggregating scores for Hispanics, as significant within group differences exist depending on the area of study. Service providers should also be aware of these differences when designing and implementing programs for families. Particular attention should be paid to Spanish-speaking Hispanic families without partner support, as those families may be especially at risk. Relationships between Parent Skills Scores and specific risk factors and parent behaviors, including breastfeeding, smoking, and unrealistic child expectations, indicate directions for future research.

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## Reaching High-Risk Hispanic Families in a Home Visiting Program with Age-Paced Newsletters

### Introduction

The disparate group of Americans collectively identified as Hispanic is an important and rapidly growing segment of today's society. One of every eight Americans is of Hispanic origin (Therrien & Ramirez, 2001) and this proportion is expected to increase to one in four by the year 2050 (U.S. Census Bureau, 2000). The term Hispanic can refer to persons of any race and of multiple nationalities, but there are values, cultural traits, socioeconomic characteristics, immigration patterns, and language preferences that generally distinguish Hispanics from other racial or ethnic groups in the United States (Leyendecker & Lamb, 1999).

Hispanics are more likely to be parents than any other group in the United States (Guzmán, 2001; Leyendecker & Lamb, 1999, Therrien & Ramirez, 2001). As a result of high fertility and immigration rates, Hispanic parents are younger than other groups with proportionately more children than non-Hispanic Whites (Guzmán, 2001; Therrien & Ramirez, 2001; U.S. Bureau of the Census, 1996). Many of these young parents have been in this country only a short time. Of those Hispanics born outside of the United States, 43% entered the country between 1990 and 2000 (Therrien & Ramirez). This continued immigration is reflected in the large number of Hispanics who retain their native language. By 2000, more than one in ten Americans over the age of five spoke Spanish in the home, an increase of over 64% in just the past decade (U.S. Census Bureau, 2003).

Many Hispanics experience levels of poverty and education that put them at risk for negative child outcomes. More than two of every five Hispanics have not graduated from high school, compared to less than one in eight of the non-Hispanic White population (Therrien & Ramirez, 2001). Hispanics are more likely to live in poverty than non-Hispanic Whites and Hispanic children are much more likely to be living in poverty than non-Hispanic White children (Proctor & Dalaker, 2001). Hispanic women do have relatively positive birth outcomes given their age at childbearing and access to health care (Martin, Hamilton, Ventura, Menacker, & Park, 2002). However, Padilla, Boardman, Hummer, and Espitia (2002) found that even with early life birthweight advantage, Mexican American children scored substantially and significantly lower than White children on tests of mental development at three to four years of age. Their research showed that the most important predictor of scores of child mental development was the mother's educational level. Further, lower scores were associated with the amount of time the child had lived in family and social environments affected by poverty. This finding is supported by other research indicating that poverty is more strongly associated with IQ at age 5 than is any other socioeconomic measure (Duncan, Brooks-Gunn, & Klebanov, 1994).

Social service practitioners who work with parents are struggling to serve this relatively young, rapidly growing population of families with generally low levels of education and income that put them at risk for poor child outcomes. When selecting appropriate parenting resources and educational materials for Hispanic families,



practitioners must not only be aware of the socioeconomic difficulties faced by many families, but also their language preference and unique cultural values and traits.

The parent resource investigated in this study is an age-paced parenting newsletter, *El Primo Año como Papás (Parenting the First Year)*, that was originally written in English and later translated to Spanish. It is low cost and available widely through the state extension service network as well as other agencies. Whether this newsletter is an effective resource for Spanish-speaking families is a significant question for both social service practitioners searching for materials to use with this population as well as for those who are already using it. That there are few inexpensive Spanish language parent education materials available to practitioners adds to the importance of this question. The results of this investigation may also provide a preliminary guide to the usefulness of other written materials for economically and educationally disadvantaged Hispanic families.

## Literature Review

### *Parenting and Parent Support in the Hispanic Cultural Context*

Significant cultural differences in parenting practices may compromise the cross-cultural effectiveness of parenting resources. There is evidence that Hispanic parenting practices differ from those of other groups but the effect size appears to be small and is overshadowed by other variables, including poverty and education level. The differences Cardona, Nicholson, and Fox (2000) found between scores of Hispanic and non-Hispanic White mothers on the Parent Behavior Checklist were significant, but small. In a study of African American, Dominican, and Puerto Rican adolescent mothers, Hispanic mothers reported more strict childrearing attitudes than Blacks but the authors cautioned that acculturation, social support, and poverty were possible confounding factors (Wasserman, Rauh, Brunelli, Garcia-Castro, & Necos, 1990). Similarly, Bradley, Corwyn, McAdoo, and Garcia Coll (2001) found that although there were differences in the home environment between African Americans, European Americans, and Hispanic Americans, the magnitude of the effect for poverty was greater than that for ethnicity. The effects of poverty were proportional across all ethnic groups. Julian, McKenry, and McKelvey (1994) found no differences in parenting attitudes or involvement between Hispanic and non-Hispanic White mothers and fathers with children under five. Other studies have also found little or no cultural differences in parenting once socioeconomic or educational status was controlled (Fox & Solís-Cámara, 1997; Laosa, 1980; Solís-Cámara & Fox, 1995).

Hispanic cultural characteristics may also have a bearing on how parenting information, including newsletters, may be most effectively presented. Important Hispanic cultural patterns that may impact service delivery include the emphasis on interpersonal relationships over task achievements, respect for the dignity and worth of the individual, and a generalized respect for and deference to authority (Marín & VanOss Marín, 1991; Simoni & Perez, 1995; Triandis, Marín, Lisansky, & Betancourt, 1984).

