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MATERNAL CHILD-REARING ATTITUDES AND PRACTICES AND CHILD BEHAVIOR IN MEXICAN-AMERICAN/CHICANO FAMILIES

By

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ABSTRACT

MATERNAL CHILD-REARING ATTITUDES
AND PRACTICES AND CHILD BEHAVIOR
IN MEXICAN-AMERICAN/CHICANO FAMILIES

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The problem of this study was to describe maternal child-rearing attitudes and practices, the relationship of such practices to child behavior, and the relationship of family demographics to the maternal child-rearing attitudes and practices of Mexican-American (Chicano) families residing in an urban area of the Midwest. The research took the form of a combined ex post facto (field) and attitudinal survey design. It was based upon structured observations of forty-seven mother-child dyads in their homes and interviews of the mothers.

The majority of Mexican-American mothers expressed authoritarian child-rearing attitudes, however, their practices were divided almost equally between authoritative (49 percent) and authoritarian (47 percent) child-rearing patterns. There was a significant relationship between expressed child-rearing attitudes and observed child-rearing practices, X^2 (7df) = 15.48, p = .03. Attitude variables, Acceleration of Autonomy, Lack of Control, Casual Use of Time, and Equalitarianism were found to best discriminate between authoritative and authoritarian practices. Univariate analysis of authoritative and authoritarian patterns of maternal child-rearing practices and each of the child behavior variables were significant only for: Imitation of Mother.

The effect of paternal employment status on maternal child-rearing attitudes was highly significant. In families with employed fathers,

maternal child-rearing attitudes were 20 percent permissive, 40 percent authoritative, and 40 percent authoritarian. In families with unemployed fathers, mothers' patterns of child-rearing attitudes were 7 percent authoritative and 93 percent authoritarian.

I dedicate this dissertation to my Familia—

especially Grandma, Mom, Dad,

Kathy and Lily,

Gerry and Boby Joel,

and, of course, Melínda

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CHAPTER I

INTRODUCTION

Statement of the Problem

The principal task of parents is to rear children from dependent infants to young adults capable of functioning independently in society. Much of human development is a consequence of the manner by which this is accomplished. As a vital and complex task, child-rearing has generated a substantial body of research, notably studies by Baumrind (1967, 1971, 1975, 1978); Sears, Maccoby, and Levin (1957); and Sears, Rau, and Alpert (1965). Other studies in child development suggest evidence of cultural and ethnic diversity along various dimensions of child-rearing (Baumrind, 1971, 1975; Hess, 1970, 1972; Lindholm & Padilla, 1981; Mussen, Conger, & Kagan, 1974; Strommen, McKinney, & Fitzgerald, 1983). Most of the research on the topic, however, has been conducted using middle-class White or lower-class Black populations with relatively little attention given to other cultural or ethnic goups.

Additional information is needed about child-rearing in other ethnic minority families, especially Mexican-American families living in the U.S., whose numbers represent the largest group of Hispanics, a young, diverse, and changing population that is experiencing rapid growth (Bureau of the Census, 1983). The problem of this study, then, is to describe Mexican-American maternal child-rearing attitudes and

practices, the relationship of such practices to child behavior, and the relationship of family demographics to maternal attitudes and practices of child-rearing.

Need for the Study

The few studies on child-rearing in Mexican-American families that can be considered empirical or verifiable fail to provide consistent conclusions about those child-rearing attitudes and practices. For example, Durrett, O'Bryant, and Pennebaker (1975) and LeVine and Bartz, 1979) conclude that Mexican-American parents have permissive attitudes toward rearing their children. The findings of other studies, however, suggest that traditional values and authoritarian structures are more characteristic of Mexican-American child-rearing (Kagan & Ender, 1975; Kearns, 1970).

Although lacking sufficient empirical research, the literature is replete with anecdotal and nonempirical descriptions of interaction in Mexican-American families and socialization of their children. Descriptions, some of which are written by Mexican-Americans (Alvirez, Bean, & Williams, 1982; Delgado, 1980; Mirande, 1980; Mirande & Enriquez, 1979; Staton, 1972; Vigil, 1980), characterize child-rearing in Mexican-American families as warm, nurturing, and affectionate within a patriarchal, authoritarian family structure with its traditional respect for males and the elderly.

Empirical research on Mexican-American child-rearing, then, is needed to resolve the inconsistencies in prior research and ethnographic descriptions. Additional research evidence may provide a better

understanding of how children are reared in Mexican-American families. Such knowledge has the potential for practical application in many settings where it is important to understand the manner by which parents rear their children. For example, parent education programs could be designed specifically for Mexican-American families with content based on empirical evidence of their child-rearing attitudes and practices. In day care settings, knowledge of the care Mexican-American children receive at home can be applied to staff interactions with them and their parents. Similarly, in educational institutions, empirical information about Mexican-American child-rearing attitudes and practices can have practical application to teacher-child and teacher-parent interactions. This knowledge can also be applied to interactions with Mexican-American children and their families in health care, social services, and recreational settings.

Purpose of the Study

The purpose of the study is to examine Mexican-American maternal child-rearing attitudes and practices, their relationship to one another, and their relationship to child behavior. Another purpose was to investigate the relationship between demographic variables in the Mexican-American family environment and maternal child-rearing attitudes and practices. Attitudes were measured by maternal responses in an oral interview conducted in the language of the mother's preference i.e., English, Spanish, or a combination of the two. Child-rearing practices and child behavior were measured through observations of mother-child dyads during a structured teaching task. The demographic variables were

mother's age, years of schooling, generations removed from Mexico, and religious peference; father's years of schooling and employment status; the child's gender; and number of male and female children in the family.

Research Questions

This empirical study of Mexican-American maternal child-rearing attitudes and practices, child behavior related to such practices, and the influence of family demographics was designed to determine answers to the five research questions listed below. These questions were formulated to give specific focus to the research activities and ensure that the major goals of the study were met.

1. What patterns of child-rearing attitudes do Mexican-American mothers express about rearing their children?

2. What patterns of child-rearing practices are Mexican-American mothers observed to use during interactions with their children?

3. Are the child-rearing practices of Mexican-American mothers related to their child-rearing attitudes?

4. Is there a relationship between Mexican-American maternal child-rearing practices and child behavior during observed interactions between mother and child?

5. Are there differences in maternal child-rearing attitudes and practices related to demographic variables in Mexican-American family ecosystems, such as mother's age, generations removed from Mexico, and religious preference; mother's and father's years of schooling; father's

employment status; the child's gender, or the number of male and female children in the family?

Theoretical Framework

The conceptual framework for this study is the ecological approach to study of the family (Andrews, Bubolz & Paolucci, 1980) combined with Baumrind's (1968, 1971, 1978) theoretical model of parental disciplinary patterns. At the family level, the mother and child are parts of a whole family system in which they perform different integrative functions so that they contribute differently to the family system. The mother and child also interact in such a way that they constitute an environment for one another through their reciprocal interactions. The child-rearing attitudes and practices of the mother are influenced by the family resources in ways that affect the growth and development of the child as well as the whole family system.

The mother and child also interact with other family members and environments in an exchange of physical energy, messages, signs, and symbols referred to as matter-energy and information. Family members transform matter-energy and information by storing some of the information in the form of attitudes toward rearing children and in using kinetic energy which may be manifested in mother-child interaction. The flow of energy and information between the mother and child serves as an organizing function relating them independently to one another, to the family system, and to external environments. Additional energy is required for transactions with other systems outside the family, e.g., educational, religious, health care, economic, and recreational. Much of the human energy required for those transactions is transformed into

attitudes and practices of child-rearing as well as into the behavior and development of the child. The transactive cycle of child behavior and child-rearing attitudes and practices is illustrated in Figure 1.

Baumrind's (1966, 1971, 1978) theoretical model of parental disciplinary patterns is integrated into the family ecosystem approach for further analysis of attitudes and practices of child-rearing. Permissive, authoritative, and authoritarian are the concepts applied to the disciplinary patterns of the model. The concepts refer to a process which influences parental discipline techniques. The concepts also imply an input by the parent and an output (outcome) in the child. Definitions of concepts follow in the next section.

Conceptual and Operational Definitions

The following concepts are operationalized in this study:

Environment refers to the Mexican-American culture, the family, the home, and the room(s) in which the research interaction takes place.

Family is a unit of interacting and interdependent individuals who have common goals and resources, and a commitment to one another over time.

Interaction refers to behavior in which mothers and their children exchange meanings and have a reciprocal effect upon each other's behavior, expectations, and thoughts.

Interface refers to "a meeting ground of two systems or more systems or subsystems..." (Kantor & Lehr, 1975, pp. 23-24). For example, employment is an interface between a family member and an employer.

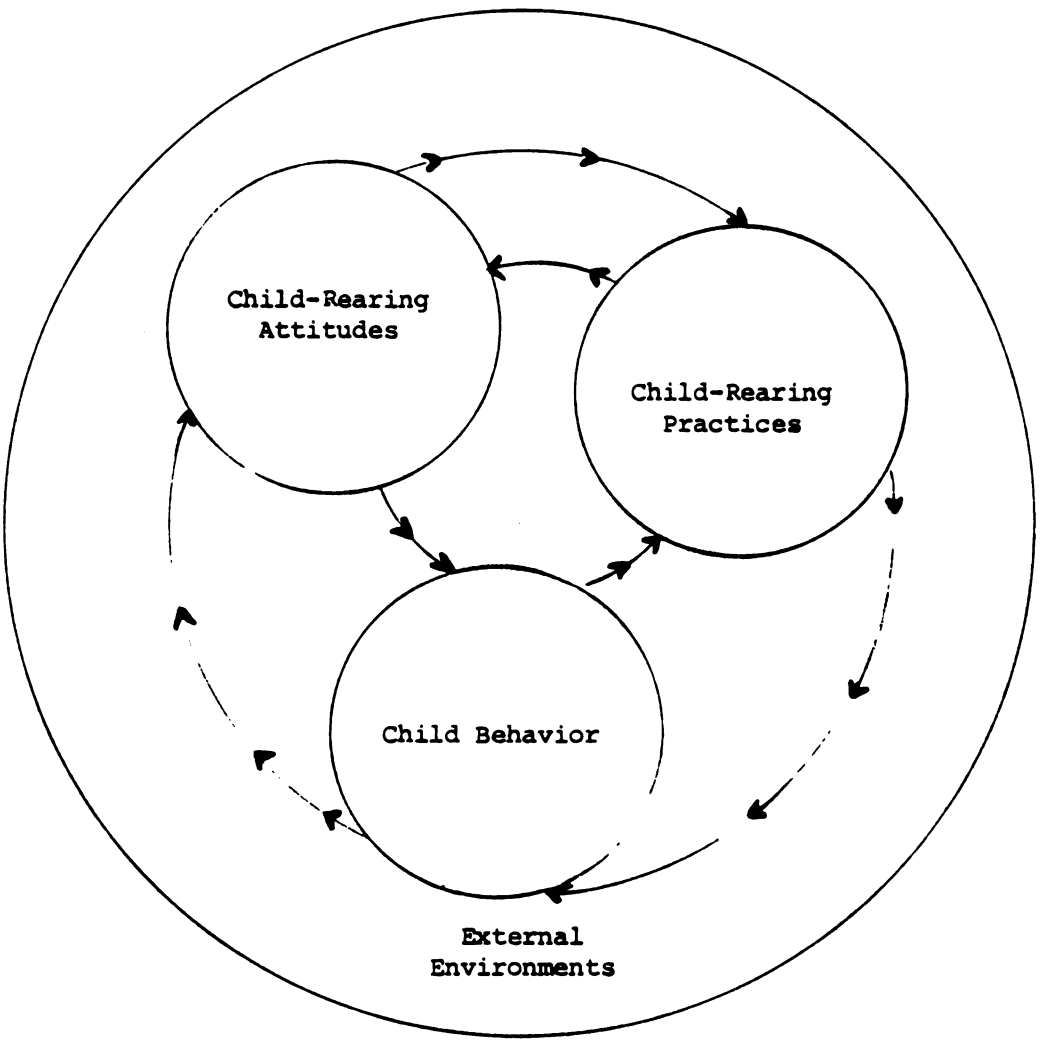


Figure 1.1--Transactive cycle of child-rearing attitudes, child-rearing practices, and child behavior.

System refers to the mother-child dyad. System is defined as a set of interrelated and interacting units or parts in which the action of one unit affects other parts. Systems can be concrete (e.g., a child) or they can be abstract (e.g., attitudes).

Ecosystem (ecological system) consists of the mother-child dyad, their environment(s), their interaction, and transactions.

Family system refers to the family members of the mother-child dyad.

Boundary is defined in this study as the mother-child relationship during the structured teaching task of the study.

Child-rearing refers to the care and guidance of the child by a parent. For purposes of this study, child-rearing is synonymous with parenting, child guidance, and parental disciplinary patterns.

Child-rearing attitudes refer to what a mother thinks she ought to do and what she values in the rearing of her children as well as how she thinks children ought to act (Baumrind, 1971; Ferguson, 1970). This variable is measured by the interview questionnaire contained in Appendix C. Different values of the variable are categorized permissive, authoritative, or authoritarian according to Baumrind's (1966, 1971, 1978) definitions of the three child-rearing patterns.

Child-rearing practices refer to maternal behavior—what the mother actually does during interactions with her child (Ferguson, 1970). This variable is measured by observation with the use of the Maternal Teaching Observation Technique developed by Laosa (1980c). Different values

of the variable are also categorized permissive, authoritative, or authoritarian according to the definitions below.

Patterns of child-rearing are permissive, authoritative, and authoritarian. They are defined according to Baumrind's (1966, 1971, 1978) theoretical model. In the literature, Baumrind has referred to them as patterns of parental control (1966), socialization practices (1967), parental authority (1971), and parental disciplinary patterns (1978). The prototypic characteristics of each child-rearing pattern are defined according to Baumrind (1978) as follows:

> **Permissive** in which the parent attempts
>
> . . . to behave in an affirmative, acceptant, and benign manner towards the child's impulses and actions. The permissive parent sees him- or herself as a resource for the child to use as he wishes, but, not as an active agent responsible for shaping and altering the child's ongoing and future behavior. The immediate aim of the ideologically aware permissive parent is to free the child from restraint as much as is consistent with survival. Some permissive parents are very protective and loving, while others are self-involved and offer freedom as a way of evading responsibility for the child's development (p. 244).
>
> **Authoritative** in which the parent attempts
>
> . . . to direct the child's activities in a rational, issue-oriented manner. He or she encourages verbal give and take, shares with the child the reasoning behind parental policy, and solicits the child's objections when the child refuses to conform. Both autonomous self-will and disciplined conformity are valued by the

authoritative parent. Therefore, this parent exerts firm control when the young child disobeys, but does not hem the child in with restrictions. The authoritative parent enforces the adult perspective, but recognizes the child's individual interests and special ways. Such a parent affirms the child's present qualities, but also sets standards for future conduct, using reason as well as power and shaping by regimen and reinforcement to achieve parental objectives. But this parent does not base his or her decisions on group consensus or the individual child's desires (p. 245).

Authoritarian in which the parent

> . . . values obedience as a virtue and favors punitive, forceful measures to curb self-will at points where the child's actions or beliefs conflict with what the parent thinks is right conduct. The authoritarian parent believes in keeping the child in a subordinate role and in restricting his autonomy, and does not encourage verbal give and take, believing that the child should accept a parent's word for what is right. Authoritarian parents may be very concerned and protective and they may be neglecting (p. 244).

The authoritarian parent also "believes in inculcating such instrumental values as respect for authority, respect for work and respect for the preservation of order and traditional structure" (1971, p. 22).

Child behavior refers to what a child actually did while interacting with his or her mother during the observed teaching task. Eight categories of behaviors are identified by the instrument, Child Behavior During Maternal Teaching Observation Technique (CBDMTOT). The behaviors

(variables) are Positive Verbal Response, Negative Verbal Response, Inquiry of Mother, Physical Response, Imitation of Mother, Task Involvement, Noncompliance, and No Response.

Mexican-American and Chicano or Chicana are used interchangeably in this study. The terms refer to persons of Mexican descent who are United States citizens. These persons may be descendants of Mexican parents or more remote ancestors who immigrated to the U.S. from Mexico, or they may be descendants of Hispanic or Indo-Hispanic forebearers who resided within Spanish or Mexican territory annexed by the U.S. in 1848. Chicano refers to a male member of the group and is also used in reference to the ethnic group. Chicana refers to a female person of the culture group.

Hispanic is comprehensive term which includes U.S. citizens of Mexican, Puerto Rican, Cuban, and other Central and South American descent.

Anglo is also a comprehensive term which refers to all White, English-speaking United States citizens.

Research Hypotheses

From the general research questions for this study and the theoretical framework, the following hypotheses are formulated for testing:

H_{01} There will not be a permissive pattern of child-rearing attitudes expressed by Mexican-American mothers.

H_{11} There will be a permissive pattern of child-rearing attitudes expressed by Mexican-American mothers.

This hypothesis is based on the research findings of LeVine and Bartz (1979) that Chicano parents have permissive attitudes toward rearing their children.

H_{02} There will not be an authoritarian pattern of child-rearing practices observed in Mexican-American mothers.

H_{12} There will be an authoritarian pattern of child-rearing practices observed in Mexican-American mothers.

The research findings of Kagan and Ender (1975) suggest that Mexican-American mothers use authoritarian child-rearing practices. These findings are the basis for the hypothesis.

H_{03} There is no relationship between Mexican-American maternal child-rearing attitudes expressed during an interview and their observed child-rearing practices during a teaching task with their young child.

H_{13} There is a relationship between Mexican-American maternal child-rearing attitudes expressed during an interview and their observed child-rearing practices during a teaching task with their young child.

A basis for this hypothesis is Baumrind's (1971) research evidence that parental behavior is predictably related to expressed parental attitudes. The shared variance between these parental attitudes and parental practices observed in her study, however, was small. In the study at hand, a correlation of the expressed attitudes of Mexican-American mothers and actual child-rearing practices provided evidence for answering the third general research question.

H_{04} There is no relationship between the observed child-rearing practices of Mexican-American mothers during a teaching task, and the observed behavior of their children.

H_{14} There is a relationship between the observed child-rearing practices of Mexican-American mothers during a teaching task, and the observed behavior of their children.

