Learning environments in a sample of communal families and a sample of two-parent married nuclear families are compared for both intragroup and across-group differences likely to influence childrearing and socialization outcomes. Learning environment variables include family and demographic backgrounds of parents; newborn health, developmental, and feeding patterns; personnel, size, and density in households; caretaking patterns; work loads and domestic tasks for mothers; kin and social supports for mothers; beliefs and value orientations of the parents; and change and mobility in families. Creedal and domestic types of communes also differed. The learning environment variables are interdependent with each other and with demographic features of the groups, and there is rapid change in communal lifestyles; both these features suggest that intragroup and longitudinal data are essential for generalizing about the effects of lifestyles on young children.

LEARNING ENVIRONMENTS FOR INFANTS:

COMMUNES AND CONVENTIONALLY MARRIED FAMILIES IN CALIFORNIA

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This article asks a series of descriptive and ethnographic questions about the contexts of child development in communal environments. We ask in what specific respects communes differ internally in the learning environments they provide for young children, and in what ways they are actually similar to a conventional comparison group. Data are presented not only on differences between conventional and communal families, but also on differences between two types of communes. By their nature and history communes are experimental and exploratory, and are created for widely

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differing reasons. Thus, the variability and diversity within communes is far greater than variability within conventionally married families. The study of intragroup or intrasubcultural differences is not only descriptively interesting, but provides the opportunity to explore hypotheses that could not otherwise be tested.

We do not conceive of family effects on children in terms of a series of family types with generic effects on child development and social behaviors. Our conceptual focus is on the specific learning environment variables themselves. Only a careful description of these, along with the methods used to measure them and the situational contexts in which they tend to occur in families, can provide the basis for answering other theoretical issues.

THE FAMILY LIFE STYLES PROJECT—DESCRIPTION AND METHODOLOGY

The data to be presented on communes and conventional families are part of a longitudinal study of family lifestyles and child development currently in progress at the University of California, Los Angeles. This study, The Family Life Styles Project,[1] has been following from birth 208 children who are growing up in a variety of conventional and nonconventional family lifestyles. We describe the 156 families in nonconventional lifestyles under three categories, used in the initial samplings: (1) *single mothers*—women without a mate who elect to bear a child; (2) *social contract couples*—who are not legally married but who have a child together; and (3) *communes and living groups*[2]—parents and children living in a collective household of some type. There are about 50 children in each of the three categories.[3] (Commune mothers may be married, single, or in a social contract relationship.)

A comparison group of 52 conventional two-parent married nuclear families is also being studied. (We use the

term "conventional" only in the sense of structurally normative.) In order to control for possible differences in demographic background factors, all of the mothers we sampled were 18 to 35 years old, Caucasian, from middle- or working-class backgrounds, and most (75%) were primiparous. The mothers were first contacted and interviewed in the third trimester of pregnancy. The project has been following the 208 babies born to these women (1973-1975) and will continue to do so until the children enter first grade in the public school system, or begin some other comparable educational experience.

The comparison group of conventional families was sampled by randomly choosing obstetricians from several counties in Northern and Southern California, and asking them to nominate a couple with the relevant background characteristics (age, first child, etc.) from their current cases. The nonconventional families (also initially living in California) were chosen in a variety of ways, using snowball samples advertisements in relevant newspapers and bulletin boards, personal contacts with clinics and physicians where nonconventional families tended to go, and so forth. Although there have been a considerable number of changes in lifestyle and residential moves both within and out of California during the course of the study, there has been virtually no attrition in the six years of the project.

Data collected include psychological tests; medical data; home environment and behavioral data on the children and their parents; and questionnaire materials on the attitudes, beliefs, and values of the babies' parents. In general, the project utilizes a multimethod approach to the collection of data on the social organization of lifestyles and group and individual developmental outcomes of children. Many of these procedures are not relevant to the present report; therefore, the tests and other details of measurement are not reviewed here. Interested readers are referred to Eiduson and Weisner (1978), or Zimmerman and Mickey (1976) for additional details. Weisner, Martin, and Bausano

(n.d.) provide detailed documentation of the full home environment observational data collection procedures. Specific methodological techniques used to collect each of the different kinds of home and learning environment data presented in this paper are described in the section where those specific data are discussed. Thus, for example, information on the caretakers of infants was collected during home observational visits to each family; the techniques used for collecting these data are discussed in the section on caretakers. Similarly, data on the values and beliefs of babies' parents were collected using an intensive interview during the mother's third trimester of pregnancy; this method is reviewed in the section on beliefs and values.

HOME OBSERVATIONAL METHODS

A brief overview of the home observational visits may be helpful for readers interested in methods and field procedures used. The six-month home visit utilized a combination of field observational techniques. A *behavior checklist* of infant and caretaker-to-infant behaviors was devised using variables reported in the literature. Time samples of these behaviors were taken for two 30-minute periods. Data collected using the behavior checklist include frequency counts of touching, holding, affective expression, looking, vocalizations, activity levels, caretakers present and caretakers' activities, and others. A *spot observation* procedure was also utilized at the six-month visit (Rogoff, 1978) which involves a rating of precoded ecological variables surrounding the child at 5-minute intervals. Variables coded include: noise, light, and movement around the baby; identity and proximity of caretakers; caretakers' activities and effect; number of people present and who these people were; and others. Following the behavior checklist and spot observations, a *mother* (or primary caretaker) *interview* was conducted, focused on the baby's development, childrearing practices, and parental satisfaction. An *inventory* of the

home environment including toys and physical features of the home setting and the baby's room was also completed by the observer. After leaving the home, the observer completed a series of ratings focused on caretaking styles, effect of the caretaker, quality of care, and obtrusiveness of the visit, among other factors. Finally, the observer completed *qualitative descriptive notes* on the visit, mentioning overall characteristics of the home, the parents, and the baby not otherwise rated, counted, or checklisted during the procedure itself. The home observational methods thus ranged from specific frequency counts of discrete behaviors, through environmental ratings and interviews with the parents, to qualitative, holistic accounts of the home and family.