Several studies have shown that in general Hispanic parents preferred to have parenting information presented by experts in the field rather than by peers (DeBord & Reguero; Powell, 1995; Powell & Zambrana, 1990; Simoni & Perez, 1995). Simoni and Perez report that Hispanic parents who participate in parenting groups prefer to receive information about specific parenting skills rather than social support activities. Other authors have emphasized the importance of face-to-face interactions and inclusion in a small familiar group for activities targeting parents (Espinosa, 1995; Inger, 1992).

#### *Parent Education Newsletters*

Parent education newsletters represent a universal prevention effort that seeks to reach all families regardless of risk factors. Age-paced newsletters provide parents with information on child development and care that is keyed to the age of their child. Age pacing is particularly appropriate for the first two years of life when children change rapidly from month to month. By targeting information about a child's development to the approximate time it is happening, age-paced newsletters address

the preferred learning style of most adults. Specifically, adults learn best when they have a particular need for the information presented and when it is presented in an accessible and understandable fashion (Cudabeck et al., 1985).

Riley, Meinhardt, Nelson, Salisbury, and Winnet (1991) detailed several advantages of age-paced newsletters. On one hand, newsletters are low-cost, an important consideration for universal prevention efforts intended to reach a wide audience. They can be used to reach parents who are otherwise hard to reach and who are unlikely to attend parenting classes or to utilize other forms of informational support. Newsletters can be shared with others, including spouses, and this sharing may help parents initiate social contact and decrease social isolation. Finally, newsletters can help parents who are at risk for child abuse to establish more realistic expectations for their children. On the other hand, the authors acknowledge that the impact of a newsletter may be negligible in the face of risk factors such as low education, poverty, or substance abuse.

The limited research on parent newsletters has indicated that they are useful for parents. In 1985 Cudabeck and her colleagues explored the use of age-paced newsletters in 19 states and found that those who received the newsletters reported that they were useful in increasing their self-confidence as parents, improving their knowledge of child development, and increasing their ability to be nurturing and effective parents. Similarly, a survey of parents of kindergarteners who received an age-paced newsletter found that most of the parents reported reading at least a majority of the newsletter issues and that a significant number reported positive

changes in their parenting behavior as a result of reading the newsletter (Garton et al., 2003). In their study of an age-paced newsletter for parents of adolescents, Bogenschneider and Stone (1997) compared a control group of parents who had not received the newsletter with a group who received a series of three newsletters. The treatment group had higher levels of parental monitoring, although the effect size was small.

*Parenting the First Year* is an age-paced newsletter series developed at the University of Wisconsin. It was originally written in English and later translated into Spanish as *El Primo Año como Papás*, the newsletter investigated in this study. The series consists of 12 eight-page newsletters written at a fifth grade reading level. Each issue contains information corresponding to a specific month of the first year of life, including information relevant to the developmental milestones commonly occurring at each month as well as practical information on medical issues, age-appropriate parent and child activities, and tools for parenting. Information on general parenting topics, such as choosing quality childcare and coping with stress, is also included.

The impact of *Parenting the First Year* on self-reported parent behavior was examined in two studies. Riley and his colleagues (1991) surveyed parents who received the newsletter and found that parents reported the newsletter to be a very useful source of information, more so than any other source including physicians, relatives, and other parents. Seventy percent of the survey respondents reported sharing the newsletter with other parents. In their investigation of the relationship between mothers' involvement with their social network and the impact of *Parenting*

*the First Year*, Walker and Riley (2001) found that mothers who reported reading the newsletter more and discussing it more with others also reported greater change in parenting behavior. Only parents receiving the English version were included in these studies.

To date no studies have been published investigating the usefulness of parenting newsletters for Hispanic families. Researchers who have explored the usefulness of written parent education materials in general for Hispanic families have had mixed results. On the one hand, in their survey of 121 low-income Mexican and Mexican American mothers, Powell and Zambrana (1990) report that participants rated reading materials as the least helpful source of parenting information. On the other hand, in a survey of 760 Hispanic parents, DeBord and Reguero (1999) found books to be among the most preferred methods of learning, after friends and family, medical professionals, and group speakers. The discrepancy in these findings may be due to sample differences. Only mothers with 12 or fewer years of formal education were included in the Powell and Zambrana study whereas over one quarter of the parents surveyed in the DeBord and Reguero study had completed 2 years or more of college.

### *Research Questions*

With the Hispanic population in the United States increasing as a result of continued immigration and relatively high fertility rates, and with many Hispanic families at risk for negative child outcomes due to poverty and low levels of education, it is important to know whether the parenting information that is

disseminated is actually of use. Research is mixed on the desirability of written parent education materials for Hispanic parents, but with generally lower educational levels than the population as a whole, written materials may be used and valued less by this group. The cultural preference for interpersonal interaction could also influence how parents value an impersonal means of presenting parenting information, such as written materials.

Cheng Gorman (1996) has delineated a continuum of culturally sensitive parent education programs: translated, culturally adapted, and culturally specific. Translated programs have been translated directly from the original program with no adaptation; culturally adapted programs contain the same information as the original program with some attempt to incorporate cultural values, traditions, and role models; and culturally specific programs have been specifically developed to reflect the unique needs and values of the target population. In a 1997 meta-analysis of culturally sensitive parent education programs, Cheng Gorman and Balter reported that most parent education programs for Hispanic families had been translated from existing programs without cultural adaptation.