The rationale for this hypothesis is based on the research findings of Baumrind (1971, 1973, 1975). Her extensive studies provide evidence for differences in child behavior related to patterns of parental child-rearing practices. Examination of the interface between child behavior and maternal child-rearing practices provided evidence for answering the fourth general research question.

H_{05} There is no relationship between Mexican-American maternal child-rearing attitudes and the demographic family variables,

(a) mother's age,

(b) mother's years of schooling,

(c) mother's generations removed from Mexico,

(d) mother's religious preference,

(e) father's years of schooling,

(f) father's employment status,

(g) subject child's gender,

(h) number of female children in the family,

(i) number of male children in the family.

H_{15} There is a relationship between Mexican-American maternal child-rearing attitudes and the demographic family variables,

(a) mother's age,

(b) mothers years of schooling,

(c) mother's generations removed from Mexico,

(d) mother's religious preference,

(e) father's years of schooling,

(f) father's employment status,

(g) subject child's gender,

(h) number of female children in the family,

(i) number of male children in the family.

The rationale for this and the following hypothesis is derived from the family ecological model (Andrews, Bubolz, & Paolucci, 1980; Bubolz, Eicher, & Sontag, 1979), in which the interaction between family and environment is one of reciprocal influence. Families affect their environments, which in turn affect families.

H_{06} There is no relationship between Mexican-American maternal child-rearing practices and the family demographic variables,

(a) mother's age,

(b) mother's years of schooling,

(c) mother's generations removed from Mexico,

(d) mother's religious preference,

(e) father's years of schooling,

(f) father's employment status,

(g) subject child's gender,

(h) number of female children in the family,

(i) number of male children in the family.

H_{16} There is a relationship between Mexican-American maternal hild-rearing practices and the family demographic variables,

(a) mother's age,

(b) mother's years of schooling,

(c) mother's generations removed from Mexico,

(d) father's religious preference,

(e) father's years of schooling,

(f) father's employment status,

(g) subject child's gender,

(h) number of female children in the family,

(i) number of male children in the family.

Assumptions

The assumptions made in this study are as follows:

1. Through continuous interaction over time, children and their family systems grow, change, and develop within an ecosystem.

2. Mother-child interaction is best studied in natural settings.

3. Teaching and learning occur in the family environment.

4. Maternal attitudes can be measured by using maternal responses to statements posed.

5. Mother-child interactions observed during a teaching task are representative of their interactions during similar teaching-learning interactions.

6. Children at the age of five years are generally able to successfully manipulate Tinkertoys.

Limitations

The potential limitations of the study concern the sample, measures used, and generalizability of the findings. The sample size of 47 may be too small to allow findings to be generalized, with confidence, to a population of Midwest urban-dwelling, working-class Mexican-American families that the sample is intended to represent. The sample may not be representative of the population due to the purposive and snowball sampling deemed necessary to meet research objectives. The nature of the structured observation limits the findings to child-rearing practices involving similar teaching tasks. General statements about the overall effects of child-rearing patterns cannot be derived from this study.

The fact that there was only one observer posed certain questions of observer reliability as well as the validity of the data collected. Despite efforts made to control for observer reliability, one observer of two subjects engaged in simultaneous interaction poses threats to the internal validity of the observation data.

Only maternal child-rearing was investigated. Findings apply, therefore, only to mothers and not to parenting in Mexican-American families in general. Similarly, only Mexican-American mothers residing in an urban setting in the Midwest were included as subjects. Results of the study, therefore, are only generalizable to similar populations.

Overview Statement

This research is reported in the following four chapters. In Chapter II is a review of the literature on child-rearing in Mexican-American/Chicano families and on demographic family variables pertinent to this study. The design of the study and procedures used are explained in Chapter III. Chapter IV is a presentation of the findings from the data analyses of the study. In Chapter V, the study is summarized, conclusions are drawn, findings are discussed, and implications for future research and practical application are presented.

CHAPTER II

LITERATURE REVIEW

The literature pertinent to this study is reviewed under two headings, Child-Rearing and Demographics. Empirical or verifiable studies on Mexican-American child-rearing are reviewed according to their findings of authoritarian/traditional, permissive, or a range of child-rearing findings. Literature surveys on child-rearing in Mexican- American families follow. Next, the literature on family demographic variables pertinent to this study is reviewed; and a summary concludes the chapter.

Child-Rearing

Over the years, researchers have learned not to generalize their findings for some Mexican-Americans as characteristic of all Mexican-Americans. In the studies reviewed, distinctions were made between Mexican-Americans of different socioeconomic levels and those in rural or urban areas of residence. Mexican-American subjects of these studies, however, have primarily been urban-dwelling and of low socioeconomic status (SES). Research findings as to the child-rearing attitudes and practices of these subjects vary widely, so they are divided for review into studies in which researchers reported authoritarian or traditional child-rearing, those in which permissiveness was reported, and the broad range of findngs in one study.

Authoritarian/Traditional Child-Rearing Findings

Kearns (1970) studied 50 Anglo, 50 Mexican-American, and 50 Papago Indian mothers of first-grade children in the urban area of Tucson, Arizona. Due to the perceived need for developing rapport, personal interviews were conducted in the homes of the subjects in their preferred language by interviewers of matched ethnicity. Interviews ranged from twenty-five minutes to two and one-half hours. Interviewers recorded subjects' responses in shorthand and transcribed them after the interview for rating. The research instrument was a self-report measure of maternal child-rearing based on a structured oral interview, an adaptation of the child-rearing rating scales for mother interviews developed by Sears, Maccoby, and Levin for their classic study, Patterns of Child Rearing (1957).

Significant differences were found among the groups on the dimensions of strictness, restrictions on children, and permissiveness for aggression toward other children. Since socioeconomic status (SES) was controlled by including only lower SES subjects, Kearns concluded that significant differences among the Papago, Mexican-American, and Anglo child-rearing practices were cultural. Mexican-American and Papago patterns of child-rearing appeared to be governed to a large extent by traditional values and practices. Bonds with tradition appeared to be weaker among the Anglo mothers. Although Kearns generalized her findings to patterns of child-rearing practices, it appears that the results of the study also apply to child-rearing attitudes, since her self-report interview schedule measured maternal child-rearing attitudes as well as practices (Sears et al., 1957).

Kagan and Ender (1975) investigated the preferred reinforcement patterns of 16 urban Anglo-American, 16 urban Mexican-American, and 16 rural Mexican mothers. American mothers were selected at random at a boating and picnicking park in Riverside, California, and ranged from upper middle to lower class economically, as determined by family income. Rural Mexican mothers were also chosen at random from the town of San Vicente, Mexico, where most families live slightly above subsistence level. In both rural Mexico and the urban U.S. city, subject participation was obtained by requesting that a mother-child pair spend time interacting in a gamelike situation at a table, while the experimenter tallied mother responses. Prior to the experiment, family demographics were collected on where the family lived, the number and ages of family members, the types of employment in which family members were engaged, and the amount of family income. During the experiment, measures were taken of a mother's responses to the success or failure of her child. The experiment consisted of each mother giving her child chips, taking chips away, or doing nothing when her child succeeded or failed to reach the child's predetermined goal in pressing a tally counter a specific number of times during timed intervals.

Analysis of the findings suggested a tendency for higher-income mothers to discriminate between success and failure more than lower-income mothers. Although neither group of American mothers discriminated between boys and girls in giving chips, they did give significantly more chips on success than on failure trials. Rural Mexican mothers gave almost as many chips following failures as they did following successes. Mexican-American mothers, however, took more chips away from their

children on failure trials. According to Kagan and Ender, the overall differences between mothers tended to be related to both economic and ethnic variables. The behavior of both American groups was similar to one another, except that Mexican-American mothers were generally more punitive than Anglo-American mothers. Regression analysis of the results, however, indicated the more frequent use of punishment by Mexican-American mothers was a function of their lower economic status and not of their culture. The researchers found that economic level, but not culture, was significantly related to the use of punishment. They concluded, however, that parental reinforcement patterns may function to maintain cultural and economic class differences. Thus, Kagan and Ender's findings on punishment suggest that Mexican-American mothers of lower SES have a tendency toward authoritarian child-rearing practices.

Griswold's findings (1976) also suggest that SES cuts across ethnicity in determining child-rearing attitudes. Griswold studied Anglo, Black, and Mexican-American mothers to gain information concerning similarities and differences in child-rearing as a function of ethnicity and SES. Her 114 subjects were from an Arizona metropolis; 52 were Anglo, 32 were Black, and 31 were Mexican-American. SES of the Anglo mothers was 24 upper, 18 middle, and 10 lower class. Among Blacks, there were 11 upper class, 10 middle, and 10 lower class mothers. Of the 31 Mexican-American mothers, 11 were upper class, 10 were middle class, and 10 were lower class. Mothers were identified through their second-grade children of dual-parent families, but the children were not included in the study as subjects. Data were collected with the use of two questionnaires, The

Maternal Information Needs and Attitudes Assessment (MINAA) and the Parent as a Teacher Inventory (PAAT).

Descriptive statistical comparisons of MINAA responses indicated similarities and differences which existed as a function of ethnic background and socioeconomic status of the subjects. MINAA data also provided information on maternal information needs, frustration, satisfaction, information sources, and characteristics valued at home. Differences between the groups showed that Mexican-American and Anglo mothers expressed greater need for child-rearing information. Mexican-Americans also expressed greater concern about their children's school experiences than Anglos and Blacks. Mexican-Americans and Blacks expressed greater satisfaction with their children's successful adjustment in self-concept, relationships with siblings and peers, and relationships within the environment. Mexican-Americans and Blacks also expressed more pride in their children's increasing independence, assumption of responsibility, and obedience. Mexican-Americans were the least likely to consult agencies, services, institutions, and printed matter for help in child-rearing concerns. Mexican-Americans and Blacks reported that they turned to their mothers and other family members for help in child-rearing more often than Anglos. Mexican-Americans and Anglos regarded participation of both parents in child-rearing, assurance and support from both parents, religious and moral faith, and a routine life style as somewhat more important for proper children's adjustment than Black mothers.

Conclusions were made based on the statistical analysis of the PAAT, which measured creativity, frustration, control, play, and the

teaching-learning process. Ethnic background had a significant effect on every variable except frustration; however, the major source of variance was between Anglo and Black mothers. There were no significant differences between Anglo and Mexican-American or between Black and Mexican-American mothers. In addition, SES had a significant effect on all the variables measured. The major source of variance was between upper and lower class; however, variance on control, play, and teaching-learning was also attributed to differences between middle and lower class SES. Significant variance on control was attributed to differences between upper and middle class. Due to the higher proportion of Anglo upper- and middle-class mothers, Griswold was cautious about generalizing her findings. Nevertheless, the results of her study suggest to this researcher that the Mexican-American mothers tended to have traditional child-rearing attitudes.

Permissive Child-Rearing Findings

Some researchers (Durrett, O'Bryant, & Pennebaker, 1975; LeVine & Bartz, 1979) have concluded that Mexican-American parents have permissive attitudes toward rearing their children. Durrett et al., interviewed 29 White, 30 Black, and 31 Mexican-American pairs of mothers and fathers about their child-rearing orientations and techniques. The subjects were all low-income families with five-year-old children enrolled in Head Start. A 91-item Q sort was individually administered to each parent in the home, in their preferred language of either Spanish or English. The Q sort items were arranged by each subject on a continuum of importance according to goals, methods, and perceived reactions to his or her child.

Measures of child-rearing orientations were achievement, authority, protectiveness, stressing of individual responsibility, control of emotions, and the positivity of the parent-child relationship. Measures of child-rearing techniques were consistency or lack of it, use of positive reinforcement, use of guilt, use of aversive control, and physical punishment. The following differences were found among the groups on both the orientation and technique categories:

In the Durrett et al. (1975) study, White and Black "parents reported being more authoritative (e.g., stressing respect for adults) than did Mexican-American parents." (p. 871) The example that stressing respect for adults suggests authoritativeness is in disagreement with Baumrind's definition that the authoritarian, not the authoritative, mother "believes in inculcating such instrumental values as respect for authority." (1971, p. 22)

Durrett and her associates (1975) also found that fathers of Black and White children were more achievement and success oriented than their Mexican-American counterparts. Mexican-American parents scored lowest on the category emphasizing individual responsibility and were significantly more protective. Mexican-American parents stressed somewhat greater control of emotions than the other parents and were most consistent in their methods of reward and punishment. Use of reward when the child displays good behavior was a favored method of Black parents, but Black fathers also reported more use of strict arbitrary rules. Mexican-American and White mothers reported using significantly more guilt in

child-rearing than did Black mothers. The groups did not differ significantly on the positivity of their parent-child relationships.

Durrett and her associates (1975) concluded that data on self-reported techniques of socializing children were similar among the groups, but the parents' desired ends differed. The researchers offered no explanation of parental desired ends. The conclusion suggests that low-income Mexican-American, White, and Black parents expressed different child-rearing "orientations" but they have similar child-rearing "techniques". If the statistically significant findings are categorized according to Baumrind's (1971) definitions of permissive, authoritative, and authoritarian patterns of parental authority, the data suggest that the Mexican-American parents' child-rearing practices tend to be authoritarian while their child-rearing attitudes are permissive.

Bartz and LeVine (1978) and LeVine and Bartz (1979) also compared the child-rearing attitudes of 152 Chicano mothers and fathers with those of 143 Anglo and 169 Black parents to identify unique ethnic child-rearing patterns. Using data from the same study, they focus on Black parents in their 1978 article, while their 1979 article centers on Chicano parents. Their study was a component of the multidisciplinary project of the Family Study Center of the University of Missouri to investigate various dimensions of ethnic family life. The data were collected in 1973-74 according to a communication with one of the project directors, Ronald E. Cromwell (July 1984).

The research subjects, who resided in a low socioeconomic urban community in Kansas City, Missouri, were randomly selected from public and parochial elementary school rosters. A survey questionnaire was

administered in their homes in English or Spanish by interviewers of matched gender and ethnicity. In instances when both parents in a family participated, they were interviewed simultaneously but in different rooms of their home. The questionnaire items consisted of 25 statements selected from adaptations of the Parent Attitude Research Scale (PARS) and Cornell Parent Behavior Inventory (Cornell), which LeVine and Bartz report that Cromwell adapted for use with lower-class parents. The 17 statements selected from the PARS measured 5 factors labeled as Acceleration of Autonomy, Casual Use of Time, Equalitarianism, Value Strictness, and Devalue Permissiveness. The 8 Cornell items selected from the Cornell Inventory were labeled Lack of Support and Lack of Control and were restated to measure parental perceptions of child-rearing. LeVine and Bartz's resulting research instrument of 25 items was the interview schedule used by this researcher in the present study and is discussed in Chapter III.

Comparisons by ethnicity on the seven factors indicated parents did not differ in their child-rearing, but in the degree of their emphases on particular attitudes or desired behaviors (Bartz & LeVine, 1978). LeVine and Bartz (1979) found that the child-rearing attitudes of Chicano parents differed from those of Anglos and/or Blacks on six of the seven factors measured: (1) Chicanos and Blacks, more than Anglos, pressed for early assumption of responsibility. This finding is in contrast to the Durret et al., (1975) findings on the same measure. (2) Blacks, more than Chicanos and Anglos, pressed for wise time use. (3) Chicanos were least likely of the groups to stress equalitarianism. (4) Chicanos were more likely to value permissiveness than Anglos. (5)

Chicanos and Anglos reported that they offer less support than Blacks. (6)Chicano and Anglo parents also reported that they are less controlling than Black parents. (7) No significant differences were found between the three groups on the strictness factor. The researchers indicated that this lack of significance suggest all three groups value strictness in child-rearing (LeVine & Bartz, 1979, p. 171), but conclude that "Hispanic child-rearing is quite permissive" (1979, p. 175) in the low socioeconomic class.

To further delineate the relationship of ethnicity to parental responses on each factor, analysis of covariance was performed with educational level as the covariant. Education was nonsignificant as a control variable for all factors except one. "The higher the level of education, especially in Chicano families, the greater the belief in equalitarianism" (Bartz & LeVine, 1978, p. 714). No explanation was made of what the levels of education were for the sample. Nevertheless, LeVine and Bartz (1979) concluded that Chicanos, as a group, were more permissive and less equalitarian than Anglo and Black parents in their child-rearing attitudes as well as practices. While a self-report instrument, such as the interview instrument employed by LeVine and Bartz, is appropriate as a measure of attitudes, it is not considered an appropriate measure of actual child-rearing practices (Baumrind, 1971). Cross-ethnic differences in attitudes, however, were more attributable to Chicano fathers than to mothers. F ratios on the seven factors measured suggested to the researchers that Chicano fathers and mothers stressed acceleration of autonomy more than Anglo mothers. Chicano fathers, and not mothers, tended to devalue equalitarianism, support,

and control. The conclusions, devalue equalitarianism and devalue control appear contradictory. If equalitarianism is devalued, the implication is a lack of equality between parent and child, in which case control on the part of the parent would be expected.

The researchers further concluded that since Chicanos were less equalitarian than Anglos and Blacks, their findings were consistent with descriptions of the relatively authoritarian Hispanic family. In summary, the conclusions by LeVine and Bartz on Chicano child-rearing provide conficting information, some of which may be attributed to the labels they assigned to the categorical variables of their research instrument, which was employed in the present study. The instrument and conclusions of the LeVine and Bartz study are discussed further in Chapter V.

A Range of Child-Rearing Findings

In their study of Mexican-American perceptions of parent and teacher socialization roles, Parra and Henderson (1982) interviewed 95 Chicano parents of lower and middle socioeconomic levels. The 70 subjects classified as middle-class were attending a community college and were employed in skilled or higher occupations. The 25 lower-class subjects were receiving welfare and/or public housing benefits. The interview instrument consisting of 22 items calls for open-ended responses and was administered in each subject's preferred language of either Spanish or English. It was developed by the researchers to elicit information on parents' child management practices, sex-role perceptions relating to children, age-related behavioral expectations, activities and

qualities valued in children, learning outcomes and focus of responsibility, and aspirations and expectations for their children.