Six different home observers (five women and one man) visited the 208 families in the project. Five home observers were graduate students in anthropology and psychology, and the other had been trained as a social worker. Extensive reliability data were collected at five time points during the two years of six-month home observational visits. Reliability coefficients were calculated for the various kinds of data that were collected (i.e., frequency counts, ratings, qualitative assessments, spots, etc.). Overall interobserver reliabilities during parallel observations (done with a nonproject reliability sample) range from 67% to 83% agreement. A 70% criterion was necessary before observers were sent out to the field on their own. Periodic checks and conferences on the observational measures also helped to maintain reliability in the definitions and use of the coding categories.

The six-month observations were typically recorded during the morning hours and included at least one feeding. Most home observational visits occurred between 9:00 a.m. and 12:00 noon. The goal of the visits was to observe a typical weekday morning for the baby. This was discussed with the mother or both parents prior to scheduling the visit. If a typical weekday morning was a time when the

baby was with the mother alone at home, then that would be the setting of the observation. If a typical weekday morning included a period when the baby was in a collective nursery, with the father, or in a neighborhood infant care center, then the home observations would be recorded in those settings. Most six-month observations involved approximately two hours of time spent in the home, although sometimes this period would be longer if for instance, the baby fell asleep in the middle of the visit.

THE INFORMAL LEARNING ENVIRONMENT AROUND INFANTS

The general concept of the informal learning environment for children is central to the tradition of research on naturalistic, contextual, nonformal socialization and training, the primary mode of learning in most cultures around the world (Barry, Josephson, Lauer, and Marshall, 1976; Barry and Paxson, 1971; Cole and Scribner, 1974; Fortes, 1970; Munroe and Munroe, 1975; Rebelsky and Daniel, 1975; Weisner and Gallimore, 1977; Whiting, 1963; Whiting and Whiting, 1975). Generally, studies of learning environments during infancy focus on the role of the mother in the infant's daily schedule, her pattern of caretaking, the social supports available to her during the first year of the baby's life, variables relating to feeding and health, and other stimulation and maturational factors in the environment that might influence infant growth and development (Caudill and Frost, 1972; Konner 1975, 1977; Landau, 1976; Nerlove and Snipper, forthcoming; Tulkin and Kagan, 1972). Other factors in children's learning environments such as neighborhood characteristics, kind of task performance and responsibility expectations, and so on, tend to increase in importance and influence when the child begins to walk, understand language, and speak. Studies of infant's learning environments collected during the first six months of life also have focused on the values and beliefs that the baby's parents bring with them to the family setting. These vari-

ables are especially relevant for a comparison between communes and conventionally married families.

There are eight general categories of learning environment variables presented in this article. Some of the variables are sociodemographic, some are based on specific measures of child caretaking practices, and others are measures of values based on parents' self-reports or our own indirect estimates. The variables include:

(1) The demographic backgrounds of the babies' parents, including age, education, occupation, employment, socioeconomic status, and residential moves of baby's grandparents.
(2) Infant health and development variables, such as obstetrical complications, neurological status at birth, and feeding practices,—breast and bottle feeding, weaning, and use of solid foods.
(3) Number and status of caretakers of child.
(4) Household size and density.
(5) Mother's work loads and domestic tasks within the family.
(6) Kin and social supports for the mother.
(7) Mothers' and fathers' values along six dimensions: materialism, achievement, future orientation, natural/organic orientation, sex egalitarianism, and beliefs about conventional authority; also naming practices as an index of countercultural value orientation.
(8) Change and mobility in family lifestyle since the third trimester.

These topics are not exhaustive of possible learning environment variables, but they all meet three fundamental criteria: they include many criticial environmental factors likely to influence development in early childhood; they have interesting and important relationships to communal and conventional family styles; and they are measured in a clear and comparable way in all of our families.

The term "learning environments" is used to describe variables which affect how parents take care of children, and sources of stimulation which affect children's develop-

ment (e.g., White and Watts, 1973; Kagan, 1971). The terms "home environment," "community settings," "background variables," and "parental characteristics and supports" also describe many of these variables. One of the main goals of the Family Life Styles Project is to look at cognitive and socioemotional developmental outcomes of specific features of family lifestyles, such as those suggested in this article—hence "learning environmental" influences. However, our present focus is on an analysis of these environmental features of family lifestyles as they differ between creedal and domestic communes and between communes and conventionally married families. In other words, for our purposes here, "learning environment" variables are both *descriptors* and the *outcomes* of different family lifestyle choices. The outcomes of learning environmental differences, in turn, may be differences in children's developmental paths, cognitive functioning, or social and emotional growth. The question of effects on individual children or groups of children has been considered in other studies (e.g., Zimmerman and Mickey, 1976).

The primary goal of this article is to present a social organizational and ethnographic comparison of two kinds of communal family settings and a conventionally married family comparison group. The study has a *social organizational* focus, in that it attempts to relate various learning environment differences to other features of communal lifestyles or conventional married family styles. Few, if any, descriptions of communes characterize, for example, the home environment of an infant from that infant's "point of view"—that is, using variables likely to directly influence how the baby will be taken care of, fed, and so forth. How have features of collective family life, begun by and for adults, become transformed into specific, measurable features of environments which will influence infants and young children?

CREEDAL AND DOMESTIC COMMUNES

Berger et al. (1974), Kanter (1972, 1976), and others have broadly characterized two kinds of contemporary American communal lifestyles which provide very different infant learning environments. *Creedal* communes are groups with a formal ideology, a hierarchical organization, formally bounded group membership, and frequently a neophyte stage of intensive desocialization to break the strength of the new members' ties to the past and the "outside" world. Groups based on commitment to either an Eastern or Christian religious philosophy provide some of the best-known examples of such groups. Secular creedal groups, however, also focus on commitment to a powerful leader or follow a secular ideology which sets out clear group rules and practices. Creedal groups often have stated procedures concerning child care and the family, and every member is expected to follow these. Such practices, for example, might involve group nursery care of infants, the establishment of sleep and waking times for all group members, or strict rules concerning disciplinary measures or child care task assignment. Creedal groups tend to be large, often numbering hundreds, tend to have been established for a longer period of time, and also tend to have set rules and rituals which extend directly into the family's daily and childrearing activities. They often attempt to provide all the economic needs of the members, including employment and social ties. Creedal group members do not generally hold jobs outside the communal setting.