Can a resource not specifically developed to meet the unique needs of the Hispanic culture be useful for Hispanic families? *Parenting the First Year* was designed to be used by a diverse population of families. It was later translated into the Spanish version, *El Primo Año como Papás*. There was some cultural adaptation of the text for Hispanic families, including addition of information on parents co-sleeping

with their infant (D. A. Riley, personal communication, November 5, 2003), and thus would be classified as a culturally adapted program in the Cheng Gorman continuum.

With the above considerations in mind, we identified the following research questions:

Is a Spanish language parenting newsletter, specifically, *El Primo Año como Papás*, an appropriate resource for higher-risk Hispanic families?

Are there changes in parents' knowledge and skills related to the use of this newsletter? In other words, is the newsletter effective for this population?



## Methods

### *Sampling a Hard to Reach Population*

At the outset we identified and targeted as potential research sites two Oregon counties with rapidly growing Hispanic populations that distributed the newsletter (both Spanish and English versions) to all first-birth families. Most families received the parenting newsletter by mail. Locating the Spanish speaking families who had received the newsletters through the mail and then eliciting a survey response from them posed some methodological difficulties. We anticipated that many of the families would be recent immigrants with relatively unstable living situations. The agency providing the newsletter reported that indeed many families with Hispanic surnames did not have phones and had moved during the year after birth without leaving a forwarding address. Previous focus groups we conducted with social service providers also led us to believe that these families would have generally low literacy levels making completion of a mail survey problematic. Further, in an earlier attempt to conduct a mail survey of the same newsletter, one of the researchers in this investigation had encountered a 15% response rate by Spanish speaking families (Doescher, Pratt, Allen, & Grobe, 1997).

Other Spanish speaking families in the same two county area had the newsletter hand delivered by home visitors as part of a home visitation program for higher risk families. We found that the home visitors did not simply deliver the newsletter, they also verbally went over it with the families in the course of their visits and sometimes used it as the parent education curricula for their visit.

Surveying parents who received the newsletters from home visitors meant we would be evaluating the use of a parenting newsletter in an entirely different context from those who received it through the mail, as had been done in previous parent newsletter evaluations. This entailed both advantages and disadvantages. The sample would be limited in number, would encompass only higher risk families, and would be nonrandom. In their review of sampling methods, Faugier and Sargent (1997) discuss the difficulties of locating and contacting what they characterize as low visibility populations. One must balance the time and resources necessary to obtain a larger sample with the advantages of studying a smaller sample more intensively. By surveying parents served by home visitors we would essentially be using "insider's knowledge" (Berg, 1988) to locate our target population. This would also allow us to administer the questionnaire through interviews rather than as a paper-and-pencil survey, thus ensuring that all parents would be able to participate regardless of literacy level. Additionally, we would be able to specify that parents surveyed had received at least a predetermined number of newsletters. Using bilingual and bicultural home visitors as interviewers would allow us to take advantage of the cultural preference for face-to-face interactions and to use a known and trusted person as an interviewer. Finally, we would also be able to explore in depth the use of parenting newsletters in a new and different context.

We chose to evaluate the newsletters as used in the home visiting context and to supplement the survey results with qualitative focus group data obtained from the home visitors themselves. This would allow us to enhance what was learned through

the survey with in depth information regarding how the newsletters were presented to parents and how parents responded to them. Our intent was to utilize the experience of bilingual, bicultural home visitors to inform our understanding of the phenomena underlying the survey answers, a method that is particularly important when exploring new fields such as this one.

#### *Collaboration With Home Visitors*

As this was a cooperative effort with the home visiting agency, collaboration with the home visitors was an integral part of the research process. They assisted with questionnaire translation and selection of the incentive given for participation. They also recommended survey items to assess parents' knowledge in parenting areas that they saw as particularly important for Hispanic families. As with many practitioners who work with higher risk families, the home visitors were helping families deal with critical daily needs. The time they had available for nonessential activities, such as the interviews that we proposed, was limited. By involving them in the research process and attempting to make it relevant to their work with families, we hoped that they would feel some ownership of the investigation.

#### *Parent Interview Participants and Procedures*

Survey respondents were participants in a voluntary intensive home visiting program for parents of first-borns. Families receiving these intensive services had been assessed during the prenatal period or at the time of birth as high risk for poor child and family outcomes. Risk factors assessed included such items as low education, inadequate income, depression, inadequate prenatal care, and a history of

substance abuse. The goal of the program was to guide parents in safe, nurturing, and developmentally appropriate parenting practices. A Spanish speaking home visitor visited each family at least once a month to provide parenting information and support services. In the course of these visits, home visitors gave parents the issue of *El Primo Año como Papás* corresponding to the age of the targeted child. At the same time, home visitors also used the newsletter as a teaching tool and they reviewed some of the newsletter content with the parents.

Hispanic mothers with children at least 6 months but less than 18 months old were targeted. This insured that mothers with younger infants would have received enough newsletters to be familiar with them. Mothers with older infants would have received them recently enough so they would still be fresh in their minds. Interviews were conducted in the parents' home during the course of a regularly scheduled home visit. Parents were assured that participation was voluntary and confidential and that refusal to participate would not affect the delivery of home visitation services. They were informed at the outset that they would receive a small gift (a Spanish language children's book) whether or not they participated. As some of the survey questions dealt with critical issues affecting child health and safety (such as putting babies to sleep on their backs), at the end of the interview parents were also given a one page Spanish language summary of appropriate parenting practices in these areas. If parent survey responses indicated that parents were not aware of the appropriate health and safety practices covered in the survey, interviewers were instructed to use the sheet to review the appropriate practice or practices with the parent.