Parra and Henderson found some differences between the reports of middle- and lower-class Mexican-American parents. For example, there was a significant difference in the language preference of the two groups. While 83 percent of the interviews with middle-class parents were conducted in English, 80 percent were conducted in Spanish with lower-status parents. Middle-class parents also shifted from one language to the other (code switching) more frequently than lower-class subjects.

Findings on child management indicated that most parents in both groups had a number of different means of controlling and guiding the behavior of their children including induction, positive reinforcement, and punishment. The use of explanation as a means of managing child behavior was suggested by 68 percent of the parents, and there was no difference by SES of subjects. The majority of parents in both groups reported the use of positive reinforcement, and about one-half of each group also reported practices which were classified as negative reinforcement. There was a difference, however, between the two groups in reports of verbal punishment with middle-class parents reporting significantly less use of verbal punishment. Overall, fewer parents reported the use of physical punishment as a control procedure than any other category. When compared with practices using positive reinforcement, lower-status parents reported using both verbal and physical punishment to a significantly greater degree than the middle-class parents. Studying these self-report research findings from the perspective of Baumrind's (1975, 1978) patterns of parental authority, the practices of

lower- and middle-class Mexican-American parents in this study can be considered as ranging from authoritative to authoritarian patterns. Parra's and Henderson's suggested need for both observational and self-report research to determine the range of Mexican-American child management practices is addressed in the study at hand.

Findings on the other areas of investigation by Parra and Henderson (1982) revealed no statistically significant differences between lower- and middle-class subjects with the exception of learning outcomes and focus of responsibility. Despite their awareness of changes in society toward less differentiation in sex roles, a majority of the parents reported they held different expectations for boys and girls. Parents also reported that age of a child has a determining influence on how parents should respond. There was a balance between social and recreational skills and academic ability in the activities and qualities valued in children. A significant difference was found, however, between the two social classes in their responses relating to learning outcomes and focus of responsibility for socialization activities of the home and school. Most of the parents, 98 percent, perceived the main socialization task of the home as fostering socioemotional development. The school was perceived as having responsibility for fostering intellectual development and academic achievement. Parental expectations for the education and future occupation of children were not as high as the aspirations held for them. Of the 74 percent lower-class and 83 percent middle-class parents who had aspirations for their children to attend college, 67 percent of lower- and 44 percent of middle-status parents expected that their children would actually complete college. Parra and

Henderson found further evidence that these Mexican-American parents perceived that teachers fail to take children's cultural background into consideration.

Literature Surveys

From his descriptive literature survey, Staton (1972) determined that Mexican-American parents emphasize that their children learn submission and obedience to the authority of their father. The mother, consequently, becomes the family affectional focus for the children. While in early childhood, the father would play with the children, attend to their needs, and demonstrate affection for them, he maintained his authority, and demanded respect from his children. As they approached puberty, the father increased his distance from them in order to maintain his authority.

Staton determined that Mexican-American mothers and daughters tended to be close as a result of their male-dominated world and the daughters' training for their adult female role. The mother-son relationship was also described as close with the mother serving as a permissive and affectional figure for the son.

More recent descriptions characterize child-rearing in Mexican-American families as warm, nurturing, and affectionate with emphasis on traditional respect for males and the elderly (Mirande & Enriquez, 1979; Delgado, 1980; Mirande, 1980; Vigil, 1980; Alvirez, Bean & Williams, 1982). Delgado supports Staton's findings about the emphasis on children learning submission and obedience to the will of the father. He describes maternal responsibility for child-rearing, but paternal

responsibility for major discipline of the children. Under no circumstances, however, should children talk back to either parent according to Delgado. Mirande and Enriquez further descibe the Chicano family as a supportive unit as exemplified by older siblings working so that younger ones can complete their schooling. The Chicano family is also a basic source of emotional support for children since close bonds are developed with grandparents, aunts and uncles, cousins, family friends, as well as immediate family members (Mirande, 1980). In addition, girls participate early in the child care of younger siblings (Mirande & Enriquez, 1979).

Demographic Variables

Maternal Age

A mother's age has long been considered an influential variable in determining behavior and attitudes of mothers. In interviews and direct observations of 379 mothers, Sears, Maccoby, and Levin (1957) found that younger mothers tend to be somewhat more punitive in their treatment of young children. The younger mothers, aged 24 to 30 years, were quick to punish and more likely to express feelings of hostility toward their children than older mothers, who were 31 to 38 years of age. Younger mothers' greater punitiveness was attributed to age, which had a greater bearing on the mothers' use of physical punishment and ridicule than her social or educational background.

More recent studies have generated inconsistent data on maternal age and behavior. The results of two studies (Field, Widmayer, Stringer, & Ignatoff, 1980; Osofsky & Osofsky, 1970) suggest that younger mothers tend to have less positive maternal attitudes or behavior. Other

researchers (Conger, McCarty, Yang, Lahey, & Burgess, 1984) have found that with increasing age, mothers may develop priorities over child-rearing. In the Conger et al., study of three independent samples (n = 33, 38, 36), the data indicated that chronological age was inversely correlated with positive behaviors of mothers. The emotional tone of maternal interactions became less positive and more negative as age in years increased. These findings were significant for the sample of White mothers, but marginal for the samples with 72 percent Black mothers. The researchers, therefore, concluded that ethnic differences in the different effects of chronological maternal age may have been based on greater opportunities outside the family for White mothers in the study than for the Black mothers.

In addition to the effects of chronological maternal age, the influence of a mother's age at the birth of her first child was also examined by Conger, McCarty, Yang, Lahey, and Burgess (1984). Their assessment of maternal age in terms of first birth, revealed that the older a mother at the time of her first child's birth, the more positive (i.e., praise and physical affection) and the less negative (i.e., criticism and physical punishment) her maternal behaviors. Age at first birth was also negatively related to level of stressful life circumstances, which led to the conclusion that an early first birth may have long-term negative consequences for maternal social, psychological, and material well-being.

Maternal Educational Level

Maternal behavior has been found to vary according to socio-economic and educational levels (Laosa, 1977, 1978, 1980a, 1980b, 1980c, 1981)). In his studies of the influence of Anglo- and Hispanic culture and education on maternal behavior, Laosa found that the manner of teaching her child varied as a function of a mother's culture and formal educational level. The differences were attributed to the average level of formal education attained by the mothers in the two cultural populations. Differences between the cultural groups disappeared, however, when the mothers' or fathers' schooling levels were controlled. The higher the level of formal education, the more inquiry and praise were used as a maternal teaching strategy. The lower the mother's level of education, the more a mother used modeling as her teaching strategy.

The educational level attained by the Chicanas observed ranged from one year of schooling to two years of college. Two patterns of maternal teaching strategies were identified in the Chicanas. Mothers who had completed at least an eleventh-grade education taught with a combination of praise, visual cues, and inquiry and less frequently with directives and modeling. Chicanas with less than an eleventh-grade education, on the other hand, taught by modeling, using visual cues, and issuing directives (1981). Laosa also found an inverse relationship between Chicano mothers' educational levels and their teaching strategies involving negative physical control with sons (1978).

Formal education completed by Anglo mothers ranged from eleventh grade to eight years post-high school. Laosa (1980a, 1981) found that Anglo mothers used inquiry and praise as teaching strategies more

frequently than Chicano mothers, while Chicanas taught by modeling, using visual cues, issuing directives, and using negative physical control more frequently than Anglos. The most frequently observed teaching strategies among Chicanas were modeling and visual cues, followed in order of decreasing occurrence by directive, praise, inquiry, and negative verbal feedback. Among Anglo mothers, the most frequently observed teaching strategy was praise followed by visual cues, inquiry, directives, modeling, and negative verbal feedback in order of their decreasing frequency. Laosa found these cultural-group differences were related to the average level of educational attainment since the differences in teaching strategies disappeared when maternal educational level was controlled.

The instrument developed by Laosa for use in his studies was also employed in the present study. A copy of the instrument, Maternal Teaching Observation Technique (MTOT), is contained in Appendix D. The instrument and its measures are further discussed in Chapters III and V.

Maternal Generations Removed from Mexico

There is common agreement in the literature that the number of generations removed from Mexico is a salient variable in the process of acculturation. Laosa's findings (1977, 1978, 1980 a, 1980b, 1980c, 1981) suggest that the generation removed from Mexico as well as the level of formal education of Chicanas may influence the teaching strategies which they employ with their children. Similarly, the findings of an empirical study of the role of cultural awareness and ethnic loyalty in acculturation, suggest that generational level is an important predictor

variable in determining the extent of acculturation among Mexican-Americans (Padilla, 1980). The definition of cultural awareness in the study included respondents' cultural heritage as well as that of spouse and parents, language preference and use, cultural identification and preference, and social behavior orientation. Ethnic loyalty consisted of cultural pride and affiliation, perceived discrimination, and social behavior orientation. Padilla (1980) reported that the 584-item survey questionnaire of 68 men and 313 women indicated that there were individuals who had not completely acculturated and who possessed a marked degree of cultural awareness and/or loyalty to the Mexican culture even to the fourth generation. As might be expected, less acculturated respondents had lower educational levels while higher educated respondents were more acculturated. Income and ethnic density of neighborhood were also found positively correlated with level of acculturation.

Child's Gender

Differences in the rearing of boys and girls are well documented by Sears, Maccoby, & Levin (1957), who compared ratings of 202 mothers of kindergarten-aged boys and 177 mothers of kindergarten-aged girls on scales of child training in relation to gender of child. Few dimensions of differential treatment were found statistically significant in the areas of feeding and warmth, toilet training, sex training, aggression, tasks and chores, school achievement, and techniques of training. Findings indicated that weening took longer and mothers were warmer with infant girls. There were no significant differences in the way boys and

girls were toilet trained, but there was a tendency for more severe training of boys and for it to be completed later than with girls. Boys and girls were treated similarly with respect to sex training at kindergarten age. The greatest gender distinctions were made by parents regarding aggression. Boys were allowed to be more aggressive with neighborhood children but not with siblings. Boys were also more frequently encouraged to fight back than were girls. Similarly, aggression toward parents was not allowed of girls, but boys were given high freedom of expression. There were no differences in the amount of tasks and chores assigned to boys and girls, but there was evidence of sex-typing in the nature of chores assigned. In the area of school achievement, mothers expected their sons to go to college and their daughters to complete high school. Differential treatment was evident in techniques of training and discipline. Among relatively non-aggressive children, there were more girls who practically never received physical punishment while among aggressive children, girls were spanked as often as boys. Girls received more praise and were more often subjected to love withdrawal than boys. Girls were primarily disciplined by their mothers, and boys received more discipline from their fathers when both parents were in the home. Sears and his associates (1957) state that there were few dimensions on which boys and girls were differently treated; however, this study took place nearly 30 years ago. Their conclusions about the findings of their study may conceivably be that there were considerable differences in child-rearing according to a child's gender.

Summary

In summary, research on Mexican-American child-rearing is limited and the findings are inconsistent. Results and descriptions have been supported by some researchers but contradicted by others. There is evidence suggesting that Mexican-American child-rearing attitudes range from permissive to authoritarian. There is no documentation, however, of actual observation data on Mexican-American child-rearing practices since parents were not observed in interaction with their children in the studies reviewed. Nor is there evidence of the effects of varying maternal attitudes and practices on child behavior in previous studies. A predominant criterion for selecting subjects was that parents have a child between the ages of five and seven years; consequently, child-rearing attitudes were studied vis-a-vis a young child.

The reader will note in the next chapter that strengths of previous studies are incorporated in its methodology. Child-rearing is observed in the home environment where subjects were interviewed in their preferred language by a researcher of matched ethnicity. This is salient to minimizing cultural and language barriers since the meaning of relevant behaviors and implicit group norms is likely to be readily understood (Laosa, 1981; Bernal, North, Rosen, Delfini, & Schultz, 1979). Suggestions in the literature that demographic variables are determinants of differences in child-rearing are tested. Child-rearing is studied relative to kindergarten-aged children thereby providing continuity with earlier studies. An attempt was also made to improve upon earlier research by investigating both maternal child-rearing attitudes and practices separately and relative to one another. Children were included

as subjects in the study and the effects of child-rearing practices on their behavior were examined.

CHAPTER III

METHODOLOGY

This chapter has two primary sections, design and procedures. In the design section, the research methods used to investigate the research problem are described. In the procedures section, the activities used to implement the design and conduct the study are discussed.

Design

Design Over Time

The purpose of this descriptive, cross-sectional study was to describe Mexican-American maternal child-rearing attitudes and practices, the relationships, if any, between them and any relationships between child behavior and child-rearing practices. In addition, the relationships, if any, between attitudes and practices of child-rearing and family demographic variables were investigated. The subjects were 47 mothers paired with their kindergarten-aged children. The study took the form of a combined ex post facto (field) and attitudinal survey design (Kerlinger, 1974). The ex post facto portion was based upon structured observations of mother-child dyads in their natural home environment. Maternal child-rearing attitudes were surveyed in interviews with the mothers following the structured

observations. The ex post facto outcome measures were child-rearing practices and child behaviors based on simultaneous observation of the mother-child dyad engaged in a structured teaching task. A survey technique was used to determine the mothers' child-rearing attitudes.

Population

The population studied was Mexican-American mothers and their kindergarten-aged children living in Lansing, Michigan. The Two Factor Index of Social Position (Hollingshead, 1957) was used to determine socioeconomic status (SES) of the sample, which was predominantly lower SES. A lower SES Chicano population was selected because it is most representative of this ethnic group in the Lansing area as well as in the U.S. as a whole (U.S. Census, 1980). The study was limited to mothers and their kindergarten-aged children for comparability with earlier studies in which the child-rearing of Mexican-American parents, primarily mothers, of children in this age group was examined. Researchers have also successfully used this age group to examine parent and child teaching-learning interaction (Brophy, 1970; Hess & Shipman, 1972; Laosa, 1980a, b, c). Furthermore, the instrument, The Maternal Teaching Observation Technique (MTOT), developed in both English and Spanish, was previously found to be successful in eliciting and maintaining the attention of five-year-old Chicano children and their mothers (Laosa, 1978; 1980a, b, c).

Sample Strategy and Characteristics

The sample consisted of 47 Mexican-American mothers who volunteered to participate in the study with their kindergarten-aged children. A nonprobability, purposive sample was selected because of the impossibility of random sampling. Snowball sampling was also used. Names, telephone numbers, and addresses of potential subjects were obtained from organizations with Chicano members, as well as from various Mexican-American community leaders.

Potential subjects were contacted by telephone or in person to request their participation in the study. At that time, the mothers were informed of the nature of the study and that the investigator was seeking Chicanas to participate with their kindergarten-aged children. The researcher communicated with the mother in either English, Spanish, or both. Of 66 potential subjects who were contacted, 50 volunteered to participate and 47 actually participated. Of the 47 mother-child dyads, 4 (8.5 percent) spoke only Spanish, 7 (14.9 percent) spoke only English, and 36 (76.6 percent) spoke both English and Spanish to each other and to the researcher. Eleven percent of the mothers were born in Mexico (first generation), 26 percent were second generation, 40 percent were third generation, and 23 percent were four or more generations removed from Mexico. The families of 57 percent of the subjects lived in predominantly white neighborhoods, 27.6 percent in mixed, 10.6 percent in Mexican-American, and 2 percent in Black neighborhoods. Seventy percent of the families were Catholic; the rest were Protestant. The average number of children per family was 3.4 with ages ranging from infancy to 26 years. The age range of the mothers was

22 to 47 years with a mean age of 30.3, median age of 30 years, and mode of 23 years. The mean age of the 47 children (28 girls and 19 boys) in the study was 5 years, four months. Eighty-one percent of the mothers were married, 9 percent were divorced, 2 percent were separated, and 8 percent were never married of whom 4 percent were cohabitating. Most (62 percent) of the mothers were not employed outside their homes; 1 (2 percent) was a proprietor of a fast food business; 4 (8.5 percent) were clerical workers; 4 (8.5 percent) were semi-skilled workers, and 7 (14.9 percent) were unskilled workers; the remaining 4 (8.5 percent) were students. The mean educational level was tenth grade for mothers and eighth grade for fathers. Their years of formal education ranged from 0 to 14 years for mothers and 0 to 16 years for fathers. The majority of the fathers were semi-skilled (17), and skilled (7) laborers; 2 were unskilled laborers, 1 was a clergyman, and 2 were students. Of the 40 fathers, 11 (27.5 percent) were unemployed.

The Research Instruments

The data measures obtained for this study were (1) family demographics, (2) maternal child-rearing attitudes, (3) maternal child-rearing behaviors, and (4) child behaviors. Family demographics and pertinent information were recorded during an interview with the use of the Background Information Instrument developed by the researcher for use in this study and included as Appendix B. The instrument used to obtain measures of maternal attitudes expressed during an interview was selected for its successful use with

Mexican-American parents of similar social class. The instrument consists of adaptations of the Parental Attitude Research Scale (Cromwell, 1969) and the Cornell Parental Behavior Inventory (Weigert, 1968). It is included as Appendix C with a translated version in Spanish. The Maternal Teaching Observation Technique or MTOT (Laosa, 1980 a & b) was used to measure maternal behaviors. The Child Behavior During the MTOT (CBDMTOT) was developed by the researcher and was used to measure child behaviors during administration of the Maternal Teaching Observation Technique (MTOT). The MTOT and CBDMTOT are included as observation instruments in Appendix D along with the protocol for recording observations.

Interview Instruments

Background Information. Demographics and other information pertinent to the study were recorded during the initial rapport-building interview of the mother in her home. Demographics include mother's age and marital status; mother's and father's occupation, educational level, and place of birth; child's date of birth and gender; ages and gender of all children in the family; and place of birth of maternal grandparents and great-grandparents. Other pertinent information include ethnic predominance in the family's area of residence, mother's religious preference and whether or not she attends church regularly. The presence of absence of Tinkertoys in the home was recorded for comparison with the Laosa studies (1978, 1980a, 1980b).