Domestic communes, by contrast, consist of individuals who live together to benefit from the communal household itself as the primary goal, rather than living in a group setting as a means to participate in a formal ideological movement. Domestic groups do not share an explicit, strongly held, formal set of beliefs; overt hierarchy and clear boundaries for membership are rarely found; and residents often hold jobs and other interests outside of the

communal setting. These groups tend to be smaller in size (three to five adults is modal), are more temporary, and are more informally organized. Parents in domestic groups are there to find an alternative family/residential arrangement more often than they are seeking a total restructuring of their professional or social lives.

Since creedal and domestic communal lifestyles can have such very different consequences for parenting practices and for children, our ethnographic description of these two kinds of groups and analyses of data on learning environments will distinguish between them.[4]

LEARNING ENVIRONMENTS FOR INFANTS: SELECTED COMPARISONS

FAMILY BACKGROUNDS OF BABIES' PARENTS— ARE COMMUNARDS "DIFFERENT"?

Methodology

Both mothers and fathers were interviewed during the mother's third trimester of pregnancy; the parents also completed a demographic inventory which asked about their personal backgrounds and economic circumstances, as well as those of their own parents.

Many of the specific variables covered in the third trimester interview are discussed in Cohen and Ericson (1975). Data on the demographic backgrounds of the parents were completed at that time by the parents themselves following the interview session. The demographic inventory includes self-reported data on the parents' own family background; a number of these variables are shown in Table 2. Both the mothers and fathers (if available) were interviewed and filled out the demographic inventory.

TABLE 1
Communal Sample (N = 54)
Subcategory Frequencies at Time of Recruitment

CREEDAL (29)			DOMESTIC (25)	
Religious (20)		Secular (9)	Urban (19)	Rural (6)
Eastern (11)	Christian (9)			
11 participants in 5 independent groups	9 participants in 6 independent groups	9 participants in 3 independent groups	19 participants in 16 independent groups	6 participants in 5 independent groups

Results

Some background characteristics of the two samples were limited in their range of variation by design. All the participating mothers had to be between 18 and 35 years old, Caucasian, from a middle- or working-class upbringing, and having their first or second child. Other background characteristics were not controlled in any way during the selection of families, and so could have differed by lifestyle.

Table 2 indicates a number of background variables which did or did not discriminate the communal parents from the conventionally married parents in our sample (see Cohen and Eiduson, 1975, for additional data). First, conventionally married mothers were more likely to be above the median age of 26, and communal mothers below. Second, although the job status of fathers was most likely in both samples to be executive or professional, the remaining conventionally married fathers were most likely to be white collar and the communal to be unskilled. At the baby's birth, only 4 of 52 (7.7%) conventionally married fathers were in unskilled or semiskilled jobs compared to 13 of 47, or nearly 28%, of the communal fathers. Executive or managerial jobs were held by 36.5% of conventionally

married fathers, and 23.4% of the communal fathers. The differences in occupation occur at the low end of the scale; there were many communal men in middle- and higher-level employment. Third, communal mothers and fathers experienced more frequent residential moves in their own childhoods than did the conventionally married parents. Finally, both mothers and fathers living in the communal households were far more likely to have previously lived in some alternative lifestyle—for example, another commune or a social contract arrangement.

Creedal and domestic commune samples had more similarities than differences. However, both mothers and fathers in domestic groups had somewhat more formal education than parents in creedal groups. Consistent with this finding, mothers in domestic groups had higher status occupations than mothers in creedal groups. Women in domestic groups were more likely to be or to have been in a profession and employed outside the living group; women in creedal groups were more often in manufacturing, sales, or proselytizing connected with the functions of the group itself.

INFANT HEALTH AND DEVELOPMENT

DO COMMUNE BABIES GROW UP DISADVANTAGED?

Methods

Newborn screening. Shortly after the births, mothers were interviewed in their homes about their birth experiences and initial adjustments to the baby, and the infants were administered a Newborn Neurological Examination (see Parmalee and Michaelis, 1971 for further details) by a nurse in the home to screen for gross developmental differences. The mother's birth practices and complications (if any) were

TABLE 2
Demographic and Background Variables of Parents at the Time of the Initial Interview

Variables with No Statistically Significant Difference	Significant Differences ($p \leq .05$ for χ^2 test)	Direction of Difference
Communal Compared to Conventionally Married		
Age of Father	Age of Mother	Older in conventionally married
SES of Mother	Employment status of Father	Higher status in conventionally married
SES of Father	Residential moves in childhood of Mother	More moves in childhood of communal Mothers
Education of Mother	Residential moves in childhood of Father	More moves in childhood of communal Fathers
Education of Father	Past involvement in alternative life style by Mother	More past involvement by communal Mothers
Employment status of Mother	Past involvement in alternative life style by Father	More past involvement by communal Fathers
Creedal Compared to Domestic Communes		
Age of Mother	Education of Mother	More formal education in domestic
Age of Father	Education of Father	More formal education in domestic
SES of Mother	Employment status of Mother	Higher status in domestic
SES of Father		
Employment status of Father		
Residential moves in childhood of Mother		
Residential moves in childhood of Father		
Past involvement in alternative life style by Mother		
Past involvement in alternative life style by Father		

scored using the Obstetrical Complications Scale (Parmalee and Michaelis, 1971). These data were assembled from both parents' reports during the birth interview and from hospital records collected by project staff. At one year of age, each infant was given a pediatric exam by a pediatrician or nurse. This examination included a nutritional interview and assessment of the child; an overall health status examination; and height, weight, skinfold, and head circumference measurements of each baby.

Results

Since a number of families (conventional as well as communal) had their babies delivered at home, and since prior drug use among the nonconventional families was fairly high (Eiduson et al., 1975), there was some reason to inquire as to the initial health and developmental status of the infants (Eiduson et al., 1978). Certainly a higher than normal incidence of health problems could alter caretaking patterns and babies' behaviors in subsequent tests and observations (cf. Hunt, 1976).