### *Parent Interview Measures*

Survey items assessed the impact of the newsletter on parents' self-reported behavior changes, the usefulness of the newsletter in comparison to other parenting information, and the extent to which it was read by the parents and shared with others. Most of the interview questions were adapted from a mail survey used in previous evaluations of the *Parenting the First Year* newsletter in Wisconsin and Oregon. The Spanish language version of the Oregon survey was revised as an interview schedule and additional items were added covering material suggested by the home visitors. Multiple translators were employed to convert the survey to an interview schedule and to translate the new material. Translators were instructed to use conversational Spanish that would be appropriate for any educational level. Two additional translators checked the initial translation for accuracy through the use of back translation. At this point the questionnaire was reviewed and piloted by home visitors, after which final revisions were made to improve readability and meaning.

A total of 23 items from the original mail survey assessed parent behavior changes through such questions as "Did the newsletters help you be less angry when your baby cries?" and "Did they help you to be more accepting when your baby puts things in his (her) mouth?" Parents were asked how much the newsletter helped them with such specific parenting tasks in six categories: discipline; provision of a stimulating environment; child safety; health and feeding; child development; and parent coping. Responses were given on a four-item Likert scale with responses ranging from 1 (*it didn't help me*) to 4 (*it helped a great deal*). Interviewers were

provided with a pictorial representation of a ladder with responses arranged on it from the bottom of the ladder (*least help*) to the top (*most help*) to assist parents who may have been unfamiliar with responding in this way. Use of this ladder is especially suitable for less educated respondents. Scales were developed for each parent task category by computing the average response for the items included in the category. Cronbach's alphas for the scales were acceptable and ranged from .79 to .88. Using an independent sample two-tailed *t* test, mean scale responses were compared for older and younger mothers (younger mothers were classified as 20 years or younger; older as 21 years or older), more and less educated mothers (less educated mothers had 8 years or less of education, more educated 9 years or more), mothers reporting more and less social support (mothers with less social support reported "no" or "very little" support, those with more reported "OK" or "lots of support"), and married and unmarried mothers.

Additional items assessed parents' knowledge of parenting practices that were included in the newsletters that home visitors also emphasized in their visits. These practices included seven health and safety issues: giving sugar and honey to babies, using walkers, using a high chair for feeding, using baby carriers, putting baby to sleep on his/her back, and exposing baby to secondhand smoke. First, parents were asked how often they engaged in each practice by responding to a five-point scale ranging from 1 (*never*) to 5 (*all the time*). A pictorial ladder similar to the one described above was provided to help them with these responses. Parents were then asked to respond

“yes” or “no” as to whether the newsletter helped them learn about these issues. If they responded “yes” they were then asked to explain how it helped them.

We also asked two open-ended questions: “Is there anything you would change or add to *El Primo Año como Papás?*” and “Is there anything else you would like to tell us about the newsletters?” Responses were transcribed, translated, and coded according to themes that emerged in the analysis. When appropriate, data was analyzed quantitatively by codes for descriptive purposes.

### *Sample*

Out of 241 Spanish-speaking Hispanic parents who were enrolled in the home visiting program during the time of the study, a total of 42 were interviewed. All parents interviewed were mothers. Their ages ranged from 14 to 38 years; the average age was 23. Spanish was the primary language of 95% of the participants. Most (95%) were from Mexico and they came from 15 different Mexican states with the largest number (21%) from Michoacan. Almost all of the mothers (83%) were living with the biological father of their child or children at the time of the interview, 49% were married. Most (83%) were first-time parents. The average length of time receiving home visiting services was 16 months. On average, mothers completed 8.4 years of school; fathers completed an average of 8 years. Mother’ education levels ranged from 3 to 13 years.

### *Home Visitor Focus Group*

Seven of the ten home visitors who administered the questionnaire were interviewed using a focus group. All were bicultural and bilingual. The participants

were asked how they used the newsletter with families, what was useful about the newsletter, and how the newsletter could be improved. Because the focus groups were exploratory in nature, the interview format was semistructured to allow participants the freedom to contribute in content areas not foreseen by the researchers (Morgan, 1997). A schedule of questions reflecting the general research parameters was constructed prior to the focus group session, although the moderator was prepared to follow up unanticipated but fruitful topic areas that arose during the discussion. The focus group lasted approximately two hours.

The focus group discussion was transcribed and analyzed qualitatively using analytic coding (Lofland & Lofland, 1995). Based on initial reading of the transcripts, themes that emerged from the discussion were assigned codes. Passages reflective of the identified themes were coded accordingly. Noncoded passages were analyzed for unidentified themes, but none were found.