The Parental Attitude Research Scale and the Cornell Parental Behavior Inventory (PARS and Cornell). Twenty-five statements constitute the PARS and Cornell attitudes survey. The statements were selected by LeVine and Bartz (1978, 1979) to analyze child-rearing attitudes and behaviors of Black, Anglo, and Chicano mothers and fathers, and they were also used in this study for measuring Mexican-American maternal child-rearing attitudes (see Appendix C). Cromwell (1969) adapted items from both the Parental Attitude Research Instrument by Schaefer and Bell (1958) and the Cornell Parent Behavior Inventory (Weigert, 1968) to use with a lower-class population. LeVine and Bartz selected 17 items from the PARS which were most class sensitive in that they discriminated at least 40 percentage points between lower and middle-income samples in Cromwell's item analysis. They conducted a factor analysis and identified five factors, which they labeled Acceleration of Autonomy, Casual Use of Time, Equalitarianism, Value Strictness, and Devalue Permissiveness. The remaining eight items were selected from the Cornell, which had been restated for parental rather than child responses. Four of the items were labeled Lack of Support and four, Lack of Control. Because of the high reliability of the items on the Cornell in previous research, no additional factor analysis was undertaken by LeVine and Bartz. Scores for each interview statement were generated by assigning numerical values to Likert scales ranging from "strongly agree" to "strongly disagree" on the PARS items and "never" to "very often" on the Cornell items (see Appendix C). LeVine provided a copy of the instrument to the researcher.

In this study, the PARS and Cornell instrument was employed to obtain measures of maternal attitude. Acceleration of Autonomy, Casual Use of Time, Equalitarianism, Value Strictness, Devalue Permissiveness, Lack of Support, and Lack of Control were the variables used for categorizing mothers' attitudes expressed during an interview into permissive, authoritative, or authoritarian child-rearing patterns. Baumrind's theoretical model (1971, 1975, 1978) was applied by this researcher to determine how mothers with permissive, authoritative, or authoritarian child-rearing attitudes would be expected to score on each of the 25 measures comprising the PARS and Cornell. For example, on Acceleration of Autonomy a mother with permissive child-rearing attitudes would be expected to have a low score according to Baumrind's (1978) theoretical definitions; a mother with authoritative child-rearing attitudes would be expected to have a medium-low score; and a mother with authoritarian child-rearing attitudes would be expected to have a high score (Baumrind, 1978, p. 266). Dr. Eileen Earhart, an expert in the areas of child development and parent education, concurred with the researcher's determination of expected scores, thereby, establishing content validity. The expected scores for each measure and child-rearing pattern were then ranked as shown in Table 3.1.

The following procedures were followed in order to determine the pattern of maternal child-rearing attitudes for each subject:

1. Mean scores of the seven a priori classificatory variables of the items on the PARS and Cornell Instrument were computed for each subject.

2. Descriptive statistics for the seven variable categories were computed for the sample (see Table 3.1).

3. The seven categorical mean scores were rank-ordered for each subject manually.

4. Chi-square values for each child-rearing pattern were calculated using the observed ranks and the expected a priori determined ranks for the variables according to the application of Baumrind's (1966, 1971, 1978) theoretical model.

5. The smallest of the three chi-square values indicated the child-rearing pattern for each subject.

Table 3.1—Maternal Child-Rearing Attitudes Scores on Interview

Variable	Mean	Variance
Acceleration of Autonomy	2.574*	.185
Casual Use of Time	2.415**	.330
Equalitarianism	2.915*	.330
Value Strictness	2.702*	.181
Devalue Permissiveness	2.539**	.167
Lack of Support	1.622***	.244
Lack of Control	2.021***	.252

*Scores above 2.5 indicate general agreement.
**Scores above 2.5 indicate general disagreement.
***Scores below 2.0 indicate behavior is often shown.
N = 47

Table 3.2—Expected Scores and Ranks on Child-Rearing Attitude Measures

	Child-Rearing Attitudes					
	Permissive		Authoritative		Authoritarian	
Measure	Score	Rank*	Score	Rank*	Score	Rank*
Acceleration of Autonomy	Low	6	Medium	3.5	High	2
Casual Use of Time	High	2	Medium	3.5	Low	6
Equalitarianism	High	2	High	1	Low	6
Value Strictness	Low	6	Medium	3.5	High	2
Devalue Permissiveness	Low	6	Medium	3.5	High	2
Lack of Support	Medium	4	Low	6.5	Medium	4
Lack of Control	High	2	Low	6.5	Low	6

*Mid-ranks were used in cases of ties.

Observation Instruments

The Maternal Teaching Observation Technique (MTOT).

The MTOT was developed in English and Spanish versions by Laosa (1980a, 1980c) for use with American subjects from both Chicano and Anglo cultural-linguistic populations. Laosa (1980b) determined parallel form consistency between the two forms of the instrument by computing Spearman rank-order correlations, corrected for ties, for Form A and Form B raw frequencies for each ethnic sample. Estimates of consistency were significant with a median of .68 for Anglo-Americans and .70 for Chicanos.

For this study, slight modifications were made to the MTOT by expanding the definitions of four of the nine categories measured to include additional verbal and visual behaviors. This was done in the interest of measuring as many observed behaviors as possible. Laosa (1980c) originally included some of these behavioral measures, but deleted them to enhance interobserver reliability and parallel-form consistency. Because there was only one observer in this study, establishing interobserver reliability could not be done. Furthermore, t-tests revealed no statistically significant differences between Forms A and B, indicating that there were no significant differences between the behaviors observed during the administration of each form of the MTOT. Forms A and B were, therefore, combined for further analyses. The MTOT is contained in Appendix D with the modifications delineated.

The MTOT was utilized in this study as a means by which to measure observed maternal behaviors. The nine behavioral measures on the instrument are (1) Inquiry, (2) Directive, (3) Praise, (4) Negative

Verbal Feedback, (5) Modeling, (6) Visual Cue, (7) Physical Affection, (8) Positive Physical Control, and (9) Negative Physical Control. The frequency of observed behaviors was recorded on a protocol on which the measures are abbreviated (1) I, (2) D, (3) P, (4) -VF, (5) M, (6) VC, (7, PA, (8) +PC, and (9) -PC, respectively (see Appendix D). For the purposes of this study, Baumrind's (1966, 1971, 1978) theoretical model was then employed to rank the measures according to their expected frequency of occurrence in permissive, authoritative, and authoritarian patterns of child-rearing practices. For example, the expected order of the behavior measures for a mother with a pattern of permissive child-rearing practices would be: (1) Praise, (2) Inquiry, (3) Physical Affection, (4) Visual Cue, (5) Modeling, (6) Positive Physical Control, (7) Negative Verbal Feedback, (8) Directive, (9) Negative Physical Control. Table 3.2 indicates the rank order of the measures that was expected for each pattern of child-rearing practices. This rank ordering was applied to the data collected for each individual, and a determination was made as to which order most nearly matched.

This rank ordering was applied to the data collected for each mother in order to determine her pattern of child-rearing practices. The following procedures were followed to make each determination:

1. The nine raw frequencies on Form A and Form B of the MTOT were totaled and verified.

2. Proportions for each variable were computed by dividing the raw frequency of each variable by the sum of the respective nine frequencies on the forms.

3. The totals of Forms A and B were combined since there were no significant differences between the paired variables on the two forms.

4. A grand total frequency of the combined forms of the MTOT was used to determine the proportions for each of the new nine combined variables.

5. The final nine frequency proportions for each subject were rank-ordered.

6. The chi-square goodness of fit was computed between the observed variable ranks on the MTOT and the a priori determined ranks of the variables according to the criterion of Baumrind's theoretical model as indicated on Table 3.3.

7. The smallest chi-square for each subject indicated the best fit for each pattern of child-rearing, i.e., permissive, authoritative, and authoritarian.

Table 3.3— Maternal Behavior Measures Ranked According to Child-Rearing Patterns.

MTOT Measures	Child-Rearing Pattern		
	Permissive	Authoritative	Authoritarian
Inquiry	2	1	9
Directive	8	2	1
Praise	1	3	8
Negative Verbal Feedback	7	8	5
Modeling	5	7	2
Visual Cue	4	5	3
Physical Affection	3	4	7
Positive Physical Control	6	6	4
Negative Physical Control	9	9	6

Child Behavior During MTOT (CBDMTOT).

The CBDMTOT was developed by the researcher for measuring the child's behavior during administration of the MTOT. Its objective was to measure child behaviors concurrently with maternal behaviors during the MTOT strucured teaching tasks. When the MTOT was pilot tested with five mother-child dyads to measure child behaviors during the teaching tasks, eight behavioral categories were found. The eight behavioral measures on the instrument are: (1) Positive Verbal Response, (2) Negative Verbal Response, (3) Inquiry of Mother, (4) Physical Response, (5) Imitation of Mother (6) Task Involvement, (7) Noncompliance, and (8) No Response. Frequency counts for each measure were recorded on the protocol used to record maternal behavioral measures (see Appendix D). Abbreviations on the protocol for the eight measures of child behavior are (1) +VR, (2) -VR, (3) Q, (4) PR, (5) IM, (6) T, (7) NC, and (8) NR, respectively. The measures were, then, used to further evaluate patterns of maternal child-rearing practices.

Observer Reliability

To insure efficiency and consistency in data collection, the researcher trained herself to observe mother and child behaviors simultaneously by viewing video tapes of similar parent-child interactions on video tapes obtained from the Michigan State University Institute for Family and Child Study. During this process, the researcher experimented with various forms and methods of coding and recording the observations until the protocol used in the study was developed (see Appendix D). A .98 construct validity of measurement on

the simultaneous use of the MTOT and CBDMTOT was established with the expert assistance of Dr. Lillian A. Phenice, faculty member of the Department of Family and Child Ecology, Michigan State University, who observed and recorded several video taped interactions with the researcher prior to data collection.

Validity

Although the Maternal Teaching Observation Technique was originally developed to measure maternal teaching strategies, in this research it was also considered a valid measure of child-rearing practices during a teaching task. An assumption underlying Laosa's (1980c) development of the MTOT is that a mother's behavior in an observed structured situation is representative of her teaching behavior during everyday situations in which she might teach her child similar tasks. Research evidence for this type of validity was found by Stallings and Porter (1981) as a result of their observations during a large-scale, government-supported study of day care homes. The structured observation was, therefore, considered a valid technique for measuring child-rearing practices during a maternal teaching task, particularly since the observation took place in the familiar home environment.

External validity was established by administering the structured observation prior to conducting the interview survey of child-rearing attitudes. Thus, the potential effects of an interview about child-rearing on maternal behaviors during the structured observation were controlled.

Concurrent validity was established between the CBDMTOT and MTOT. The set of variables developed by the researcher for measuring child behaviors during administration of the MTOT was found to be related significantly (.80) to the set of maternal behavior variables on the MTOT. The observations of the mother-child dyads could, therefore, be measured concurrently; and scores on one instrument can be expected to predict scores on the other instrument. The concurrent validity of the two observation instruments could not be answered since the researcher was the sole observer for both mother and child.

Design Over Variables

In this section, the inter-relationships of the research design variables are discussed. The major interdependent variables in the study were (1) maternal child-rearing attitudes, (2) maternal child-rearing practices, (3) child behavior relative to maternal child-rearing practices, and (4) demographics relative to maternal child-rearing attitudes and practices. The demographics include mother's age, mother's and father's years of schooling, mother's generation removed from Mexico, mother's religious preference, father's employment status, child's gender, and number of girls and boys in the family. Three analyses of the interdependencies between data sets were made. In the first, the interdependent variables are child-rearing practices with child-rearing attitudes, which are subdivided into permissive, authoritative, and authoritarian categories. In the second, the interdependent variables are child-rearing practices and child behaviors. The variables are also subdivided into behavioral

categories. In the third analysis, the interdependent variables are child-rearing attitudes and practices with family demographics.

Statistical Model of Analysis

Inferential statistical models were used to test the hypotheses in this study. The inferential analyses included the Z test of significance for a single sample, chi-square, Student's t-test, discriminant analysis, multivariate and univariate analysis, Pearson correlation, and analysis of variance. All hypotheses were tested at the alpha = .05 level of significance. Descriptive statistics were calculated where applicable, and they were used to describe the sample.

The Z Test of Significance for a Single Sample. This test was appropriate for the first two hypotheses since the data were interval in nature. The Z test assumes, conventionally, that a sample size is equal to or greater than 30, that the population is normally distributed, and that the mean and standard deviation are known (Leonard, 1976). To compute the Z statistic for Hypothesis 1 and 2, the following formula was used:

$$Z = \frac{p - a}{\sqrt{pq/N}}$$

where: p = proportion (i.e., n/N)
a = a fixed criteria defining the majority,
0.6 (60 percent) in this case
$q = (1 - p)$

H_0: $p = 0$

H_1: $p \neq 0$

Pearson's Chi-square Test. This test is a measure of statistical sigificance, is a representative statistic for nominal variables, and helps to determine whether or not a systematic relationship exists between variables. In the chi-square test of statistical significance, which is based on the null hypothesis, the chi-square measure assumes there is no relationship between the variables (Babbie, 1979). For purposes of this study, the chi-square tests for goodness of fit and independence were used. These tests assume the sample has been randomly and independently selected; however, they are sufficiently robust to allow violation of the assumption, as was the case in this study. The chi-square goodness of fit test statisic was appropriate where the data consisted of frequency counts. It was appropriate for testing the degree of association between nominal scales since it is sensitive to any systematic departure from independence or total nonpredictability (Freeman, 1965). The test of independence was computed for categorical variables, i.e., permissive, authoritative, and authoritarian child-rearing patterns.

The Student's T-test. T-tests for paired observations and independent samples were computed for differences between sample means. The purpose of pairing was to reduce the effect of subject-to-subject variability. Independent samples refer to subsamples within the single sample of this study. The t statistic assumes a normally distributed random variable where the mean is known and the population variance is estimated from a sample (Nie, et al., 1975).

Discriminant Analysis. This statistical technique is used to distinguish between two or more groups of cases, which have a

collection of discriminating variables that measure characteristics on which the groups are expected to differ. The effects of a collection of interval-level independent variables on a nominal dependent variable are calculated. The two research objectives of this technique are analysis and classification. Although the latter was not used in this study, the analysis aspect provided media for interpreting data. For example, there are statistical tests for measuring how successfully the discriminating variables actually discriminate when combined into discriminant functions by forming linear combinations of the discriminating independent variables. Weighting coefficients identify the variables which discriminate most. Further evidence of group differences can be derived from group centroids, which are the mean discriminant scores for each group. The centroids summarize the group locations in the space defined by the discriminant function. There was one discriminant function, canonical, for this analysis since there were only two groups. The canonical correlation, which is a measure of association between the single discriminant function and the set of variables that define the groups, was used as an aid in judging the importance of the discriminant function in this study (Nie, et al., 1975).

Multivariate Analysis of Variance (MANOVA). MANOVA tests of significance included univariate F-tests for measuring the association between several variables (i.e., dependent child behavior variables and independent maternal child-rearing practices variables). The F value in the univariate F-test is a function of the ratio (SSH)/(SSE), where SSH is the sum of squares due to the hypothesis and SSE is the sum of

squares due to error. The MANOVA procedure of the Statistical Package for the Social Sciences (SPSS) program computes four statistics used for significance tests. They are Roy's largest root, Wilks' lambda, Hotelling's trace, and Pillai's criterion. F statistics are given for each, with the exception of Roy's largest root. Univariate analysis of variance results are given for the effect of the independent variable on the dependent variables (Hull & Nie, 1981).

The Pearson Product-moment Correlation Coefficient (r). The Pearson r is a measure of association that measures the strength of relationship between two continuous variables (i.e., observed maternal and child behaviors). The coefficient has a specfic numerical value for any given set of paired variables equal to the mean of the products of the z-score for the pairs. The strength of relationship refers to the linear correlation between two variables. Assumptions involved in testing for significance are random sampling from the population concerned, bivariate normal distribution, linearity, and interval-level data (Spence et al., 1976).

Analysis of Variance (ANOVA). ANOVA is a statistical technique used to measure group differences. It assesses the effects of categorical independent variables (i.e., child-rearing attitudes or practices) on an interval-level dependent variable (i.e., age). Three assumptions underlie ANOVA: (1) that the populations from which the groups in the study were drawn are normally distributed, (2) that the variance values for the populations are equal, and (3) that the subjects of the study have been randomly and independently drawn from their populations. According to Spence et al. (1976), practical

usefulness of the ANOVA procedure may be nearly as great when one or two of these assumptions are met as when all are satisfied.

Methods Used in the Analyses of Data

The purpose of each analysis, along with the appropriate data and statistics, are summarized in Table 3.4. The computer procedures applicable to the study are described in the Statistical Package for the Social Sciences (Nie, et al., 1975; Hull & Nie, 1981). The Control Data Corporation Cyber 750 computer of the Michigan State University Computer Laboratory was used to perform the statistical analyses.

Research Hypotheses

The testable hypotheses for this study are stated below in the null form. The hypotheses are stated in more detail in Chapter IV.

Hypothesis 1. There will not be a permissive pattern of child-rearing attitudes expressed by Mexican-American mothers.

Hypothesis 2. There will not be an authoritarian pattern of child-rearing practices observed in Mexican-American mothers.

Hypothesis 3. There is no relationship between the child-rearing attitudes and child-rearing practices of Mexican-American mothers.

Hypothesis 4. There is no relationship between the child-rearing practices of Mexican-American mothers and their children's behavior.

Hypothesis 5. There is no relationship between Mexican-American maternal child-rearing attitudes and family demographic variables.

Hypothesis 6. There is no relationship between Mexican-American maternal child-rearing practices and family demographic variables.

Table 3.4—Methods Used for Analyses of Data.

Purpose of Analysis	Type of Data Used	Statistics
Test Hypothesis 1	Interviews	X^2 goodness of fit test, Z test for a single sample
Test Hypothesis 2	Observations	Paired t-test, X^2 goodness of fit test, Z test for a single sample
Test Hypothesis 3	Interviews & Observations	X^2 test of independence, Discriminant analysis, t-test for independent samples
Test Hypothesis 4	Observations	Paired t-test, Pearson r, MANOVA
Test Hypothesis 5	Demographics	X^2 test of independence, ANOVA
Test Hypothesis 6	Demographics	X^2 test of independence, ANOVA

Procedures

A roster of potential subjects was compiled from various sources, such as the Cristo Rey Catholic Church, Cristo Rey Community Center, and several Chicano community leaders. Telephone or face-to-face contacts were made with the potential subjects, informing them about the study and that the researcher was seeking Mexican-American mothers and their kindergarten-aged children as participants. The researcher explained in English, Spanish, or both languages what participation would entail. All but three of the mothers who were contacted, readily volunteered to participate. An appointment time was scheduled, and the mothers were requested to telephone the researcher if the child did not wish to participate. All those mothers who initially volunteered took part in the study with their children.