Only one developmental index has been found to differentiate between communal and conventional lifestyles: a median split on the Newborn Neurological Examination revealed significantly more commune babies below the median score and more conventional family babies above the median than would be expected by chance ($X^2 = 5.15$, $df = 1$, $p = .02$). There were no differences in very low or "at risk" scores between lifestyles and no indications of differences in postbirth trauma affecting subsequent development. In fact, the babies did not show any gross developmental differences by lifestyle on any other indices (Zimmerman and Mickey, 1976).

Methods

Infant feeding. Data on feeding practices were gathered in interviews with the mothers at six months and one year and by observation at six months. The six-month interview was done following the six-month home observation at the mother's home. The one-year interview was done when the mother or both parents brought their baby to UCLA for psychological tests (described in Eiduson and Weisner, 1978, and in Zimmerman and Mickey, 1976) and the mother or both parents were interviewed extensively on their parenting practices, the baby's development, attitudes toward parenting, feelings about their lifestyle, any changes

in lifestyle, and related topics. In addition, the six-month home observation directly observed an infant feeding in the home. Data collected on the observation of the feeding included styles of breast or bottle feeding, types of supplementary solid foods given to the child (if any), and the duration of the feeding.

Results

Given that many of the communal parents had unconventional diets and strong feelings about "naturalness" in childbirth and in food and nutrition, it is not surprising that feeding practices differ widely between the two lifestyle samples. Whether the baby is fed on demand or on schedule is *not* such a difference, however; for both samples, babies were usually reported to be fed on demand. But at six months of age, two-thirds of the communal mothers were breastfeeding their children, while two-thirds of the conventionally married mothers had either ended or never begun breastfeeding. [This compares with an estimated national average of approximately 5% to 6% of American babies still being breastfed at six months of age (Fomon, 1975), and a figure of 33% obtained by Auerback (1978) for a 1975 sample of 102 women from Minnesota very similar to ours: obtained from obstetricians, between 20 and 30 years old, all but two married, all "Protestant, Caucasian, and middle-class" (p. 28), and 70.5% primiparous.] Even at one year of age, 44% of the communal mothers were still breastfeeding their infants versus 6% of the conventionally married mothers. Paralleling this difference, half of those conventionally married mothers who were breastfeeding at six months had already begun giving solid foods, versus only 15% of the communal mothers. Communal mothers almost always reported using homemade baby foods, whereas three-fourths of the conventionally married mothers primarily used commercially prepared foods. These differences in feeding patterns did

not produce babies at six months or one year of age who showed any measurable differences (not by lifestyle at least) in their nutritional status, height, weight, or illness history (Eiduson and Family Life Styles Project Staff, 1976).

THE SOCIAL ENVIRONMENT

DO COMMUNE BABIES REALLY HAVE MORE "MOTHERS," MORE ATTENTION, MORE HUBBUB? DO COMMUNE MOTHERS HAVE IT EASIER?

Methodology

We interviewed the mothers at the birth of their child (see above) and when the babies were six months old, and had the parents draw maps and provide a census of their households. We also observed the babies extensively in their homes at six months of age and recorded (among other variables) the number and identity of caretakers and other personnel around the baby. These data were collected as part of the home observational visit made to each family during the "typical morning" in the baby's week already discussed in detail above.

The mothers also completed an inventory of their daily routine in relation to their child. The daily routine reports and the observations were quite consistent in their overall assessment of caretaking during the day—although the observations, since they were done in the morning, underestimate the amount of paternal care, especially in the conventional families where more fathers worked away from home. In addition, some of the data for communal families may slightly overestimate the role of the parents in child care, since mothers and fathers were perhaps more likely to stay around during an observation than they might on a "typical" day. Within these constraints, however, the observational and parents' reports provide a reliable and systematic picture of caretaking.

Size and density of households. The modal conventional family consisted of the mother, father, and infant, although occasionally an older child, housekeeper, or relative also shared the household. The modal domestic commune consisted of three to six unrelated adults and children; only one domestic group had more than six adult members. The creedal groups, on the other hand, had a wide range of household size—from about 10 to about 100 at any one location.

The dwelling map showed the size, functional living spaces, sleeping arrangements, and a census of residents. Although communal dwellings were often larger than the apartments and single-family houses of the conventionally married, the number of household members was much higher per unit of space. Therefore, density was much higher and space available per member much lower in the communal groups. In one-third of the communes, each member had the equivalent of one small room 10 or 12 feet square out of the entire living space—kitchens, living rooms, and the rest combined. Only one conventional family had such a small space. The average conventionally married family member had the equivalent of several rooms, and in 20% of the cases had 1,000 square feet or more per person. The commune infant was much less likely to have its own room, both as indicated by parents on their maps and as we directly observed at our six-month home visit. At six months, 20% of the commune babies had their own room versus 66% of babies in conventional families.

Creedal and domestic samples did not differ in overall density, nor in percentage of children having their own room. However, organized communal nurseries were much more likely to be found in the creedal groups. Furthermore, only in some of the creedal groups did a family have at its disposal the enormous communal dining, recreation and meeting halls, and enclosed outdoor spaces like playgrounds and large communal gardens. Even in cases where the family's private dwelling space was tiny, very little time was spent there. The baby's days, therefore, were more

often spent in large open spaces which, even with many people in them, seemed less "dense." Also, these communal spaces really belonged to the family member; they were not used as public facilities, but rather as an extension of the family's domestic unit.

Caretakers and other personnel in conventional and communal households. Here, we were interested in the overall structure of care, rather than the microenvironment of particular caretaking styles. Thus we contrasted number, sex, and kinship, among other factors, of the personnel caring for the child between communal and conventional households. The fact that there were more people residing in any given communal family was reflected in the greater number of people observed to be present around the infant on the morning of our visit. Only two (4.4%, communal mothers were alone with their infants for the entire visit, compared to 18 conventionally married mothers (37.5%). At the other extreme of the distribution, 15 communal babies were in the presence of eight or more people during the home visit. No baby in a conventional home was in a setting with this many people. (This distribution yields a X^2 of 27.69, df = 2, $p < .001$.) There were no significant differences in the midrange of two to seven people present. Thirty babies in conventional households and 28 babies in communal households had with them, in addition to their mothers, either an older sibling, their fathers, or some combination of these.