## Results

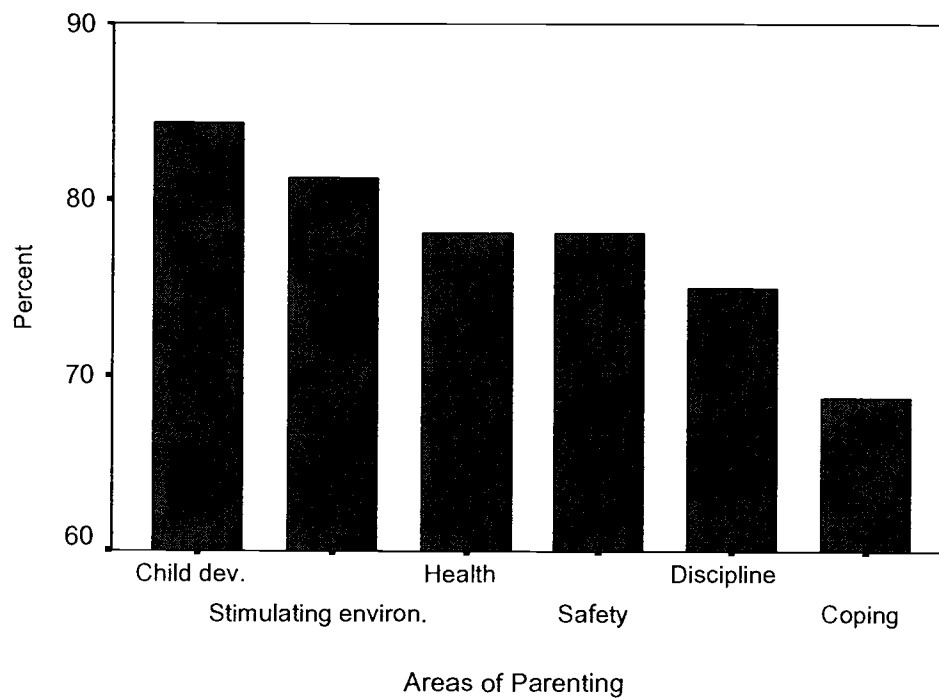
### *Questionnaire Data*

Parents reported reading and sharing the newsletter. Almost all parents, 41 out of 42, reported that they read the newsletter. Almost a third (31%) of the parents interviewed reported reading all of the issues, 31% read 7-12 issues and 33% reported reading 1-6 issues. Over three-quarters of the parents (76%) shared the newsletter with someone else: 64% shared it with their partner and 19% shared it with a relative or friend.

A large percentage of parents reported that the newsletter helped them with specific parenting tasks. Figure 1 shows the percentage of parents who reported that the newsletter helped them at least some or a great deal with each of the six categories of parenting tasks: child development and parent-infant interaction; providing a stimulating environment; health, feeding and eating; safety; positive discipline; and coping with stress. Parents found the newsletter most helpful in the area of child development and parent interaction and least helpful in the area of coping with stress.

Figure 1

Percentage of Parents Who Said the Newsletter Helped Them with Parenting “Some” or “A Great Deal”



Of the 23 parenting activities parents were asked about, more (95.3%) reported that the newsletter helped them some or a great deal to make sure their baby's shots or immunizations were up to date than any other item. Ratings did not vary significantly by age, education level, or level of social support except in the area of coping with parenting stress. Here, married mothers found the newsletter significantly less useful than nonmarried mothers ( $M = .62$ ,  $SD = .25$ ),  $t(35) = 2.53$ ,  $p = .02$  (two-tailed). This effect was confined to married mothers and did not extend to unmarried mothers living with partners.

Parents were asked about the safety and health practices that were included in the newsletter and that were also emphasized by home visitors. In all areas except for use of a walker, a majority of parents reported that they were using appropriate practices and parents overwhelming reported learning about these appropriate practices from the newsletter. Parents reported particular success in putting their babies to sleep on their backs, not exposing their babies to smoke, and refraining from giving their babies honey. (See Table 1.)

Table 1

*Percentage of Parents Reporting Specific Parenting Behaviors and Helpfulness of Newsletter (N = 42)*

Parenting Behavior	Practice Never or Almost Never	Newsletter Helped Learn About Behavior
Expose Baby to Smoke	100	92.3
Give Baby Honey	92.9	97.3
Give Baby Sugar	76.2	92.5
Use Baby Carrier	50.0	68.8
Use Walker	28.6	89.7
	Often or All the Time	
Put Baby to Sleep on Back	88.1	95.2
Use High Chair	61.0	97.1
Put Baby on Floor to Exercise	57.1	97.5

When asked by the interviewer to explain how the newsletter helped them learn about a parenting practice, over half of the mothers (24) were able to explain what they had learned from the newsletter for least 4 of the 8 practices. Some mothers' responses clearly showed that they understood why the practice was important. One mother explained why she started to put her baby on the floor to exercise, "It is good for their muscles and it helps them learn how to crawl." Another explained that she did not give her baby sugar because, "The sugar causes cavities." In other instances mothers knew what they should do, but they did not remember why they should do it or whether they had learned about it from the newsletters.

*Newsletter compared to other sources.*

In general, parents preferred the newsletter to other sources of written materials. When parents were asked how the newsletter compared to other sources of written information, two-thirds of the parents rated the newsletter as "*somewhat better*" or "*much better*" than other sources. As another indication of how parents valued the newsletter, all survey participants said that they would be interested in receiving a newsletter series on parenting two and three year olds if it were available.

Survey participants were also asked if they had received information on parenting from other sources, and if so, how helpful that information was. As shown in Table 2, in addition to the newsletter, parents reported receiving parenting information most often from other written materials followed respectively by relatives, medical personnel, friends, support groups, and caregivers. When asked how helpful the information received was, only support groups were rated as more helpful than the

newsletter, although fewer respondents had participated in support groups. Relatives, doctors or nurses, other written materials, friends, and caregivers were all rated below support groups. In some instances, respondents said the information they received from a source was of no help; the largest percentage was parents who received information from their child's caregiver.

Table 2

*Source of Parenting Information and How Helpful It was Rated by Parents (%)*

Source	Received Information	Some or A Great Deal of Help	Not Helpful
Support Group	30.8	100	0.0
Parenting the First Year	100.0	87.2	2.6
Other written materials	82.9	70.6	5.9
Relatives	75.6	69.0	6.9
Doctor or nurse	71.4	68.9	3.4
Caregiver	33.3	54.6	9.1
Other Parents and Friends	65.9	51.8	3.7

*Note.* Percentages reflect valid cases only. Cases with missing data are not included.