Data were collected in the homes of the subjects during the winter of 1984. Most home visits took place on weekday mornings or afternoons, but some were scheduled on weekends or early evenings for employed mothers. The visits were approximately one and one-half hours in length. The objective of making home-visits was to take the data measures in the home environment where maternal-child interaction occurs most naturally.

Rapport was established with the dyad upon the researcher's arrival. The mother read and signed the research participation consent form (see Appendix A) which was written in the language for which she had indicated a preference. Some mothers asked the researcher to read the consent form to them, stating they could not read Spanish or that they could not read well. Rapport-building conversation continued

primarily with the mother as family demographics were recorded on the Background Information sheet (see Appendix B).

The mother was then asked to sit at a table with her child where she would teach the child how to make two replicas of Tinkertoy models (administration of MTOT Forms A & B). Some mothers cleared the living room coffee table. Others led the way to the kitchen or dining room table. A few preferred the floor; one family did not have a table. The mother was given a Tinkertoy robot model (Form A, MTOT), which was glued together to prevent it being taken apart. She was asked "to teach" her child "how to make" a toy like the model and to ignore the researcher's presence during the process. In Spanish the phrases used to instuct the mother were, "haga que _____ aprenda" or "hagalo(a) que aprenda." The researcher positioned herself apart from the dyad, but remained close enough that she could readily observe the faces and hands of both mother and child. If other people were present, they were asked not to participate and to be as quiet as possible. Siblings were distracted by the researcher during the visit with other toys included in the see-through, plastic shopping bag which contained supplies for the study. The researcher explained to the dyad that she would time her observation of them for five minutes with a timer, but emphasized that they were not being timed and could continue the task after the timer went off if they wished. Most dyads were so engrossed that they did continue the task if the toy was not completed within the five-minute observation. The researcher manually recorded on a protocol the maternal and child behaviors demonstrated during the observation, according to the categories on the MTOT and CBDMTOT (see Appendix D).

Because most children were eager to begin the next model, the interval between administration of the two forms of the MTOT was generally only long enough to put away Form A. The mother was then given another Tinkertoy model (Form B, MTOT), and the instructions and observation were repeated.

Shortly after the teaching tasks, the adapted PARS and Cornell attitude survey interview was administered to the mother (see Appendix B). Any children present were given a large cylinder of Tinkertoys, or other toys more appropriate for very young children, to entertain them during the interview. Sitting next to the mother, the researcher read to her in the language of her preference, each of the 25 statements on the PARS and Cornell instrument and circled the mother's responses on the Likert scale. In some instances, the mother read along with the researcher and circled her responses herself. Explanations of some statements as well as clarifying examples were given by the researcher when necessary. Some mothers were quite reflective during the interview, recalling incidents with their own children and/or comparing their own child-rearing with the ways they were reared. Following completion of the interview, mothers frequently expressed their enjoyment of the researcher's visit and offered names of other potential subjects for the study.

Ethical Considerations

The required documentation was submitted for review by the University Committee on Research Involving Human Subjects (UCRIHS).

Approval was granted by UCRIHS prior to the selection of subjects for the study.

Various ethical concerns were taken into consideration during the implementation of this study. Of foremost importance was that the adult subjects (mothers) understood their option, as well as that of their children, not to participate in the study. A consent form (Appendix A) was provided to each mother to ensure that she understood the explanation of the study, that there were no inherent risks to either her or her child, and that her participation was entirely voluntary. It was also made clear that the mother had the option of discontinuing her participation, and that of her child, at any time. As previously stated, the procedures of the researcher's home visit, which would last approximately one to one and one-half hours, were discussed in the initial contact. The mother was informed after the observation technique that the researcher was interested in what Mexican-American mothers think is important in the rearing of their children and, thereby, encouraged her to participate in the maternal attitude survey.

The mother was informed during the home visit that any information she provided and observations made by the researcher would be treated as confidential. She was shown that her name would not appear on any of the forms on which the researcher recorded information and assured that names would not be connected to any data used for analysis, the dissertation, or any publication of the information. The subjects were also told that the results of the study would be made available to them upon request.

CHAPTER IV

RESULTS OF DATA ANALYSES

Results of the data analyses are reported in this chapter under the sections: Hypotheses Tests, Statistical Results, and Summary Data.

Hypotheses Tests

In this section, the hypotheses are discussed in the same order as they are listed in Chapters I and III, although each null hypothesis is restated in a more precise form. A report of whether or not statistical significance was found follows each hypothesis.

Hypothesis 1

H_{01} The majority of Mexican-American mothers will not express permissive child-rearing attitudes as measured by the combined adaptations of the Parental Research Scale (PARS) and Cornell Parent Behavior Inventory (Cornell) oral interview.

In order to test the hypothesis, mean scores were first computed for the seven a priori categorical variables (Acceleration of Autonomy, Casual Use of Time, Equalitarianism, Value Strictness, Devalue Permissiveness, Lack of Support, Lack of Control) measured by the 25 items on the combined PARS and Cornell attitude survey. Descriptive statistics were then computed for the seven categorical variables of scores on the PARS and Cornell instrument. Next, the mean scores of the seven categorical variables were rank-ordered for each subject.

Chi-square values for each child-rearing pattern were calculated using the observed ranks and the expected ranks of the seven categorical variables discussed in Chapter III. The smallest of the three chi-square values indicated the child-rearing pattern for each subject. It was found that 7 mothers were permissive, 13 were authoritative, and 27 were authoritarian in their expressed child-rearing attitudes.

The percentage distribution of the three patterns of child-rearing attitudes was computed (see Table 4.1) and yielded a combined proportion for authoritative and authoritarian child-rearing attitudes of 0.85, indicating that most of the Mexican-American mothers did not express permissive child-rearing attitudes. Finally, the Z test for a single sample was used to evaluate the significance of the proportion of those mothers who expressed authoritative and authoritarian child-rearing attitudes. The result, $Z = 4.8$, was significant at the .01 level, indicating statistical significance at or near a majority level of 0.60 (60 percent). The null hypothesis, therefore, failed to be rejected. The majority of Mexican-American mothers in the sample expressed authoritative and authoritarian child-rearing attitudes as measured by the PARS and Cornell interview instrument. The findings of this hypothesis failed to support the research findings of LeVine and Bartz (1979) upon which the hypothesis was based.

Table 4.1—Child-Rearing Attitudes Based on PARS and Cornell Interview.

Child-Rearing Attitude Percentages					
Permissive		Authoritative		Authoritarian	
n	%	n	%	n	%
7	0.15	13	0.28	27	0.57

N = 47

Hypothesis 2

H_{02} The majority of Mexican-American mothers will not be observed to use authoritarian child-rearing practices during administration of the Maternal Teaching Observation Technique (MTOT).

As with the previous hypothesis, several procedures were performed in order to test the hypothesis. First, the nine raw frequencies on Form A and Form B of the MTOT were totaled and verified, and proportions for each variable were computed by dividing the raw frequency of each variable by the sum of the nine frequencies for each form of the MTOT.

The *t* test for paired samples was then used to evaluate the differences between the effects of Forms A and B across their respective nine variables. The means of two paired variables were found to be significantly different. Inquiry occurred with greater frequency during Task A, which was administered first ($t = 2.35$, $df = 46$, $p = .023$). Negative verbal feedback was more frequent during Task B ($t = -2.21$, $df = 46$, $p = .032$). Since the remaining 78 percent variable differences between the paired observations were not significant,

Forms A and B were combined. A grand total frequency for the combined forms was used to determine the proportions for each of the new nine combined variables, and the final nine frequency proportions for each subject were rank-ordered.

Chi-square goodness of fit was computed between the observed variable ranks on the MTOT and the a priori ranks determined by employing Baumrind's (1967, 1971, 1978) theoretical model to rank the measures according to their expected frequency of occurrence in permissive, authoritative, and authoritarian patterns of child-rearing practices. For example, the expected order of the behavior measures for a mother with a permissive pattern of child-rearing practices would be: (1) Praise, (2) Inquiry, (3) Physical Affection, (4) Visual Cue, (5) Modeling, (6) Positive Physical Control, (7) Negative Verbal Feedback, (8) Directive, (9) Negative Physical Control. Table 3.2 indicates the rank order of the measures that was expected for each pattern of child-rearing practices. The smallest chi-square for each particular subject thus indicated the best fit for a particular child-rearing pattern.

A percentage distribution of the three patterns of child-rearing practices was then computed (Table 4.2). The proportion for authoritarian practices was found to be .468, indicating that nearly one-half of the mothers in the sample were observed to use authoritarian child-rearing practices during the structured teaching task. The percentage distribution resulted in a combined proportion of 0.53 for permissive and authoritative child-rearing practices, indicating that slightly over one-half of the Mexican-American mothers did not use authoritarian child-rearing practices. Finally, the Z test of significance for a single sample was used to evaluate the significance of the .53 proportion of mothers who used permissive and authoritative child-rearing practices. The result, Z =

0.96 was not significant at the .05 level, indicating the .53 proportion was not statistically significant below the majority criterion of 0.60. The null hypothesis, therefore, was rejected. This finding that Mexican-American maternal child-rearing practices were almost equally divided into authoritative and authoritarian patterns lends tentative support to the research findings of Kagan and Ender (1975) upon which the hypothesis was based.

Table 4.2—Child-Rearing Practices Based on MTOT Observation by Percentages.

Child-Rearing Practices					
Permissive		Authoritative		Authoritarian	
n	%	n	%	n	%
2	0.04	23	0.49	22	0.47

N = 47

Hypothesis 3

H_{03} **There is no relationship between expressed Mexican-American maternal child-rearing attitudes, as measured by the PARS and Cornell oral interview, and their observed child-rearing practices during administration of the MTOT.**

The patterns of child-rearing attitudes and practices derived from procedures for testing the previous hypotheses were the nominal variables for the chi-square test of independence employed to test this hypothesis. The resulting

chi-square contingency table revealed important descriptive statistics about the attitudes and practices of the mothers studied which are discussed and presented as part of the Summary Data section of this chapter. Due to the relatively small or empty cell frequencies of the permissive practices column on the chi-square table (Table 4.8) which included the total 47 mothers in the sample, the permissive column was eliminated from the contingency table in order to arrive at a more accurate chi-square result. Because the two mothers with permissive practices represented a proportion of the total sample that was not significant, the permissive child-rearing practices category was eliminated from this and subsequent analyses.

The chi-square test result for this hypothesis of $X^2(2\ df) = 3.93$, $p = .14$, was not significant, indicating maternal child-rearing attitudes and practices were independent in this study. Thus, the null hypothesis failed to be rejected. This result was incongruent with Baumrind's (1971) findings that parental attitudes were predictably related to observed parental behavor, although the shared variance was small.

Further analysis of the maternal patterns of child-rearing attitudes and practices by discriminant function, however, revealed results supporting this hypothesis. These contrasting outcomes are attributed to using the scores from the attitudes measure rather than the classification of the scores into permissive, authoritative, and authoritarian categories. The chi-square test was applied to nominal scales of measurement which represent the most basic level of data. Post hoc procedures were used to further examine the data at its original higher interval level due to possible loss of information by reducing measurement levels. Another reason for further data analyis was that the chi-square test is a test of significance and not a measure of association;

consequently, it can be used to determine the acceptability of an hypothesis but cannot be used alone for assessing the degree of relationship between variables (Leonard, 1976).

Discriminant analysis was applied, with the continuous scales of child-rearing attitude scores employed as discriminating variables between the categories of authoritative and authoritarian child-rearing practices (see Table 4.3). The canonical correlation (.569) indicated that the canonical function's ability to discriminate between the two patterns of child-rearing practices was significant, X^2 (7 df) = 15.48, p = .03. Based on function coefficients, the variables measuring attitudes, Acceleration of Autonomy, Lack of Control, Casual Use of Time, and Equalitarianism, were found to best discriminate between authoritative and authoritarian practices.

A multivariate analysis of variance test of the attitude variables with child-rearing practices revealed a significant difference for Acceleration of Autonomy, F (1,43) = 13.24, p = .001, and for Casual Use of Time, F (1,43) = 4.57, p = .038. These findings suggested that information may have been lost by reducing the measurement level of the attitude data. Based on these findings, two of the seven variables on the attitude instrument could be used to discriminate between authoritative and authoritarian patterns of child-rearing practices. Therefore, tests of significance using interval level data provided evidence to reject the null hypothesis that there was no relationship between child-rearing attitudes and practices. Conversely, findings from the chi-square test of the nominal level data provided evidence to retain the null hypothesis. Based on findings on the higher level data tested by more robust statistical tests of significance, the null hypothesis was rejected.

Table 4.3—Canonical Discriminant Function Between Child-Rearing Attitudes as Measured by the PARS and Cornell Attitude Survey Interview and Child-Rearing Practices Measured by the MTOT.

Canonical Correlation = .569

X^2 (7 df) = 15.48, p = .03*

Function Standardized Coefficients	Variables
-.84070	Acceleration of Autonomy
.36436	Casual Use of Time
.35507	Equalitarianism
.13306	Value Strictness
.30648	Devalue Permissiveness
.27976	Lack of Support
.54141	Lack of Control

Group Centroids	Group
.66230	Authoritative
-.69241	Authoritarian

N = 45

*p< .05

Hypothesis 4

There is no relationship between the observed child-rearing practices of Mexican-American mothers, determined by the MTOT, and their children's observed behavior measured by the instrument, Child Behavior During the MTOT (CBDMTOT).

The following procedures were followed to test the hypothesis. First, the eight raw frequencies on Forms A and B of the CBDMTOT were totaled and verified. Proportions for each variable were computed by dividing each raw frequency by its respective grand total of the eight frequencies on each observation form.

A matched pairs t-test was then used to evaluate the differences between Forms A and B of the instrument across the eight matched variables on the forms. One variable, Negative Verbal Response, was found to be statistically significant, $t(46) = -2.01$, $p = .05$. Significance was attributed to a greater frequency of Negative Verbal Feedback by children during the second task. Because of the similarity between them, Forms A and B were combined. Each newly created variable was a ratio of the two paired frequencies to the total frequencies on the forms. Pearson product-moment correlations were calculated for pairs of variables on the MTOT and CBDMTOT (see Table 4.4). Statistically significant positive correlations were found between Praise and Inquiry of Mother, Praise and Task Involvement, Modeling and No Response, Positive Physical Control and Positive Verbal Response, Positive Physical Control and Task Involvement, and Negative Physical Control and Negative Verbal Response. Significant inverse relationships were found between Directive and Task Involvement, Praise and No Response, Visual Cue and No Response, Positive Physical Control and Physical Response, Positive Physical Control and No Response.

Table 4.4--Pearson Correlation Coefficients for Observed Maternal and Child Behavior Variables.

Maternal Variables	Child Variables							
	Positive Verbal Response	Negative Verbal Response	Inquiry of Mother	Physical Response	Imitation of Mother	Task Involvement	Noncompliance	No Response
Inquiry	r=-.0928 p= .267	r=-.0391 p= .397	r=-.2178 p= .071	r= .0737 p= .311	r=-.1298 p= .192	r= .1960 p= .093	r= .0018 p= .495	r= .0790 p= .299
Directive	r= .0890 p= .276	r= .0700 p= .320	r=-.0482 p= .374	r= .1495 p= .158	r= .1421 p= .170	r=-.4103 p= .002**	r= .1095 p= .232	r=-.0995 p= .253
Praise	r=-.0841 p= .287	r=-.1340 p= .185	r= .4076 p= .002**	r=-.1419 p= .171	r=-.0598 p= .345	r= .2769 p= .030*	r=-.1732 p= .122	r=-.3283 p= .012**
Negative Verbal Feedback	r= .0551 p= .357	r= .2005 p= .088	r= .1606 p= .140	r=-.0184 p= .451	r= .0270 p= .429	r=-.1942 p= .095	r= .1128 p= .225	r=-.2186 p= .070
Modeling	r=-.0596 p= .345	r=-.0149 p= .460	r=-.1766 p= .118	r= .0381 p= .400	r= .0743 p= .310	r=-.0725 p= .314	r= .1675 p= .130	r= .5272 p= .001**
Visual Cue	r=-.1336 p= .185	r= .0476 p= .375	r= .2360 p= .055	r= .1356 p= .182	r= .0017 p= .495	r=-.1150 p= .221	r=-.2118 p= .077	r=-.2978 p= .021*
Physical Affection	r= .1544 p= .150	r= .0619 p= .340	r=-.0494 p= .371	r=-.2292 p= .061	r=-.1572 p= .146	r= .2004 p= .088	r= .0386 p= .398	r= .1453 p= .165
Positive Physical Control	r= .2811 p= .028*	r=-.1974 p= .092	r=-.0620 p= .340	r=-.2520 p= .044*	r=-.1098 p= .231	r= .3255 p= .013**	r=-.1220 p= .207	r=-.2939 p= .022*
Negative Physical Control	r=-.0538 p= .360	r= .2733 p= .032*	r=-.1816 p= .111	r= .0839 p= .288	r=.1181 p= .215	r=-.0919 p= .269	r=.0100 p= .473	r=-.0293 p= .423

* Significance level: $p \leq .05$
** Significance level: $p < .01$

Multivariate tests for significant differences between authoritative and authoritarian child-rearing practices on the variables measuring child behavior were then applied (Table 4.5). The multivariate tests of the effects of child-rearing practice variables on child behavior variables as a group revealed no significance ($p = .21$). Univariate analysis of variance results for each of the child behavior variables revealed child-rearing practices effects on only one variable, Imitation of Mother, $F(1,43) = 5.08$, $p = .03$. It was, therefore, concluded that the hypothesis failed to be rejected. Significance in one out of eight variables on the CBDMTOT was not considered sufficient to conclude that there was a relationship between observed maternal and child behaviors. This finding was incongruent with Baumrind's (1971, 1973, 1975) findings that differences in child behavior are related to patterns of parental child-rearing practices.