Not only were there more people visible to infants in communal households, but more people were observed to be actually taking care of these infants. Two-thirds of the babies in conventional homes had only one caretaker during the observation, and only one had as many as three. Communal babies had three or more observed caretakers in one-third of the cases, two caretakers in another one-third, and only one in the remaining third. (This distribution yields a X^2 of 19.74, df = 2, $p < .001$.)

Who had real responsibility for the six-month-old babies, other than their mothers? In other words, who were the "primary" caretakers? Mothers and fathers in many nonconventional families had reported to us prior to the birth of their baby that they hoped to reduce the exclusive reliance on the mother as the primary caretaker. Nonetheless, when their babies were six months of age, fully 96% of the mothers in communes were observed to be the most frequent primary caretaker of the infants, just as in conventional nuclear families (90%). (In the other 10% of conventional households, a housekeeper or paid caretaker was present and judged to be the primary caretaker. In the other 4% of communes, it was the father.)

The identity of second-ranked primary caretakers, however, was different in communes. Of the 14 babies in conventional homes who were observed to have a second primary caretaker, 10 were in the care of the fathers. In communes, on the other hand, 30 families had a second primary caretaker. Sixteen of these were fathers and 14 were other commune members, including some older children. Third-ranked primary caretakers were observed in 14 communal but in only two conventional households.

To summarize some of the patterns of primary caretaking, we see that, although the mother in both settings was almost always present and maintaining primary responsibility for her infant, supplementary primary caretaking was quite different between the two settings. There were more likely to be second and third primary caretakers, more diverse in sex, age, and kinship, in communes than in conventional nuclear families. Furthermore, fathers or other men were more commonly encountered and more likely to be caretaking infants in the communal settings. In fact, in our morning visits to conventional households, males were encountered in only 27% of the cases, versus 73% of the living group visits ($X^2 = 13.92$, $df = 1$, $p < .001$). Thus, the number, range, and diversity of infants' caretakers were all greater in communes, and the infant's daily life usually

included fairly frequent but intermittent and nonexclusive time with the mother. A significant amount of sharing occurred in primary caretaking responsibility.

Reflecting the fact that creedal households tend to be larger than domestic, the babies in creedal groups were observed to be in the company of more people, on the average, than the babies in domestic groups. Summary observations of the environment also showed more movement and activity around the creedal baby than the baby in the domestic commune.

It is important to point out that communal caretaking structures differ from our conventional families primarily *at the ends* of the range. Thus, there are many babies living in a nuclear or mother-child domestic unit within a commune who are cared for during infancy by their mothers, with relatively little supplemental support. And there are a number of conventional families with fathers and/or others taking important roles in child care. But no communal mother is typically alone with her baby all day, and no conventional mother in our study had eight or more people around her and her baby on a typical weekday.

These findings relate not only to obvious questions concerning outcomes in the socioemotional realm, but also to current debates concerning the role and presence of the mother in intellectual development. White and Watts (1973) emphasize the importance of the mother's presence as well as the kinds of things she does. At least in terms of mothers' presence around the six-month period, most of our communal babies had frequent, daily contacts. Data on the quality of contact is beyond the scope of this article.

Mothers' work loads and domestic tasks. It is well known that the work load a new mother must shoulder following birth influences her caretaking practices, her attitudes toward motherhood, and later styles of discipline and expectations of responsible behavior (cf. Minturn and Lambert, 1964; Bernard 1974: ch. 7; Oakley 1974; Whiting and Whiting 1975). Many communal-resident mothers

work for their religious group's goals or have work responsibilities within a rural or semirural collective subsistence economy. Others, on the other hand, receive state aid for their child and/or are supported by a spouse or their own job. Certainly more communal infants begin life with a mother with multiple role and work responsibilities than do infants in conventional homes. To explore these issues, we asked the mothers to report on the number of different domestic and household tasks they performed, if others performed them, and how often they were performed.

We anticipated that mothers in communes would have both increased work loads and increased social supports and that they would perform tasks with others more often than conventionally married mothers. Mothers in our conventional two-parent nuclear families were more likely to do domestic and household chores and to do more different kinds of domestic and household chores than were mothers in either creedal or domestic communes. Figure 1 shows the number of people reported to be doing domestic and household chores in the three samples. A modal number of three to five individuals were reportedly performing a significant number of household tasks in domestic and creedal communes, whereas only one or two performed these tasks in two-parent nuclear families.

Formally organized creedal groups often have mothers who are freed from any substantial domestic tasks other than care of their own infant, and even infant care is very often not full-time. In the interest of work in other aspects of the community's functioning—such as proselytizing, group child care, community work, or other activities—tasks are often specialized within the community. In many communal settings, particularly the religious ones, individual family units live apart in separate dwellings, so that mothers in such settings often perform more domestic tasks on their own, independent of the community, and therefore have a particularly high overall work load. Domestic group mothers less often have their own separate dwelling to maintain in addition to whatever group or collective work may be need-

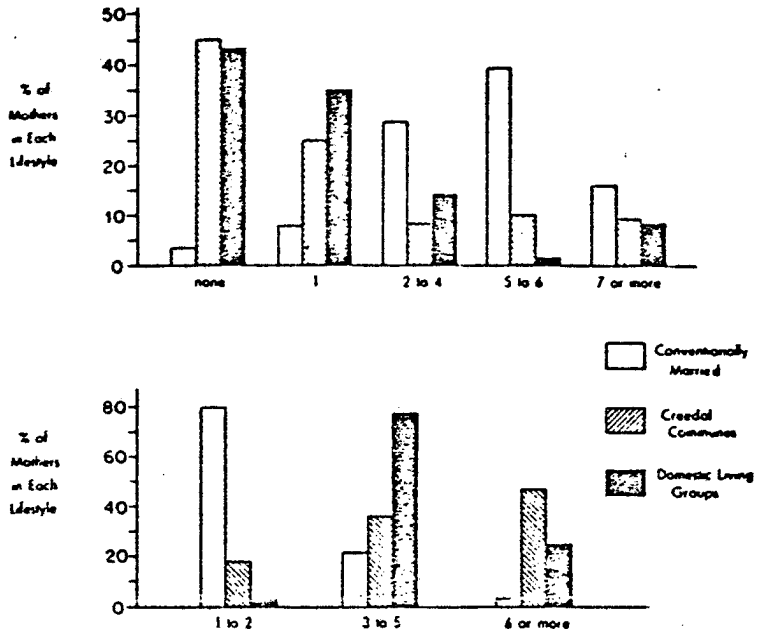

Figure 1: Number of Tasks and Number of People Doing Tasks

ed, and so they often have fewer chores or have more help for chores when they do them. Thus the variability in the amount and kind of domestic tasks performed by communal mothers is very great, from no chores required in some groups, to a continually changing formal schedule in others.