*Open-ended responses.*

Given the opportunity to voice their opinion about the newsletter, 17 mothers responded, all with positive comments. One mother said, "They are very well explained and at times they make me laugh and learn and I share the information with other parents." Another told us about specific information that helped her:

They [the newsletters] are good and if one dedicates time and is open to the advice, one can learn, especially in being more tolerant. The information that most helped me was the one about being patient with my child like I am with myself.

*Home Visitor Focus Group*

Home visitors reported that they found the newsletters to be very helpful, both for themselves and for the high-risk Spanish speaking families with whom they worked. Home visitors described the newsletters as a teaching tool, as a guide for them to follow when talking with families, and as a reinforcement for other sources of information, including their own teaching and other curricula. Home visitors characterized the newsletter as an effective teaching tool because the content is organized and includes all of the critical information for new parents. Additionally, it is small and portable. As one worker said, "It covers problem areas that otherwise we wouldn't have information on in Spanish and covers them all. "

Home visitors also felt that the newsletter was useful for parents in several ways. There is a wide amount of information covered, including parent self-care and sibling rivalry. Parents find it appealing because it is easy to read and short in length, something that is important for a less educated population. One home visitor noted

“That's why I like the newsletter, because it's really easy for the moms with lower education level to read. It's shorter, so the information is just what they want.”

Parents reported to home visitors that they use the newsletter to defend appropriate parenting practices to their friends and relatives. A home visitor described what happened in one instance when a father wanted to buy a walker but the mother resisted because she had read about the disadvantages of walker use in the newsletter, “She said ‘No, no, don't buy it,’ because she had read the information. And he went and bought it. She said, ‘Look, I told you to read this.’ And they returned it.”

Home visitors reported using the newsletter in various ways, often individualizing their approach to meet the needs of different families. One influential factor was the likelihood of family members to read the newsletter on their own. One home visitor reported, “One mother, I can just give it to her and she says, ‘Oh great, you brought me another one of those.’ And she'll sit and read the whole thing.... but other families either can't read or reading is very difficult for them, and so it's better to go over it with them.” Home visitors said that they chose which parts to emphasize based on a particular family's needs. For instance, if there were no smokers in a family, the worker would simply mention that children should not be exposed to second-hand smoke.

Home visitors cited certain questionable parenting practices that were promoted by economic, cultural, or familial circumstances. One of these was food that mothers were giving to infants and babies. One worker said, “Food, it's a big problem.” The home visitors' concerns about food seemed to be closely tied to



differences between recommended practices in the United States and traditional practices from families' homelands and family custom. Home visitors were particularly concerned with the practice of giving honey to very young babies. They reported that relatives bring back pacifiers from Mexico with honey in them. As one told us, "A lot of the families we visit aren't aware that they shouldn't be giving babies honey. They're very appreciative of the information." Another told us:

I had a mom who was buying a pacifier once a week because she said that every time she gave it to the baby she'd look at it and it didn't have that honey in there so she thought it was no good so she'd go get another one. I told her they don't come with honey here, they're empty.

Many parents live with extended families and as one worker pointed out, "They've got five people in the family saying this and you're one person saying something else." Home visitors report that the newsletter helps mothers to deviate from family traditions because they can point to it as an authority. However, the conflict between family tradition and newsletter recommendations is a problem that is not easily overcome. If a parent wants to do something contrary to family practice, it is difficult to hide. Home visitors suggested that additional content on how to deal with advice from well meaning friends and relatives would be useful. Home visitors also appreciated having the newsletters to reinforce their authority. Rather than confronting families with unsafe practices, they could point to the newsletter. One home visitor described it this way: "When you already know that they're doing the opposite of what it says it's kind of a way to break that....and you can say, 'well, it says in here why that's not good'. So then it's not on you."

Other areas of concern were the nonuse of car seats with older babies; the use of walkers, even with very young babies; and the need to provide time for floor exercise. Some of these issues, such as car seat use after infancy, were a matter of understanding the risks associated with the practice. Other issues were reportedly related to household context. Housing conditions that some families experience are such that parents hesitate to put their child on the floor because it is unsanitary or the surface is hard. This is also one explanation for the use of baby walkers, to keep infants off the floor. As one home visitor said of the families she visits, "They don't want to put them on the floor because the carpets are dirty."

## Discussion

Can educational parenting materials that have been written in English and translated into Spanish be useful for Hispanic families? The answer seems to be a qualified yes. The age-paced newsletter *Parenting the First Year* was developed to be mailed to new parents and was later translated to Spanish with little cultural adaptation as *El Primo Año como Papás*. Home visitors in Oregon adopted this Spanish version as a curriculum to be used with high-risk first birth families. Survey and focus group results indicate that, as used in this situation and with these families, parents and home visitors did find the newsletter helpful. Parents reported reading the newsletter and sharing it with others, and they expressed an interest in a similar newsletter for older children. It was preferred to other written sources of information and mothers reported it to be a more helpful source of parenting information than any other source except support groups, the use of which was rare. Further, the only difference detected between the families who did and did not find the newsletter helpful was that married mothers were less likely to find it helpful in coping with stress.

Regarding parenting practices that were covered in the newsletter and that home visitors identified as of particular concern with this population, mothers overwhelmingly reported knowing the appropriate practices to use and in most instances reported utilizing those practices. This was most true for areas critical for infant health such as exposure to secondhand smoke, giving infants honey in the first six months, and putting babies to sleep on their backs. Areas where mothers were less likely to use appropriate practices, such as high chair, walker, and baby carrier use or

putting the baby on the floor for exercise, although important, were less critical for child health. Implementation of these practices by families may be influenced by lack of resources and housing conditions. In certain adverse housing situations, putting the baby in a walker or baby carrier may be a more realistic alternative than laying them on the floor for exercise.