Table 4.5—Multivariate and Univariate Analyses of Child Behavior with Authoritative and Authoritarian Maternal Child-Rearing Practices.

Child Behaviors	Child-Rearing Practices Authoritative vs. Authoritarian	
	F	P
Behaviors as a Group	1.46	.21
Positive Verbal Response	.77	.39
Negative Verbal Response	.19	.66
Inquiry of Mother	.32	.58
Physical Response	.59	.45
Imitation of Mother	5.08	.03*
Task Involvement	1.56	.22
Noncompliance	1.08	.30
No Response		

*Significance level: $p < .05$

Hypothesis 5

There is no relationship between Mexican-American maternal child-rearing attitudes and the family demographic variables,

H_{05a} mother's age,

H_{05b} mother's years of schooling,

H_{05c} mother's generation removed from Mexico,

H_{05d} mother's religious preference,

H_{05e} father's years of schooling,

H_{05f} father's employment status,

H_{05g} child's gender,

H_{05h} number of girls in the family,

H_{05i} number of boys in the family.

Tests of statistical significance were applied to the dependent demographic variables to test their effects on child-rearing attitudes. The one-way analysis of variance procedure was used to test the interval variables (i.e., mother's age, mother's years of schooling, father's years of schooling, number of male children in the family, and number of female children in the family). The chi-square test was applied to the nominal variables (i.e., subject child's gender, father's employment status, mother's generation removed from Mexico, and mother's religious preference. Only one dependent variable was found statistically significant. The effect of father's employment status on mother's child-rearing attitudes was highly significant, X^2 (2, 39) = 10.487, p = .005. Sub-hypothesis H_{05f} of Hypothesis 5 was, therefore, rejected. The other sub-hypotheses failed to be rejected. Descriptive statistics for the test of each variable by child-rearing attitudes are shown in Table 4.6.

Table 4.6--Inferential Tests of Significance of Demographic Variables by Mothers' Child-Rearing Attitudes and Practices.

Variables	Attitudes				Practices			
	Statistic	D.F.	N	Alpha	Statistic	D.F.	N	Alpha
Mother's Age	F=1.754	2	47	.185	F=1.622	1	45	.210
Mother's Years of Schooling	F=1.652	2	47	.203	F=.000	1	45	.992
Mother's Generations From Mexico	X^2=8.203	6	47	.224	X^2=2.693	3	45	.441
Mother's Religious Preference	X^2=3.410	2	47	.182	X^2=.712	1	45	.399
Father's Years of Schooling	F=1.176	2	47	.318	F=.019	1	45	.891
Father's Employment Status	X^2=10.497	2	39	.005**	X^2=3.63	1	38	.057*
Subject Child's Gender	X^2=2.618	2	47	.270	X^2=.534	1	45	.465
Number ♀ children in family	F=.041	2	47	.960	F=.772	1	45	.384
Number ♂ children in family	F=.058	2	47	.944	F=.318	1	45	.576

*p < .10

**p < .01

Hypothesis 6

There is no relationship between Mexican-American maternal child-rearing practices and the family demographic variables,

H_{06a} mother's age,

H_{06b} mother's years of schooling,

H_{06c} mother's generation removed from Mexico,

H_{06d} mother's religious preference,

H_{06e} father's years of schooling,

H_{06f} father's employment status,

H_{06g} child's gender,

H_{06h} number of girls in the family,

H_{06i} number of boys in the family.

Tests of statistical significance were applied to the dependent demographic variables to test their effects on child-rearing practices. As with tests of the sub-hypotheses for Hypothesis 5, the one-way analysis of variance procedure was used to test the interval variables (i.e., mother's age, mother's years of schooling, father's years of schooling, number of male children in the family, and number of female children in the family). The chi-square test was applied to the nominal variables (i.e., subject child's gender, father's employment status, mother's generation removed from Mexico, and mother's religious preference). Since none of the test results were statistically significant, all sub-hypotheses of Hypothesis 6 failed to be rejected (see Table 4.6).

Statistical Results

Statistical results of the five hypotheses tested in this study are summarized in Table 4.7.

Table 4.7—Statistical Results of Hypotheses Tests.

Focus of Hypothesis	Hypothesis	Statistic	Decision
Maternal Attitudes	1	$Z = 2.88^*$	Retain
Maternal Practices	2	$Z = 6.43^*$	Reject
Attitudes X Practices	3	$X^2 = 3.98$	Reject
Child Behavior X Practices	4	$F = 1.46$	Retain
Mother's Age X Attitudes	5a	$F = 1.76$	Retain
Mother's Age X Practices	6a	$F = 1.62$	Retain
Mother's Years of Schooling X Attitudes	5b	$F = 1.65$	Retain
Mother's Years of Schooling X Practices	6b	$F = 0$	Retain
Mother's Generation X Attitudes	5c	$X^2 = 8.203$	Retain
Mother's Generation X Practices	6c	$X^2 = 2.693$	Retain
Mother's Religious Preference X Attitudes	5d	$X^2 = 3.4$	Retain
Mother's Religious Preference X Practices	6d	$X^2 = .71$	Retain
Father's Years of Schooling X Attitudes	5e	$F = 1.78$	Retain
Father's Years of Schooling X Practices	6e	$F = .019$	Retain
Father's Employment Status X Attitudes	5f	$X^2 = 10.487$	Reject
Father's Employment Status X Practices	6f	$X^2 = 3.63$	Retain
Child's Gender X Attitudes	5g	$X^2 = 2.62$	Retain
Child's Gender X Practices	6g	$X^2 = .53$	Retain
Number of Girls in Family X Attitudes	5h	$F = .041$	Retain
Number of Girls in Family X Practices	6h	$F = .772$	Retain
Number of Boys in Family X Attitudes	5i	$F = .058$	Retain
Number of Boys in Family x Practices	6i	$F = .32$	Retain

Note. Hypotheses rejected or retained at the significance level of $p < .05$

Summary Data

An overall picture of the findings from the data analyses of patterns of child-rearing attitudes and practices is shown in Table 4.8. The table is the variable matrix (Figure 3.1) from the Design Over Variables section of Chapter III with the appropriate summary statistics entered. Major interdependent variables in the study were maternal child-rearing attitudes and maternal child-rearing practices. In table 4.8 a chi-square table is presented in which the permissive, authoritative, and authoritarian child-rearing attitudes are correlated with the patterns of child-rearing practices of the 47 mothers in the sample. In the first row, the empty cell indicates that of the 7 mothers who expressed permissive child-rearing attitudes, none were observed to use permissive child-rearing practices. Five of those mothers had authoritative practices, and the remaining 2 were observed to have authoritarian child-rearing practices. The second row of the table, authoritative attitudes, shows that of the 13 mothers who expressed authoritative attitudes, 8 were consistent in their observed practices, while 4 had authoritarian, and 1 had permissive child-rearing practices. The third row, authoritarian attitudes, indicates that of the 27 mothers with authoritarian child-rearing attitudes, 16 were also observed to be consistently authoritarian in their practices, 10 were authoritative, and 1 was permissive in her child-rearing practices. Row and column percentages reflect proportions of the row and column total. For example, row percentage, 71.4, indicates that 71.4 percent of the 7 mothers who expressed permissive attitudes had authoritative practices. Under column percentages, 72.7 percent of the 22 mothers who were observed to have authoritarian practices also expressed authoritarian child-rearing attitudes.

Table 4.8--Crosstabulation of Mexican-American Maternal Patterns of Child-Rearing Attitudes by Practices.

Attitudes		Practices: Permissive	Authoritative	Authoritarian	Row Total
Permissive	Count	0	5	2	7
	Row %	0	71.4	28.6	
	Column %	0	21.7	9.1	
	Total %	0	10.6	4.3	14.9
Authoritative	Count	1	8	4	13
	Row %	7.7	61.5	30.8	
	Column %	50.0	34.8	18.2	
	Total %	2.1	17.0	8.5	27.7
Authoritarian	Count	1	10	16	27
	Row %	3.7	37.0	58.3	
	Column %	50.0	43.5	72.7	
	Total %	2.1	21.3	34.0	57.4
Column:		2	23	22	47
Total:		4.3	48.9	45.9	100.0

CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION, IMPLICATIONS

In this concluding chapter, the purpose, methodology, and findings are summarized; conclusions are drawn from the results; and interpretations of the findings are discussed. A final section, Implications, includes recommendations for future research and practical application.

Summary of the Study

Much of human development is a consequence of the manner by which parents rear their children. There is evidence of cultural and ethnic differences on various dimensions of child-rearing. Hence, the rationale for studying the child-rearing attitudes and practices of Mexican-Americans, the largest group of Hispanics who are the second largest and rapidly growing ethnic minority population in the United States (Bureau of the Census, 1980). While the contributions of the paternal role to human development are recognized, only the maternal role was examined since the mother continues to be the primary agent in carrying out the expressive role with children in many families (Bigner, 1979).

The purpose of this study was threefold. The interface between Mexican-American maternal child-rearing attitudes and practices was examined. The interface between these practices and child behavior was studied. Finally, Mexican-American maternal child-rearing attitudes and

practices were investigated relative to demographic variables in the family environment.

The subjects were 47 Mexican-American mother-child dyads. The children, who were enrolled in kindergarten had a mean age of 5 years, 4 months. The age range of the mothers was 22 to 47 years with both a mean and median age of 30 years, and a mode of 23 years. The majority of the mothers were married (81 percent). The 38 percent who were employed outside their homes, had occupations ranging from proprietor of a fast-food business to unskilled service workers. Occupations of fathers ranged from clergyman to unskilled laborer. The unemployment rate for the 39 fathers was 30 percent. Years of schooling ranged from 0 to 14 years for mothers and 0 to 16 years for fathers. The mean educational level was tenth grade for mothers and eighth grade for fathers. The average number of children per family was 3.4 with ages ranging from infancy to 26 years. The majority (66 percent) of the families were Catholic; others were Protestant. The families lived in predominantly white (57 percent) and ethnically mixed (28 percent) neighborhoods.

Five questions were considered in the study. The first addressed the attitudes Mexican-American mothers express toward rearing their children. The second question focused on child-rearing practices Mexican-American mothers employ when they interact with their children. The third question concerned how the attitudes expressed compared with practices observed and the fourth concerned the relationship between maternal child-rearing practices and child behavior. The fifth question focused on the attitudes and practices of child-rearing relative to family demographics such as mother's age, generations removed from Mexico,

religious preference; father's years of schooling and employment status; the child's gender; and the number of male and female children in the family.

The study took the form of a combined ex post facto (field) and attitudinal design in which the ex post facto portion was based upon structured observations of 47 mother-child dyads in their homes. Maternal behavior was measured with the Maternal Teaching Observation Technique (MTOT), which was developed by Laosa (1980c) for use with two sociocultural and language groups—Anglo and Chicano. During administration of the MTOT, child behavior was measured with an accompanying instrument developed by the researcher, Child Behavior During the MTOT (CBDMTOT). Mother's attitudes were surveyed in interviews following the structured observations using an instrument designed for use with lower-class populations that was comprised of 25 statements adapted from the Parental Attitude Research Instrument (PARI) by Schaefer and Bell (1958) and the Cornell Parental Behavior Inventory (Cornell) by Weigert (1968).

Inferential statistical models were used to test six hypotheses drawn from the research questions. Inferential statistical procedures included the Z test of significance for a single sample, chi-square, Student's t, discriminant analysis, multivariate and univariate analyses, Pearson correlation, and analysis of variance. Decisions on hypotheses were made at the alpha = .05 level of significance. Descriptive data were calculated where applicable and were used to describe the sample of Mexican-American mothers and their children.

The Z test of significance for a single sample was used to test the first two hypotheses since the data were interval level and the sample size was greater than 30. Results revealed that the majority of Mexican-American mothers expressed authoritarian child-rearing attitudes, but that the majority of mothers were not observed to use authoritarian child-rearing practices. The childrearing practices of Mexican-American mothers in the sample were split between authoritative (49 percent) and authoritarian (47 percent).

Two statistical models of analysis were used to test the relationship between attitudes and practices of child-rearing. The chi-square test of independence was performed on the permissive, authoritative, and authoritarian nominal-level variables for attitudes and on authoritative and authoritarian variables of child-rearing practices. Because the two mothers with permissive practices represented a proportion of the total sample that was not statistically significant, the permissive child-rearing practices category was eliminated from this and further analyses. The chi-square test results were not significant, suggesting that there was no relationship between Mexican-American maternal child-rearing attitudes and practices. Post hoc procedures were used to further examine the data at its original higher interval level due to possible loss of information with the chi-square technique. A more robust test, discriminant analysis, was applied to test the effects of the collection of interval-level variables that measured characteristics on which the sample of mothers were expected to differ. Discriminant analysis results provided evidence that there was a significant relationship between expressed child-rearing attitudes and observed child-rearing

practices, X^2 (7 df) = 15.48, p = .03. Based on function coefficients, the attitude variables of Acceleration of Autonomy, Lack of Control, Casual Use of Time, and Equalitarianism were found to best discriminate between authoritative and authoritarian practices. An accuracy check, the multivariate analysis of variance (MANOVA) test of the attitude variables, revealed significant differences for Acceleration of Autonomy, F (1,43) = 13.24, p = .001, and for Casual Use of Time, F (1,48) = 4.57, p = .038. The significant discriminant analysis and MANOVA test results suggested information was lost by classifying the attitudes data into the permissive, authoritative, and authoritarian categories of the Baumrind theoretical model. Findings on the higher interval level attitude variables provided evidence that there was a relationship between child-rearing attitudes and the theoretically classified practices of Mexican-American mothers; therefore, the null hypothesis was rejected.

Multivariate tests of significance were used to measure the association between independent maternal practices variables and dependent child behavior variables. Findings were not significant, suggesting that child behavior variables, as a group, were not associated differently with authoritative and authoritarian maternal child-rearing practices as measured by the Maternal Teaching Observation Technique and the Child Behavior During the MTOT. Test results of univariate analysis of variance between the two patterns of child-rearing practices and each of the child behavior variables were significantly different on the variable, Imitation of Mother at the .05 level. The hypothesis that there was no relationship between child-rearing practices and child behavior

failed to be rejected, however, since there was lack of significance in the other seven child behavior variables.

The statistical technique, analysis of variance (ANOVA), was used to assess the effects of the interval-level demographic family variables on attitudes and practices of maternal child-rearing. The results were not significant, suggesting that mother's age, mother's and father's years of schooling, and number of male and female children in the family did not have a significant effect on the child-rearing attitudes and practices of the Mexican-American mothers in the sample.

Pearson's chi-square test of independence was applied to the nominal variables of mother's generation removed from Mexico and her religious preference, father's employment status, and the subject child's gender. One test result, the effect of father's employment status on maternal child-rearing attitudes, was highly significant at the .01 level, suggesting effects from paternal unemployment. In families with employed fathers, expressed maternal child-rearing attitudes were 20 percent permissive, 40 percent authoritative, and 40 percent authoritarian. In families with unemployed fathers, mothers' childrearing attitudes were 7 percent authoritative and 93 percent authoritarian.

Conclusions

The following conclusions were deduced from the statistical findings:

1. Mexican-American mothers expressed a broad range of child-rearing attitudes—permissive, authoritative, and authoritarian patterns.

2. Authoritarian child-rearing attitudes were predominant among this sample of Mexican-American mothers residing in an urban area of the Midwest.

3. Mexican-American mothers were also observed to use child-rearing practices ranging from permissive to authoritarian patterns.

4. Mexican-American maternal child-rearing practices were nearly equally divided into authoritative and authoritarian patterns.

5. Some variables of maternal child-rearing attitudes were positively related to observed maternal behavior.

6. The authoritative and authoritarian patterns of child-rearing practices were best discriminated by scores on the attitude variable, Acceleration of Autonomy.

7. Another attitude variable, Casual Use of Time, was also used to discriminate between authoritative and authoritarian maternal child-rearing practices.

8. Only one child behavior variable, Imitation of Mother, was significant as a discriminator between the authoritative and authoritarian patterns of maternal child-rearing practices.

9. Based upon Pearson product-moment correlations for pairs of mother-child behaviors during the teaching task, there were significant linear relationships between the following pairs of variables:

a. The more directives a mother issued, the less a child initiated or became absorbed in the task.

b. The more a mother praised her child, the more the child responded to the mother.

c. The more a mother praised her child, the more the child questioned the mother.

d. The more a mother praised her child, the more the child initiated or became absorbed in the task.

e. The more visual cues a mother gave her child, the more the child responded to the mother.

f. As the mother's positive physical control increased, the child's physical responses decreased.

g. As the mother's positive physical control increased, the child's failure to respond decreased.

h. As the mother's positive physical control increased, the child's positive verbal responses increased.

i. As the mother's positive physical control increased, the child's frequency of initiating or being absorbed in the task increased.

j. As the mother's negative physical control increased, the child's negative verbal responses increased.

10. The significant influence of father's employment status on maternal child-rearing attitudes was attributed to the paternal unemployment rate of 36 percent.

In summary, it is concluded that the majority of Mexican-American mothers in the sample expressed authoritarian child-rearing attitudes but were divided in their observed child-rearing practices between authoritative and authoritarian patterns. While permissive, authoritative,

and authoritarian patterns of child-rearing attitudes and practices were not significantly related, some variables comprising the three patterns of attitudes were significantly related to the predominant authoritative and authoritarian patterns of practices. The variables, Acceleration of Autonomy and Casual Use of Time showed discrimination between authoritative and authoritarian patterns of maternal child-rearing practices. Furthermore, significant linear relationships were found between variables comprising the patterns of practices and variables which measure child behavior, indicating a relationship between mother-child behavior which was not significant between patterns of child-rearing practices and child behavior. Finally, the Mexican-American family ecosystem had only one demographic variable, father's employment status, which significantly influenced maternal child-rearing attitudes or practices. It is concluded that patterns of maternal child-rearing attitudes were influenced by paternal unemployment.

Discussion

This section is organized around the five general research questions stated in Chapter I. Findings of the study are integrated with the theoretical framework described in the first chapter. Conclusions from the findings are also further developed and interpreted.

Research Question 1

What patterns of child-rearing attitudes do Mexican-American mothers express about rearing their children?