The overall question of work load and support is a complex one. Creedal communal mothers have a very full day; they have a lot to do and they work intensely. But they also have fewer different kinds of chores to do in many cases, and they have more help and shared responsibilities. Conventionally married mothers have a lesser work load; they expend less energy than most communal mothers. But they have a greater variety of domestic chores to do and have less shared help in doing them. This trade-off between domestic tasks, communal, shared tasks, and amount of

work overall is the most notable difference in task structure between communal and conventional families.

Kinship and other social support for mothers. Closely related to assistance in task performance are kinship and other supports provided to young mothers. The first six months of infant care can be a very trying time for a new mother—greater work load, less opportunity to leave the home, postpartum depression, a change in relationship with the father—these and other factors can make the supportive role of close kin and/or friendship very important (e.g., Bernard, 1975; Caplan and Killilea, 1976; Minturn and Lambert, 1964: chs. 4-5).

We suspected that communal parents would be less close and receive less material and social support from their own parents due to their greater geographical mobility (to be discussed in a later section) and to the frequent disapproval by their own parents of the communal lifestyle (cf. Cohen and Eiduson, 1975). At the same time, however, we expected communal mothers to receive more support from nonkin and friends both in and out of the commune. Economic supports were anticipated to be related to the type of communal setting, with creedal groups providing a total subsistence base for the family and domestic groups a highly varied, inconsistent subsistence base (cf. Gardner's 13 rural communes, 1978).

To explore these issues, we asked the parents to report on contacts with kin and nonkin at the birth of the baby, including mutual visiting, economic help, and feelings of emotional closeness. Communal parents lived farther from their own parents than did conventionally married mothers and parents, and there tended to be less economic support provided by parents of communal mothers and fathers. A summary index was constructed (over a variety of measures and time periods) of contact with the mother's kin, including visiting patterns and mothers' feelings of closeness to their families of origin. Conventionally married mothers had significantly more contact with their own natal kin than

did mothers in communal settings, which was expected. Mothers in conventional nuclear families were scored "high" 70% of the time and 22% "low or moderate," compared to a nearly reversed pattern with the communal mothers of 37% "high" and 63% "low or moderate" ($X^2 = 19.84$, $df = 1$, $p < .001$). Patterns of contact with paternal grandparents were similar, but generally characterized by somewhat less contact than with maternal grandparents.

Although there were pronounced differences in frequency and closeness of contact with the maternal grandparents, complete severance of relations was extremely rare. Almost all participant mothers had seen their own mothers at least once in the year preceding the third trimester interview, almost all by the baby's sixth month, and almost all again by the baby's first birthday. Both conventional and communal mothers were seeing their own mothers more times per month at the baby's sixth month than they were before the birth. The birth of the baby seemed to bring even communal mothers closer to their own families. Not a single mother reported that her own parents had rejected or disowned the baby.

Mothers in communal settings also reported being closer to and gaining more support from nonkin or others in their group than did conventionally married mothers who reported gaining support from neighbors or people in their community. Thus, there is no evidence that the social contacts and support available to women in communes is any less strong, and may in some respects be even stronger, than that available to conventionally married mothers; it is the nature and purveyors of this support (kin versus nonkin peers) that distinguishes the two groups of mothers.

Data from interview questions concerning how mothers felt about parenthood reaffirm the interpretation that conventional versus communal differences in support are differences of kind rather than degree. Mothers were asked during interviews when their babies were six months old whether they were finding it easier or harder to be a

mother than they had originally anticipated. Mothers in conventional and communal lifestyles were equally likely to report that things were more or less difficult than their expectations.

Differences on this measure were found, however, in a comparison of creedal versus domestic communal mothers. Of mothers in domestic communes, 75% were finding it harder than they expected, but 75% of mothers in creedal groups were finding it easier. This is consistent with our informal observation that the mother in a creedal group is the beneficiary of a well-organized and supportive environment which often provides communal child care, while the mother in a domestic group may find that the help and support she had been offered by her friends failed to materialize, requiring her to shoulder far more of a burden than she had anticipated. This "parental burden" difference is also consistent with other data reported by Kornfein (1977) on overall lifestyle satisfaction at six and twelve months. Three times as many domestic as creedal mothers reported being dissatisfied with their lifestyle at six months. This difference in reported satisfaction still prevailed at the one-year interview. Given the greater satisfaction with available social supports of all kinds expressed by the creedal groups, we might hypothesize that certain communes provide better support for new mothers than do more conventional kinship ties in spite of reduced involvement with kin. And it was true, although the causes are many, that creedal parents were less frequently in contact with the babies' grandparents than were domestic parents. The creedal lifestyles were also less likely to be evaluated "neutrally" by the grandparents. For instance, grandparents were approving of the Christian living groups in general and disapproving of the other creedal groups. Creedal group members expressed more satisfaction with support and ease of childrearing than either domestic group mothers (who expressed the least satisfaction) or conventionally married mothers. Overall, then, nonkin support systems

seem to provide a satisfactory alternative to kin for most communal mothers.

VALUES AND BELIEFS OF CONVENTIONAL AND COMMUNAL PARENTS

ARE COMMUNE PARENTS "COUNTERCULTURAL"?