Prior evaluations of the newsletter with English speaking populations found that most shared the newsletter with others, as was the case with this Spanish speaking sample. Parents in prior studies said the newsletters helped them most in providing a stimulating environment for their child. In this sample, parents said it was most helpful in the areas of child development and parent interaction.

Focus group results indicated that the strong family ties that potentially provide social support to parents can also present difficulties for young parents who are learning ways of parenting that are different from accepted cultural and familial practices. Home visitors who were aware of these potentially negative practices were able to use the newsletter to emphasize appropriate practices. Further, parents could refer to the newsletter as an authoritative source when defending their practices to their family.

### *Study Limitations*

This study has several limitations. First, the sample was small and nonrandom, and there was no control group. Of the 241 Hispanic families enrolled in the program during the time period of the study, 42 were interviewed. Respondents interviewed, however, did not differ significantly from other Hispanic families in the same program

by education or age. They were more likely to be married; 49% of the survey respondents were married compared to 28% of all Hispanic program participants during the same time period. Secondly, although the interview questions specifically asked parents about the newsletter, it is possible that parents did not remember what was learned from their home visitor and what was learned from the newsletter. As one mother responded when asked if the bulletin helped her learn about walkers, "I don't remember if I got the information from you or the bulletin." Third, the use of home visitors to administer the questionnaire could have affected the validity of the responses. It was assumed that because the interviewers were known and presumably trusted by the respondents, the possibility of socially desirable response sets would be diminished. The opposite could be true, however. Respondents may have answered so as to please the home visitor, especially because home visitors had introduced them to the newsletter and encouraged its use. When asked about this possibility, one home visitor told us that if outside interviewers had been used, "They [the mothers] would have stayed more on task but they probably wouldn't tell you the truth all the time." Although there was a connection between the home visitors and the newsletter that was potentially confounding, by using the home visitors as interviewers we were able to gain access to a mobile and difficult-to-reach population.

Finally, the respondents were almost all of Mexican origin and identified as at high risk for poor child outcomes. This limits the ability to generalize to more advantaged populations and to other Hispanic groups. However, because Mexicans Americans as a group have lower education levels than any other Hispanic group

(Therrien & Ramirez, 2000) there is reason to believe that other more well-educated Hispanic groups would respond at least as positively to the newsletter. Similarly, Spanish-speaking parents with greater resources, both educational and economic, likely would find the newsletter at least as useful as this sample.

### *Implications for Practice*

In our attempt to locate Spanish speaking families who had received *El Primo Año como Papás*, we encountered a different way of using it than had previously been evaluated. With the help of the practitioners who had adopted this usage, we were able to untangle how parents responded to this novel practice. There are at least four possible reasons why the newsletter was successful in this setting.

1. The quality of the material increases its desirability. It was developed to appeal to diverse audiences and previous studies have found this newsletter to be well received by parents in other settings.

2. The newsletters were written so as to be easy to understand. Literacy difficulties noted by the service providers were not borne out as almost all of the respondents said they not only read at least some of the newsletters but they also shared them with their partner or family.

3. The material was presented in a manner that respected cultural values. The newsletter was not mailed but was delivered personally by a trusted source in a face-to-face interaction.

4. The newsletter encompasses strategies that have been used successfully in other contexts with Hispanic parents. The content emphasizes information that is

directly related to the child's needs and is age appropriate. As an authoritative source of information it capitalizes on the Hispanic cultural value of respect for authority.

When presented with a limited choice of curriculum materials, home visitors in this study engaged families by combining a cost-effective resource with a culturally appropriate delivery method. Through their awareness of cultural preferences and practices, home visitors were able to adapt their service delivery to impact parenting practices. Practitioners in other settings may want to consider how the cultural preference for personal interaction among Hispanics can be utilized to present written materials. Practitioners should identify quality materials appropriate for the educational level of the intended audience. Materials should contain advice specific to problems parents encounter. Practitioners' knowledge of unique cultural practices can guide the information that is emphasized and presented to parents in critical ways.

Previous research with non-Hispanic White English-speaking parents has found age-paced parenting newsletters to be an effective means of communicating child-rearing information. The applicability of this resource with other cultures and in other languages has not previously been evaluated. This exploratory study gives preliminary indication of the universal appeal of age-paced newsletters for new parents. When employed as part of an integrated system of information delivery parents read them, found them useful, and reported behavior changes based on newsletter content.

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## General Conclusion

Hispanics comprise the most rapidly growing segment of the United States population. The two studies presented here were designed to increase our understanding of a subgroup of that population, high-risk Hispanic parents of young children. By investigating Hispanic families in depth, and through careful consideration of language use and acculturation, it is possible to gain a greater understanding of the variations between population subgroups and the dynamic nature of the Hispanic population as a whole that occurs as a result of immigration and acculturation. In the first paper a relatively large dataset was used to compare in detail how more and less acculturated families (as assessed by language use) compared to non-Hispanic White families on demographic characteristics, risk factors, and increased parenting skills in a home visiting program for new parents. In the second paper a small number of Spanish-speaking families and home visitors were interviewed to evaluate the relevance and utility of a Spanish-language newsletter used in the same home visiting program.

Although all parents were assessed as high-risk in the studies presented here, cultural and acculturation differences conditioned their experiences and outcomes. Newly immigrated families experience the dominant culture differently than more acculturated families and non-Hispanic White families. They face special challenges associated with minority status in language use and cultural values that diverge from the mainstream and also with stressors associated with immigration. As immigrant

families become acculturated, their experience of the dominant culture changes and the challenges they experience change as well. Examining differences not only between non-Hispanic Whites and Hispanics but also between more and less acculturated Hispanics elucidates distinctions that would be obscured if the Hispanics were treated as a homogeneous group.