The results of the data analyses provided evidence that Mexican-American mothers expressed permissive, authoritative, and authoritarian child-rearing attitudes. These results were inconsistent with the findings of LeVine and Bartz (1979) that Chicano parents have permissive attitudes and practices of child-rearing. The following discussion of the conclusions based on findings for each of the seven inclusive attitude variables used to classify maternal attitudes of child-rearing explains the inconsistency between the findings of LeVine and Bartz and those of this study. The statements comprising each of the seven categorical variables are listed following the appropriate subheading.

Acceleration of Autonomy

1. The sooner a child learns to walk the better off he will be.
2. Most kids should be toilet trained by 15 months of age.
3. A child should be taken away from the bottle or breast as soon as possible.
4. The main goal of a parent is to see that the kids stay out of trouble.
5. Kids should be nicer to their mothers since their mothers suffer so much for them.

LeVine and Bartz interpreted their findings on the variable, Acceleration of Autonomy, as "Chicano parents . . . pressing for an early assumption of responsibility by the child for his or her bodily functions and personal feelings" (p. 173). The description of Acceleration of Autonomy to which LeVine and Bartz assigned the first five statements on the instrument (see Appendix C) primarily assessed knowledge of child development rather than social expectations of

autonomy or assumption of responsibility. For example, a response to a statement that a child should be toilet trained by the age of 15 months requires knowledge of biological maturation. If a mother expects that a child should be toilet trained by the age of 15 months, she may be lacking in child development information rather than trying to accelerate the child's autonomy. Interestingly, mean scores on the variable are equivalent in both studies, but interpretations of the variable in this study differ from those in the LeVine and Bartz study (1979) because the statements included in the variable do not indicate children assuming responsibility.

Casual Use of Time

6. The sooner a child learns that a wasted minute is lost forever, the better off he will be.

7. There is no excuse for a child sitting around doing nothing, because there are so many things he needs to learn about life.

For the variable, Casual Use of Time, LeVine & Bartz (1979) found that Chicanos deemphasize wise time use. Disagreement with the statement, "the sooner a child learns that a wasted minute is lost forever, the better off he will be", was assumed to imply a casual Hispanic orientation toward time. To this researcher, however, the implication was not all that clear. Agreement with the statement may be an implication that one is pressuring a child to think like an adult (Elkind, 1981). The findings in this study suggest that Chicanas were divided between agreement and disagreement with the variable, Casual Use of

Time. Scores above 2.5 indicate disagreement, implying a casual time orientation about their children's time use. The mother's in this study had mean scores of 2.415, which reflect the ambivalence many expressed about responding to the statements. Some commented that the questions were inappropriate for five-year-old children.

Equalitarianism

8. A child has the right to his own ideas and should be encouraged to tell others about them.

9. When kids think family rules are wrong, they should not tell parents about it.

10. When a child is in trouble, he should not talk about it with his folks.

11. Kids should be able to talk with parents if they think their own ideas are better.

12. Parents must earn the respect of their kids by being fair with them at all times.

LeVine and Bartz suggested that disagreement with the Equalitarianism variable was consistent with descriptions of "the relatively authoritarian Hispanic family" (p. 173). The application of theory to analyze this variable is in agreement with the LeVine and Bartz interpretation of this variable. According to Baumrind's (1971, 1978) theoretical definition of an authoritarian parent, disagreement with these statements suggests authoritarian parental beliefs or attitudes.

Value Strictness

13. Kids that have firm rules to obey, grow up to be the best adults.

14. A child will thank you later on for strict training.

This label accurately describes one of the two statements comprising the variable. In the second statement, however, "firm" is evidently equated with strict. The Lack of Control variable is a more accurate measure of strictness than this variable.

Devalue Permissiveness

15. Parents should give in to the kids some, rather than expecting the kids to always obey the parents.

16. Most kids need less discipline and punishment.

17. Kids are not happy under strict training.

Devalue Permissiveness is also an inaccurate descriptor because the words, "discipline, punishment, and strict training" are used in statements measuring permissiveness. Disagreement with such statements can hardly be equated with a permissive atmosphere as LeVine and Bartz did. Two of the mothers interviewed in this study commented on the differences between discipline and punishment. Several other mothers hesitated, scowled, or asked for clarification of Item 16.

Lack of Support

18. If my child has any kind of problem, s/he can count on me to help her/him out.

19. I say nice things about my child.

20. I make him (or her) feel I am there if he (or she) needs me.

21. I teach him (or her) things he (or she) wants to learn.

The range of responses, never to very often, to the four statements comprising the Lack of Support variable clearly indicates parental support or a lack of it. For example, any of the five responses to Item

20 is indicative of a degree of support. There was a contradiction, however, in the LeVine and Bartz finding that there was a lack of support from fathers—but not mothers— and their conclusion that Hispanic children had minimal support from both of their parents.

Lack of Control

22. If my child doesn't do what is expected of him/her, I am very strict about it.

23. I keep pushing him (or her) to do his (or her) best in whatever he does.

24. I expect him (or her) to keep his (or her) things in good order.

25. I keep after him (or her) to do well in school.

In each of the four statements comprising this variable, strictness is either stated or implied, i.e., "I am very strict about it", "I keep pushing", "I expect", "I keep after him or her". Responses ranging from never to very often to such statements are subject to interpretation and are, therefore, provisional measures of lack of control. LeVine and Bartz (1979) found that, "Chicano fathers ... devalue control" (p. 173) and "Chicano parents offer less support and control than do Black parents" (p. 173). Such findings contradict Levine and Bartz' conclusion that Chicanos value strictness in their child-rearing.

Research Question 2

What patterns of child-rearing practices do Mexican-American mothers demonstrate while they interact with their children?

Authoritative and authoritarian patterns were found to be the observed child-rearing practices of Mexican-American mothers in this study, although permissive practices were observed in 2 (4 percent) of the mothers. The process of maternal interactions with children was transformed into a range of permissive, authoritative, and authoritarian child-rearing practices during a structured teaching task. These findings lend support to the Parra and Henderson (1982) findings which suggested that Mexican-Americans had an extensive range of child management procedures, which included explanation, positive reinforcement, and punishment.

Research Question 3

Are the child-rearing practices of Mexican-American mothers related to their child-rearing attitudes?

Systematic application of Baumrind's (1971) theoretical model to measures of attitudes and practices (i.e., behavior) resulted in classifying continuous scores into permissive, authoritative, and authoritarian global measures. Results of the chi-square test of independence between the categories indicated that the relationship between attitudes and practices was independent or not statistically significant. The theoretical framework for this study prompted further inquiry into the lack of association between maternal practices and attitudes. The transactive cycle of attitudes and practices of child-rearing and child behavior presented in Chapter I graphically pictures a cyclical process in which child-rearing attitudes, practices, and child behavior are related to one another and to external environments surrounding them. Thus, the discriminant analysis statistical procedure was used to

further interpret the data. Attitude measures at their original multivariate, continuous scales were used to discriminate between the categorical authoritative and authoritarian patterns of child-rearing practices. The canonical discriminant function for this analysis revealed a significant correlation between observed maternal practices and particular attitude variables of the interview survey. The discriminant function, therefore, indicates that discrimination between authoritative and authoritarian patterns of child-rearing practices is possible from scores on the attitude inverview variables, Acceleration of Autonomy, Lack of Control, Casual Use of Time, and Equalitarianism. These four particular variables discriminated best between authoritative and authoritarian child-rearing practices. Based on this finding, a prediction formula of patterns of child-rearing practices could be developed for testing in future research.

Research Question 4

Is there a relationship between Mexican-American maternal child-rearing practices and child behavior during observed interactions between mother and child?

Measurement of the combined child behavior variables failed to reveal a significant relationship between observed child behavior and the categorized patterns of maternal child-rearing practices. When the particular child behavior variables were analyzed separately, there was a significant relationship between Imitates Mother and child-rearing practices. This finding is inconsistent with evidence for differences in child behavior related to parental disciplinary patterns provided by Baumrind's extensive research (1971, 1973, 1975). Since there was a

significant correlation between the instruments measuring maternal and child behaviors, it may be that reducing the interval level data of maternal behavior to nominal level patterns of behaviors caused a loss of information which resulted in a lack of statistical significance. On the other hand, if measures of behavior sequences between mothers and children were available for analysis, the relationship could potentially be more adequately explained.

The findings were also inconsistent with the ecological view that the flow of energy and information between the mother and child serve as an organizing function relating them to one another. From an ecological point of view, perhaps the lack of a significant relationship between maternal practices and child behavior was that the maternal and child observation instruments did not allow for measuring transactions with other systems during the structured observation which may have influenced the reciprocal flow between mother and child. For instance, ethnographic notes, which were taken by the researcher following each home visit, provided evidence of other family members permeating the established boundary around the mother-child dyad engaged in the teaching task. Although lasting only briefly, such boundary permeations may have been manifested in transactions with other systems in the home environment which were not measured by the observation instruments. It was obvious to the researcher that when the boundary was permeated, the system was influenced in such a manner that mother and child behaviors were transformed, if only temporarily. Examples of boundary permeations were two father's attempts to verbally or visually coach either the mother or child in how to perform the task; older siblings in two

families inadvertently communicated with the mother about their own needs; in one home, younger siblings competed for the mother's attention by climbing on her lap, grabbing a part for the Tinkertoy model, crying, whining, or otherwise demonstrating a desire to be included in the task; friends or relatives visited unexpectedly in two homes; and telephone calls, such as the two which the mother later told the researcher concerned an inquiry about or a report of the grandmother who had been in surgery that day. Undoubtedly, the human energy required for such transactions was transformed into the attitudes and practices of child-rearing and may have also affected child behavior. Such normal everyday family situations suggest that the mother's and child's behaviors during the observed structured situation are representative of mother-child interaction (i.e., teaching-learning behavior) during similar tasks in the home environment. This is discussed further in the following section on implications for further research.

Research Question 5

Are there differences in maternal child-rearing attitudes and practices related to demographic variables in Mexican-American family ecosystems, such as mother's age, generation from Mexico, and religious preference, mother's and father's years of schooling, father's employment status, the child's gender, or the number of male and female children in the family?

The influence of the father's employment status on maternal child-rearing attitudes was found to be the only statistically significant demographic variable affecting the outcome of this study relative to the

family ecosystem. In families with employed fathers, expressed maternal child-rearing attitudes were 40 percent authoritarian, 40 percent authoritative, and 20 percent permissive. In families with unemployed fathers, mothers' attitudes were 7 percent authoritative and 93 percent authoritarian. The significant influence of father's employment status was attributed to the paternal unemployment rate of 36 percent. The systematic relationship was reflected by the dramatic differences in the proportions of patterns of maternal child-rearing attitudes.

The results of the chi-square test of significance showed that a systematic relationship existed between maternal child-rearing attitudes and father's employment status. Cramer's V, a measure of strength of relationship, indicated that a .52 degree of association existed between attitudes and employment status. These findings lend support to the family ecological perspective of the necessity for viewing the interrelatedness and interdependence of family members and those environments which impinge upon the family (Andrews, Bubolz, & Paolucci, 1980).

Implications

The implications of the results of this study for further research offer several contributions to the field. The methodology of this study differed from methods used in previous studies in a number of critical ways. Contributions in the area of Mexican-American child-rearing include the investigation of maternal attitudes and practices and their relationship to one another as well as the relationship between child behavior and maternal child-rearing practices. The study of the interface of attitudes and practices with demographic variables in

the family ecosystem are also a contribution to the body of research on child-rearing in Mexican-American families. Further refinement and replication of the design of the study will help researchers to improve upon future research in this area.

While this study makes unique contributions to the sparse research on child-rearing in Mexican-American families, the shortcomings in the study might be avoided by future researchers. The concept of boundary helped the researcher gain insight into the difficulties in making structured observations in a natural setting. Procedures for employing the Maternal Teaching Observation Technique (MTOT) in this study required establishing a boundary separating the mother-child relationship from other family members or outside individuals during a structured teaching task for observation. The necessity of such a boundary for observing maternal teaching strategies, however, may interfere with observing child-rearing practices as they occur naturally in the home setting. For example, the average number of children in Hispanic families was 2.3 compared to 1.9 in nonHispanic families in 1980 (Bureau of the Census, 1983). In the sample for this study, the average number of children per family was 3.4. In many families with several children, siblings and other family members may be as involved in child-rearing as the mother. Consequently, a somewhat artifical child-rearing situation is created by structuring a boundary which separates the mother-child relationship from other relationships in the family. According to the researcher's ethnographic notes of each home visit, in 70 percent of the families, the established mother-child boundary was permeated at least once by a younger sibling, an older sibling, the father, a relative, or

a friend of either the child or mother. The structured observation did not allow for measuring the behaviors of individuals outside the boundary nor their effect on mother or child. Hence, some information relative to child-rearing may have been overlooked. If an objective of the wholistic ecological approach to study of the family is to have a realistic ecological view of child-rearing practices, then perhaps the boundary should not be limited to mother and child in future studies.

On the other hand, the structured teaching task allowed direct observation of typical mother-child interaction within a very short time span with minimal intrusion by the researcher. Baumrind and Black (1967) report that generally a minimum of two unstructured observation visits in the home are needed for mother-child behaviors to stabilize and approach typical patterns of interaction. In this study, the structured teaching task was observed to quickly involve mothers and children so that their natural modes of interacting were restored almost immediately. The subjects quickly relaxed and apparently forgot or ignored the researcher's presence. Laosa (1980c, 1981)) comments on evidence that a mother's behavior during the observed, structured situation is representative of her teaching behavior during daily situations in which similar tasks might be taught her child. This was observed to also apply to the child's behavior during the structured observation in this study.

Another potential shortcoming of the study, which was mentioned previously in Chapter III, was having only one observer for both mother and child. Questions of concurrent validity of measurements employing the two observation instruments used in the study cannot be answered

since the researcher was the sole observer. Two observers, one for the mother and the other for the child, would correct this shortcoming. On the other hand, it would be more difficult for two observers to be unobtrusive in the home setting, and observer interactions with the mother during the interviews would also be affected.

Suggestions for future research are that the study be replicated to meet the need for a series of studies on Mexican-American child-rearing with samples of varied socioeconomic status in different regions of the United States. Further research into congruence among Mexican-American parents on child-rearing attitudes and practices is also needed. Inclusion of fathers in a similar study would extend the knowledge base beyond maternal and child behaviors into a dual-parent family measure of attitudes and practices of Mexican-American child-rearing. A study which would focus on direct observations of Mexican-American men interacting with their children would be an important and unique contribution to the increasing number of research studies on fathering behaviors in recent years. Judging from the enthusiasm of fathers who were present during this study, it would not be difficult to secure a sample of Mexican-American men. It is suggested that interviewer or observer gender be matched in such a study so that subjects might feel as comfortable as possible. It is also recommended on the basis of this study and other ethnic minority family research that observer ethnicity be matched (Cromwell, Vaughan, & Mindel, 1975; Laosa, 1977; Bernal, North, Rosen, Delfini, & Schultz, 1979).

Practical Applications

The practical applications of this study are in the areas of parent education, day care, education at all levels, and other human services. The findings suggest that parent education programs that include components related to the ethnicity of Mexican-American parents may be appropriate. The heterogeneity of Mexican-Americans, however, should be considered in the planning of such programs. Also germane, are the findings of this and other studies that Mexican-American child-rearing attitudes and practices may vary from permissive, to authoritative, to authoritarian patterns. Special components in such programs should be designed for families who are Mexican-American or are related to Chicanos through family bonds. A nonformal style of instruction is recommended for two reasons. First, the literature shows that participation of Mexican-American parents in general parent education classes is minimal. Second, research (Rosenblatt & Wiggins, 1967; Martinez Byrd, 1978) has shown that parent education programs are least successful in retaining Mexican-Americans as group members, reflected by their attrition rate relative to that of other group members. For these reasons, nonformal Mexican-American parent education programs should focus on informal learning experiences rather than on a more formal, classroom structured programs. The fundamental goal of such programs would be to encourage families to think and talk about their parenting relationships. Family members of all ages should, therefore, be encouraged to participate. Child care should be provided to encourage participation.

Practical use of the information gained from this study about how some Mexican-Americans rear their children is also viewed as germane to

individuals working with Mexican-Americans in day care as well as educational, and health care, and social services settings. Knowledge of maternal child-rearing attitudes and practices and child behavior in Mexican-American families, including the languages spoken in the home, can be applied by professionals serving Mexican-American children and their family members to enhance their interactions with and improve upon intervention in these families.

APPENDIX A

CONSENT FORMS

Appendix A

CONSENT FORM IN ENGLISH

Child's name: _____

As the legal parent/guardian of the above named child, I hereby give my permission for her/his participation in a study conducted by Estella A. Martínez, a Ph.D. candidate, under the supervision of Dr. Eileen Earhart and Lillian Phenice of the Department of Family and Child Ecology, Michigan State University.

Mother/Guardian's Name: _____

In addition, I have freely consented to take part in this study.

I understand that I am free to discontinue my participation and my child's participation in the study at any time.

I understand that our participation will require about one and one-half hours and that I will be teaching my child to build a toy model, and I will be interviewed.

I understand that my participation in the study does not guarantee any beneficial results to me or to my child.

I understand that at my request, I can receive additional explanation of the study after my participation is completed.

I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.

Signed: _____

Date: _____

CONSENT FORM IN SPANISH

Forma de Consentimiento

Nombre de niño/niña: _____

Como madre o guardián del niño/niña ya mencionado, doy permiso que partícipe en el estudio conducido por Estella A. Martínez, candidata del Ph.D., bajo la supervisión de las Profesoras Eileen Earhart y Lillian Phenice del Department of Family and Child Ecology, Michigan State University.

Nombre de madre/guardián: _____

Además, he consentido libremente a participar en el estudio.

Entiendo que soy libre de díscontinuar mi participación y la de mi niño/niña en este estudio en cualquier tiempo.

Tengo entendido que nuestra participación requiere una hora y media y de que voy a ensenarle al niño/niña a hacer un juguete y despues participar en una entrevista.

Entiendo que esta participación no garantiza resultados beneficiosos tanto para o mi o mi niño/niña.

Entiendo que después de haber participado en el estudio puedo recibir más explicacion sobre el estudio.

Entiendo que los resultados del estudio serán estrictamente confidenciales y que permaneceré anónima. Los resultados del estudio estarán a mi disposición si yo los pido.