Six values domains.[5] Nonconventional families felt that their beliefs and attitudes separated them from others, and they planned to implement their ideals in the ways they raised their children. During the mother's third trimester of pregnancy we interviewed all of our parent participants extensively on their beliefs and attitudes about their lives, their family lifestyle choices, and their childrearing hopes. Figure 2 shows summary scores[6] along six important value dimensions related to potential childrearing outcomes. Each value score consists of a summed set of items from interviews with the parents during the third trimester which asked about personal beliefs in these areas and how parents planned to raise their child with respect to these value domains. Thus, these value orientations are anticipatory (asked before the child was born), and based on parents' reports about their plans or actions.

In Figure 2, mean scores are graphed separately for mothers and fathers[7] comparing conventionally married, domestic commune, and creedal commune samples. A high score on each of these graphs (a positive value above the zero midpoint on each graph) indicates a *nonconventional* value orientation. Note that this fact means that, for example, a positive score of "low materialism" means a *low* value on material possessions, beliefs about acquiring material possessions, money, and wealth. Our presumption is that the conventional belief would favor the importance of material possession; thus a negative score (*below* the

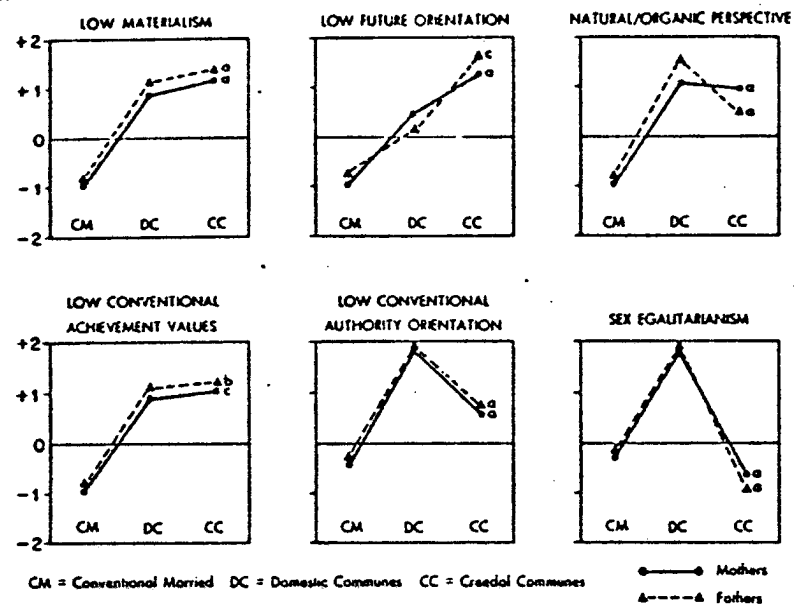

Figure 2: Six Values and Belief Dimensions* for Mothers and Fathers by Conventional Married, Domestic Communes, and Creedal Communes

zero midpoint on each graph) on "low materialism" indicates the presumed *conventional* response. This method of presentation allows the reader to easily compare degrees of conventionality and nonconventionality across values domains; high scores are all nonconventional. Note, too, that these are relative scores, comparing only within our sample; this particular conventional sample might be fairly nonmaterialistic if all Americans were randomly sampled on these value dimensions. All Figure 2 indicates is that, relative to the domestic communal parents, conventionally married parents were much more materialistic.

With the striking exceptions of sex egalitarianism and commitment to conventional authority in society, both domestic and creedal communal mothers and fathers were

STATISTICAL INFORMATION FOR FIGURE 2

Low Materialism

Mothers[a]: $R=.782$; $X^2_2=62.32$, d.f.=4, $p < .001$
Fathers[a]: $R=.742$; $X^2=47.93$, d.f.=4, $p < .001$

Low Future Orientation

Mothers[a]: $R=.444$; $X^2_2=20.13$, d.f.=4, $p<.001$
Fathers[c]: $R=.317$; $X^2=8.76$, d.f.=4, $.10>p$ .05

Natural/Organic Perspective

Mothers[a]: $R=.568$; $X^2_2=32.59$, d.f.=4, $p < .001$
Fathers[a]: $R=.520$; $X^2=23.54$, d.f.=4, $p < .001$

Low Conventional Achievement Values

Mothers[c]: $R=.271$; $X^2_2=7.485$, d.f.=4, $.250> p$ .100
Fathers[b]: $R=.498$; $X^2=21.55$, d.f.=4, $p < .001$

Low Conventional Authority Orientation

Mothers[a]: $R=.505$; $X^2_2=25.92$, d.f.=4, $p < .001$
Fathers[a]: $R=.414$; $X^2=14.906$, d.f.=4, $.005> p$ .001

Sex Egalitarianism

Mothers[a]: $R=.530$; $X^2_2=28.61$, d.f.=4, $p < .001$
*Fathers[a]: $R=.520$; $X^2=23.56$, d.f.=4, $p < .001$

Figure 2: (Continued)

a. The main chi-squared effect for this graph shows a significance level as indicated. The second order effect was not significant at the p = .05 level, one-tailed.
b. The main chi-squared effect was significant at the indicated level. The second order effect was also significant at better than p = .05.
c The main chi-squared effect was not significant at the p = .05 level, nor were second order effects. However, the pattern of relative differences between lifestye groups, and between fathers' and mothers' canonical scores, is still of substantive interest. See Note 5 in text, which describes these data.

different in their value orientation from conventionally married mothers and fathers. The conventionally married sample is always below the zero point—that is, on the traditional or conventional end of the values continuum—for all six values, compared to communal parents. And

with the one exception of sex egalitarianism, the communal parents are always relatively nonconventional—that is, above the zero point on each value or belief dimension. Creedal mothers and fathers were more conventional in their beliefs concerning traditional sex-role patterns in the family than were the conventionally married parents themselves. The creedal parents were also closer to the conventionally married in their beliefs regarding adherence to conventional authority in society. Creedal and domestic communal groups were very similar in their beliefs in the lack of importance of material possessions and materialism, and in their belief in the relative lack of importance of conventional achievement values.