As ecological theory posits, in order to understand family functioning, one must look at how persons and processes are affected by multiple contexts or systems. By considering how the effect of these contexts and systems differ culturally, it is possible to better understand the life experiences of new families and how culture and acculturation are related to parent characteristics and parent processes.

The parent-child dyad is a microsystem relationship and it is in this realm in which parenting occurs. As shown in the first study, parent and family characteristics that affect parenting practices vary by culture and acculturation level. Examination of risk characteristics associated with poor child outcomes revealed similarities and differences between more and less acculturated Hispanic and non-Hispanic White high-risk families. Economic risks were shared equally among these disadvantaged populations but psychosocial and health risks showed significant differences. In general, Hispanics were less likely to exhibit risk characteristics, including smoking, not breastfeeding, mental illness, family conflict, and substance abuse, than non-Hispanic Whites. Furthermore, less acculturated Hispanics were less likely to exhibit risk characteristics than more acculturated Hispanics. This provides a strong indication

that cultural variations affect parent characteristics and behaviors in the microsystem, with English-speaking Hispanic families having dual cultural influences.

Home visiting programs attempt to influence parenting practices in the microsystem. Overall, parents in the first study showed increased scores on measures of parenting skills after one year of home visiting service. Although there were significant differences between-group differences on mean scores, the effect was small and overshadowed by the significant interaction effect between partner status and household type. Partner social support, as expressed in the microsystem containing the child, is generally thought to contribute to more competent parenting, but the importance of this support differed by culture and acculturation level in this study. Scores for single, less acculturated Hispanic mothers were significantly lower than those of less acculturated Hispanic partner households. This indicates the importance of partner support for newly immigrated Hispanic mothers. Scores for non-Hispanic White households and for less acculturated Hispanic households did not differ substantively by partner status.

Exosystem sources of support can also enhance parental well being and parenting competence. Parents may receive support from family and friends as well as representatives of social agencies, such as home visiting workers. Social support can be attenuated for newly immigrated Hispanics, as indicated by higher isolation rates for less acculturated Hispanic mothers as reported in the first study. More acculturated Hispanics have reestablished some of that support, as indicated by rates that were

lower than those of less acculturated Hispanic mothers, but higher than those of non-Hispanic White mothers.

Culture can also influence needs and preferences for receiving information from exosystem structures, such as the parenting information provided by home visiting workers. Many immigrant families experience limited fluency in English and limited literacy in Spanish. These constraints limit the available parenting materials that can flow from exosystem structures to immigrant parents. The age-paced Spanish language parenting newsletter investigated in the second study was low-cost, readily available, and written to be used by parents with limited literacy skills. Age-paced newsletters are typically delivered by mail, but in this instance, the home visitors adapted the newsletter use in a manner respecting the cultural preference for interpersonal relationships. They delivered it personally and used it as a curriculum guide and teaching tool for families in face-to-face interactions. When we investigated this adaptation of newsletter use, we found that parents reported reading the newsletter, learning from it, and changing their behavior in response to newsletter content.

Home visitors can also act as interpreters of the larger society for new immigrants, helping to resolve exosystem differences between the culture of origin and the culture of residence, including cultural differences in acceptable parenting practices. Home visitors in the second study reported that parenting practices were influenced by familial and cultural traditions and that some of these practices were of concern, as they differed from recommended practices in the United States. Home



visitors found that the parenting newsletter, as an authoritative source of advice, was particularly useful to combat inappropriate or unhealthy parenting advice from well-meaning family members and friends.

Macrosystem values that shape all the other systems differ between collectivist and individualistic cultures, such as those represented by Hispanic and European American cultures respectively. The divergence between values in these two types of cultures may be particularly problematic for more acculturated Hispanics as they participate more fully in the larger society, partly as a result of English language acquisition. For these parents, the protective values of their culture of origin may be weakened as they are exposed to different cultural beliefs and practices. This translates into increased risks for poor child outcomes. Those providing support to Hispanic families would do well to consider how to help families retain beneficial cultural practices as they acculturate into the mainstream of American life.

Care was taken in these studies to employ methodologies that were respectful and appropriate for the characteristics of the population being studied. In the first paper, household types were constructed reflecting ethnically homogeneous categories that clearly distinguished between non-Hispanic White and Hispanic households and between more and less acculturated families. Additionally, partner status was expanded to include non-spousal partners as well as spouses, reflecting cultural values that accept cohabitation. For the second paper, rather than using a mail survey, data was gathered by home visitors who interviewed parents in person. This allowed access to a highly mobile population, ensured that all parents could participate regardless of

literacy level, and took advantage of the Hispanic cultural preference for personal interaction.

When considering issues of Hispanic ethnicity and cultural diversity, it is necessary to address the issue of language use and acculturation. High rates of immigration will continue to contribute to a portion of the Hispanic population that is younger, primarily Spanish speaking, and with lower educational and economic levels than the population as a whole. These families will differ from more acculturated Hispanics born in the United States in a number of ways, including language use and incidence of risk factors related to poor child and family outcomes. If researchers and service providers fail to recognize the difference in ecological systems and processes for Hispanics as compared to non-Hispanic Whites and for more and less acculturated Hispanics, opportunities to understand and support family functioning, both in prevention of risk and enhancement of strengths, will be diminished. It is important to be aware of and acknowledge the unique characteristics, strengths, and stressors associated with each group, both in research design and analysis and in provision of services to families.

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