Firma: _____

Fecha: _____

APPENDIX B

BACKGROUND INFORMATION

Appendix B

BACKGROUND INFORMATION

Age: Mother _____ Child's D.O.B.* _____ Male ___ Female ___

Marital Status: ____ single
____ married
____ divorced
____ widowed
____ separated

Occupation _____ Employed __ Education ____ yrs.

Spouse's occupation _____ Employed __ Education ____ yrs.
(what does he do? or job title)

Area of residence: predominantly Mexican-American __; White __;
Black __; Mixed __.

Mother's P.O.B.** _____ Spouse's P.O.B. _____

Maternal grandmother's P.O.B. _____ Grandfather's P.O.B. _____

Maternal great-grandmother's P.O.B. _____

Maternal great-grandfather's P.O.B. _____

Children:	Age	Boy	Girl
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

Religion: ____ Catholic
____ Protestant
____ Other

Attend church regularly?
____ Yes
____ No

Do you have a Tinkertoy set in your home?

*D.O.B. - date of birth

**P.O.B. - place of birth

APPENDIX C

CHILD-REARING ATTITUDES INTERVIEW

Appendix C

I.D. No. _____

CHILD-REARING ATTITUDE INTERVIEW

I. Acceleration of Autonomy

1. The sooner a child learns to walk the better off he will be.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree
2. Most kids should be toilet trained by 15 months of age.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree
3. A child should be taken away from the bottle or breast as soon as possible.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree
4. The main goal of a parent is to see that the kids stay out of trouble.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree
5. Kids should be nicer to their mothers since their mothers suffer so much for them.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree

II. Casual Use of Time

6. The sooner a child learns that a wasted minute is lost forever, the better off he will be.	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree
7. There is no excuse for a child sitting around doing nothing because there are so many things he needs to learn about life.	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree

Interview

III. Equalitarianism

8.	A child has the right to his own ideas and should be encouraged to tell others about them.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree
9.	When kids think family rules are wrong, they should not tell parents about it.	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree
10.	When a child is in trouble he should not talk about it with his folks.	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree
11.	Kids should be able to talk with parents if they think their own ideas are better.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree
12.	Parents must earn the respect of their kids by being fair with them at all times.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree

IV. Value Strictness

13.	Kids that have firm rules to obey grow up to be the best adults.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree
14.	A child will thank you later on for strict training.	4 Strongly Agree	3 Agree	2 Disagree	1 Strongly Disagree

Interview

V. Devalue Permissiveness

15.	Parents should give in to the kids some, rather than expecting the kids to always obey the parents.	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree
16.	Most kids need less discipline and punishment.	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree
17.	Kids are not happy under strict training.	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree

VI. Lack of Support

18.	If my child has any kind of problem, she can count on me to help her out.	5 Never	4 Almost Never	3 Sometimes	2 Often	1 Very Often
19.	I say nice things about my child.	5 Never	4 Almost Never	3 Sometimes	2 Often	1 Very Often
20.	I make him (or her) feel I am there if he (or she) needs me.	5 Never	4 Almost Never	3 Sometimes	2 Often	1 Very Often
21.	I teach him things he (or she) wants to learn.	5 Never	4 Almost Never	3 Sometimes	2 Often	1 Very Often

Interview

VII. Lack of Control

22. If my child doesn't do what is expected of him/her, I am very strict about it.	5 Never	4 Almost Never	3 Sometimes	2 Often	1 Very Often
23. I keep pushing him or her to do his or her best in whatever he or she does.	5 Never	4 Almost Never	3 Sometimes	2 Often	1 Very Often
24. I expect him or her to keep his or her things in good order.	5 Never	4 Almost Never	3 Sometimes	2 Often	1 Very Often
25. I keep after him or her to do well in school.	5 Never	4 Almost Never	3 Sometimes	2 Often	1 Very Often

For scales ranked 4, 3, 2, 1, scores above 2.5 indicate general agreement.

For scales ranked 1, 2, 3, 4, scores above 2.5 indicate general disagreement.

For scales ranked 5, 4, 3, 2, 1, scores below 2.0 indicate that behavior is often shown.

Note. Numerical ranks did not appear on the data collection forms used with subjects.

I.D. No. ____

Entrevista Sobre Los Actitudes Al Criar Los Ninos

I. Aceleracion de autonomía

1.	Si un niño empieza a andar más pronto sera mejor para él (ella).	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En descuerdo fuertemente
2.	Lay mayoría de los niños deben ser entrenados a usar el escusado para los 15 meses.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente
3.	Debe quitársele la botella o el pecho a un niño lo más pronto posible.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente
4.	El objetivo principal de un padre es ver que los higos no se metan en enredos (dificultades).	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En descuerdo fuertemente
5.	Los hijos deben ser más buenos con sus madres ya que sus madres sufren tanto por ellos.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En descuerdo fuertemente

II. Uso casual del tiempo

6.	Sera mejor para el niño aprender pronto que un minuto desperdiciado (malgastado) está perdido para siempre.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente
7.	No ay escusa de que un niño ande sin hacer nada porque hay tantas cosas que necesita aprender sobre la vida.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente

Entrevista

III. Igualitarismo

8.	Un niño tiene el derecho a sus propias ideas y debe ser alentado a contárselas a otros.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente
9.	Cuando los hijos piensan que las reglas de la familia son incorrectas no deben decirle esto a sus padres.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente
10.	Cuando un niño tiene dificultades no debe discutirlo con sus parientes.	Fuertemente de acuerdo	De acuerdo	No estoy deacuerdo	En desacuerdo fuertemente
11.	Los higos deben poder hablar consus padres si piensan que sus ideas propias son mejores.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertementa
12.	Los padres deben ganarse el respeto de los hijos siendo siempre justos con ellos.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente

IV. Valores estrictos

13.	Los hijos que tienen reglas firmes para obedecer llegarán a ser los mejores adultos.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente
14.	Su hijo le agredecerá después por una disciplina estricta.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente

Entrevista

V. Devalorar el libertinaje

15.	Los padres deben ceder algo (dar razón) a los hijos en lugar de esperar que los hijos siempre obedezcan a los padres.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente
16.	La mayor parte de los hijos necesitan menos disciplina y castigo.	Fuertemente de acuerdo	De acuerdo	No estoy de acuerdo	En desacuerdo fuertemente
17.	Los niños no son más felices bajo una disciplina estricta.	Fuertemente de acuerdo	De acuerdo	No estoy deacuerdo	En desacuerdo fuertemente

VI. Falta de apoyo

18.	Si mi hija(o) tiene cualquier clase de problema, ella o él puede contar conmigo para ayudarle.	Nunca	Casi Nunca	Algunas veces	Seguido	Muy seguido
19.	Yo digo cosas buenas acerca de mi higo (a).	Nunca	Casi nunca	Alqunas veces	Seguido	Muy seguido
20.	Hago que él (ella) sienta que estoy alli si me necesita.	Nunca	Casi nunca	Algunas veces	Seguido	Muy seguido
21.	Le enseño a él (o ella) cosas que quiere aprender.	Nunca	Casi nunca	Algunas veces	Seguido	Muy seguido

Entrevista

VII. Falta de control

22.	Si mi hijo(a) no hace lo que espero de él (ella) soy muy estricta acerca de eso.	Nunca	Casi nunca	Algunas veces	Seguido	Muy seguido
23.	Lo sigo empujando para que él o ella haga lo mejor que pueda en cualquier cosa que haga.	Nunca	Casi nunca	Algunas veces	Seguido	Muy seguido
24.	Espero que él o ella mantenga sus cosas en buen orden.	Nunca	Casi nunca	Algunas veces	Seguido	Muy seguido
25.	Ando tras de él o ella para que (haga) slaga bien en la escuela.	Nunca	Casi nunca	Algunas veces	Seguido	Muy seguido

APPENDIX D

OBSERVATION INSTRUMENTS

Appendix D

THE MATERNAL TEACHING OBSERVATION TECHNIQUE (MTOT)

Two parallel forms of the technique were developed by Laosa (1980b) for use with mothers and their four- to seven-year-old children. Laosa's description of the MTOT is quoted as follows:

> The technique may be administered in the subject's home or in the laboratory. After establishing rapport, the mother is asked to sit at a table next to her child. The mother is given an assembled Tinkertoy model and all the disassembled parts necessary for making an identical model. (The parts of the assembled model are glued together to prevent their being taken apart, and the disassembled parts are `worked' in and out prior to using them with the subjects until none is unusually difficult for a child fit into any other part.) The mother is asked `to teach' her child `how to make' a model like the one already assembled and to do this as she would if the observer were not present. If others are present, they are asked not to participate and to be very quiet. The observer manually records on a protocol the frequency of occurrence of the following maternal behavior categories:
>
> Inquiry (I). The mother asks the child a question or otherwise directs a verbal inquiry to the child.

Directive (D). The mother verbally commands the child to pursue a given course of action.

Praise (P). The mother praises, or otherwise verbally expresses approval of, the child or the child's activity or product.

Negative Verbal Feedback or Disapproval (-VF). The mother verbally indicates to the child that a given course of action taken by the child is incorrect or that she is displeased with the child or the child's activity or product.

Modeling (M). The mother works on the model and the child observes. A behavior unit is considered complete (and a frequency point is recorded) every time the mother fastens or unfastens two parts.

Visual Cue (VC). The mother attempts to attract the child's attention toward a given aspect of the task by providing a visual cue. This category is limited to attempts to attract the child's attention by sliding, pushing, or lifting a part or portion of the model being assembled (but short of fastening or unfastening any parts). The behavior unit is considered complete (and a frequency point is recorded) when the mother releases the part or portion of the model or otherwise moves her hand away from it. (More subtle visual cues, such as pointing and touching a part, were included as additional categories but were deleted from subsequent analyses because their interobserver reliabilities and parallel-form consistency were, in general, only moderate in magnitude).

Physical Affection (PA). The mother makes physical contact with the child as an expression of a favorable feeling toward the child.

Positive Physical Control (+PC). The mother manually controls the child's motor behavior to facilitate the child's solution of the task, e.g., turning the child's body toward the task or restraining the child as the child tries to leave the task area.

Negative Physical Control (-PC). This category includes two classes of nonverbal behavior, both displaying the mother's disapproval of the child's activity on the task or product: (1) an action that generally would be interpreted as physical punishment (e.g., slapping the child's hand); or (2) manually restraining or controlling the child's motor activity as the child works on the task in order to keep him or her from pursuing what the mother apparently perceives as action not conducive to learning or solving the task, or not appropriate for that particular time (e.g., she takes or pushes the child's hand away from the task material or she holds the child's arm as the child begins to reach for a Tinkertoy part).

For each parallel form, the observation is discontinued 5 minutes after the mother is signaled to begin teaching or when the task is completed, whichever occurs first. The observation time in seconds is recorded. The coordinated use of a timer and a stop watch can allow the observer to monitor time in a manner that should be free of distraction to both observer and subjects.

> The two parallel forms of the technique differ from one another only in the Tinkertoy models employed. Both models appear on page 5 of the Tinkertoy Instruction and Idea Book (Questor Education Products Company, 1972). Form A employs the `Robot,´ and Form B the `Jet Airplane.´ They consist of 27 and 28 parts, respectively. Both are of approximately equal difficulty. (Laosa, 1980c, pp. 357-358)

The following modifications were made to the last four behavior categories of the MTOT:

Visual Cue. Subtle cues such as pointing and touching a part of the model were included.

Physical Affection. In addition to the described physical contact, affectionate behaviors involving no contact were included such as facial expressions showing approval, smiling, positive eye contact, and words of endearment.

Positive Physical Control. Additional means of control were looked for such as the mother placing her hand on the child´s hand to facilitate solution of the task.

Negative Physical Control. The category was expanded to include facial expressions showing disapproval, frowning, and negative eye contact.

Child Behavior During The Maternal Teaching Observation Technique

Child behaviors during administration of the Maternal Teaching Observation Technique (MTOT) are observed and recorded concurrently with maternal behaviors. The observer manually records on a protocol (see page 10) for both maternal and child behaviors, the sequence and frequency of occurrence of the following dimensions of child behavior: (Coding abbreviations are in parenthesis.)

Positive Verbal Response (+VR). The child makes a positive verbal response to the mother such as answering an inquiry, making an inquiry, or asking for the mother's help.

Negative Verbal Response (-VR). The child makes a negative verbal response to the mother indicating to the mother that the child is displeased with her.

Inquiry of Mother (Q). The child initiates verbal communication by asking the mother a question or otherwise directing a verbal inquiry to the mother.

Physical Response (PR). The child physically responds to the mother by attending to the task in an effort to comply with her. This includes the child doing what the mother has directed or suggested verbally or nonverbally.

Imitation of Mother (IM). The child responds to the mother's behavior by imitating or attempting to imitate her.

Task Involvement (T). The child initiates the task at hand, or

is absorbed in the task to the extent of being oblivious to what the mother is doing.

Noncompliance (NC). The child makes no attempt to comply with the mother's verbal or nonverbal suggestions or directives.

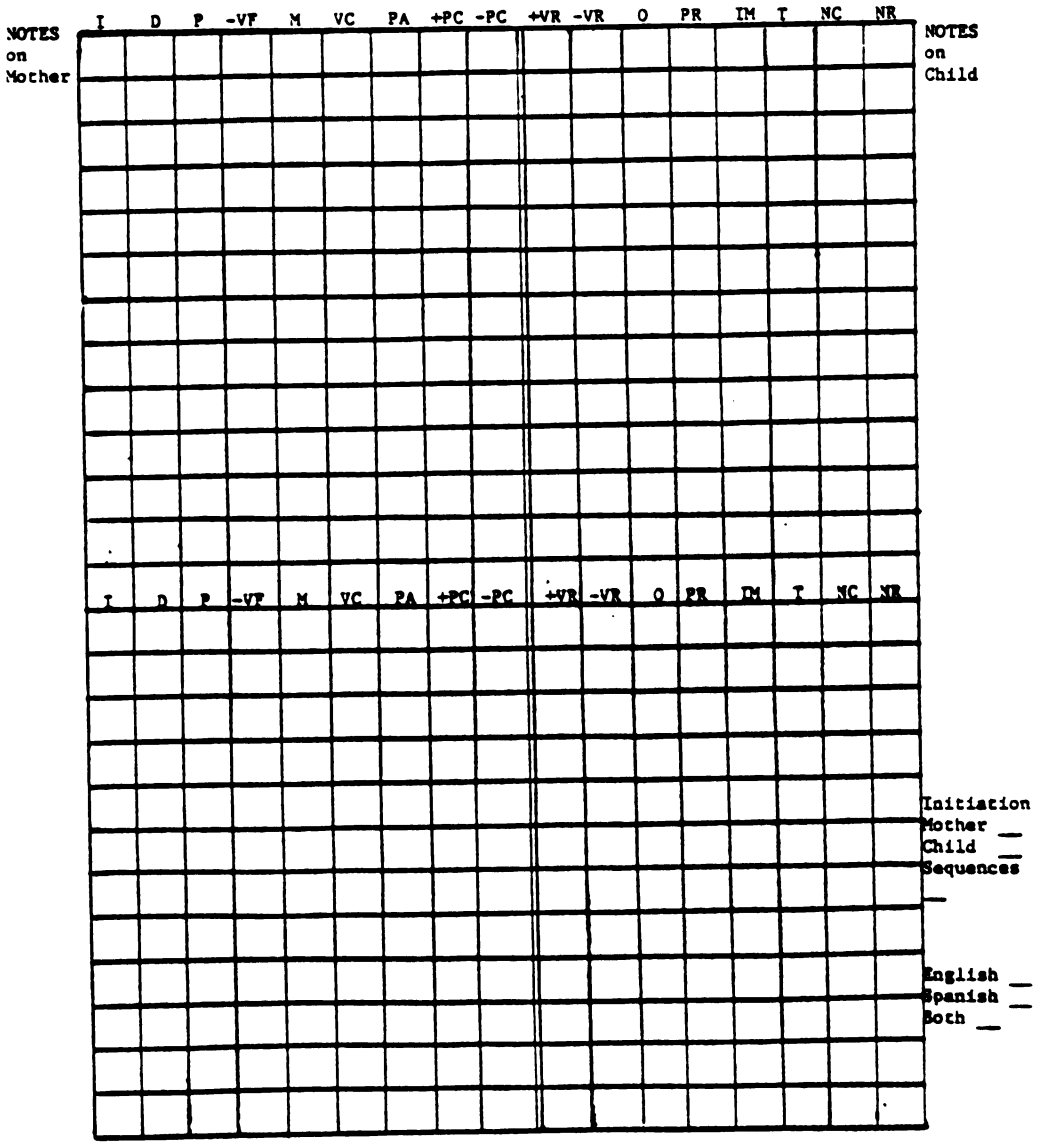
No Response (NR). The child makes no response to the mother. The child does nothing to indicate a response to any of the maternal behavioral categories on the MTOT.

PROTOCOL FOR MTOT AND CBDMTOT

The protocol for recording maternal and child behaviors during simultaneous administration of the Maternal Teaching Observation Technique and Child Behavior During MTOT is shown on the next page. Behavior frequencies are recorded in the column under the appropriate category with a short slash mark. Each row represents a behavioral sequence. A check mark notes which subject initiates a behavioral sequence.

On the top right-hand corner of the protocol is the subject's identification number. On the next line, the letter "A" or "B" is inserted on the blank line indicating to which form of the MTOT the protocol pertains. The protocol is divided in half so that notes and observations of the mother are made on the left-hand margin of the page; notes are made of the child on the right-hand margin. On the right margin, there are also blanks for noting the number of behavior units initiated by each subject as well as the total number of behavior sequences observed during the timed task. In the bottom right-hand corner of the protocol for Task B, a note is made of whether or not the mother-child dyad communicates in English, Spanish, or in both languages during either or both observations.

I.D. No. ____
Task _____


NOTES on Mother
I D P -VF M VC PA +PC -PC +VR -VR O PR IM T NC NR
NOTES on Child
I D P -VF M VC PA +PC -PC +VR -VR O PR IM T NC NR
Initiation
Mother __
Child __
Sequences
__
English __
Spanish __
Both __

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