Sex egalitarianism: creedal and domestic group differences. Figure 2 showed a striking difference in overall beliefs concerning sex egalitarianism[8] between creedal and domestic communal parents. Table 3 shows the four key items which differentiated creedal and domestic group parents in this value. Almost all domestic group parents believed that, although boys and girls grow up differently, the cause is environmental, while half of the creedal participants believed in some innate sex differences of temperament or ability. Asked how they would act on their beliefs as their children grew older, most creedal mothers said they would try to reinforce the innate differences by providing different toys or by modeling different behaviors.

By contrast, almost all domestic group mothers intended to play down whatever differences might emerge. Most creedal mothers reported *not* to have been influenced by the women's movement in the United States, while domestic group mothers all reported that they had been influenced.

All of the religious philosophies which make up creedal communal ideologies are traditional in beliefs about sex role differences, especially in the traditional Christian communities. These religious belief systems are reflected in parents' statements about values. In addition, these ideals are often explicitly carried out in practice and are

TABLE 3
Creedal Versus Domestic Communes by Four Measures of Sex Egalitarianism

1. DO BOYS AND GIRLS GROW UP DIFFERENTLY?

	Yes, innate	Row Percent	Yes environment	Row Percent	No	Row Percent	Total	Row Percent
Creedal	14	48	13	45	2	7	29	100
Domestic	3	13	20	83	1	4	24	100
Total	17	32	33	62	3	6	53	100

$x^2 = 11.46$, df = 1, $p < .001$, when "no" collapsed with "yes, environment" responses.

2. WILL YOU DO ANYTHING TO EMPHASIZE THE DIFFERENCES?

	Yes	Row Percent	Don't Know	Row Percent	No	Row Percent	Total	Row Percent
Creedal	16	59	1	4	10	37	27	100
Domestic	3	12	4	17	17	71	24	100
Total	19	37	5	10	27	53	51	100

$x^2 = 6.67$, df = 1, $p < .01$, when "don't know" collapsed with "yes" responses.

3. WILL YOU DO ANYTHING TO PLAY DOWN THE DIFFERENCES?

	Yes	Row Percent	Don't Know	Row Percent	No	Row Percent	Total	Row Percent
Creedal	4	15	0	0	23	85	27	100
Domestic	18	75	2	8	4	17	24	100
Total	22	43	2	4	27	53	51	100

$x^2 = 44.91$, df = 1, $p < .001$, when "don't know" collapsed with "yes" responses.

4. HAVE YOU BEEN INFLUENCED BY THE WOMEN'S MOVEMENT?

	Yes or always sympathetic	Row Percent	No, or disagree	Row Percent	Total	Row Percent
Creedal	4	15	23	85	27	100
Domestic	20	77	6	23	26	100
Total	24	45	29	55	53	100

$x^2 = 34.30$, df = 1, $p < .001$.

made a part of the creedal lifestyle—women dress in prescribed ways, do nearly all direct child care, do most cooking and domestic work, and so forth. One of the secular creedal groups also maintains a strictly traditional sex-role differentiation. Domestic groups have no formal ideology and the beliefs of residents, especially women, are heavily influenced by current political change in the status of women in society and within the family. These women, experimenting with marriage and domestic arrangements,

clearly are also advocating a change from traditional sex-role patterns in their communes. As we have seen earlier in this study, they also are much more likely to have higher status occupations than creedal mothers.

Naming practices. Another index of countercultural values comes from naming practices. Although a family with nonconventional values may use conventional names, it is the rare conventionally married couple who would name their first-born child Sunrise or Youthspirit.[9] Thus, naming practices serve as a highly visible cultural code in the same way as a uniform or a shaved head. Parents in the nonconventional families were, in fact, much more likely to give their children nonconventional names. In creedal groups, these names generally express the creed explicitly. For example, all of the Christian children have biblical names. All of the Eastern groups but one have given their children Indian names. Although parents in domestic communes may not have an explicit shared creed to express in names, these parents did give nonconventional names, apparently expressing either their individually held values—Harmony and Liberty, for example—or their desire to be assertively unconventional or experimental—names like Ganja, Yoniwa, or Maka, which have meaning only to the giver.

Conventionally married couples almost always gave conventional names to their children. Only two conventional couples gave a name so striking and unusual that three independent judges noticed it in a randomized list of children's names in the study; those two names—Cloud and Equity—did seem to indicate a spirit similar to some of the domestic group names. Nearly one-third of the children in conventional nuclear families were given biblical names. The reasons for these names may have included a religious commitment (although biblical names are common in America); but the lifestyle the child leads does not have the same total reinforcement of the religious ideal as it has for the creedal communal members.

In some respects, early naming provides one of the most powerful labeling devices the family will ever use to define their child. We are particularly interested in how these names are used by adults in the communal families, and by others in the larger community when children begin leaving their homes for school, health care, and other purposes. Unconventional names may be expected to have direct effects on the child's self-concept, as well as his/her identification with various possible peer groups and acceptance by them.

CHANGE AND MOBILITY IN FAMILY LIFESTYLE

WHICH BABIES STAY IN COMMUNES? WHERE DO THE OTHERS GO?

The communal families were experimenting with their domestic and child-rearing arrangements when initially contacted and began their involvement with the longitudinal study. Lifestyle changes after the birth of the baby were therefore anticipated, and in fact occurred. Table 4 shows changes in lifestyle in the communal sample through approximately the babies' first 18 months. Moves out of communes are outlined in Section A; the few inward moves are detailed in Section B. Conventionally married couples are not included in the table; only five of the 52 families experienced any family change (both involving a divorce or separation) compared to almost half (44.6%) of the commune sample.

The relatively small number of new converts to communalism within our population since the babies' births (Table 4, Section B) makes it impossible to predict any stable trends. Religious communes, perhaps because more numerous and visible because they proselytize, were more likely to receive new participant members, whereas the three secular groups received none. Rural domestic communes appear still to hold out a relatively strong appeal to our participant families, at least stronger than any other type of communal group. The back-to-the-land ideal of the

TABLE 4
Life Style Changes: Moves Out of and Into Communes Between Birth and 18 Months

A. Percent of Original Commune Sample Leaving the Initial Life Style by Sub Category.

Total = $\frac{25}{55}$ = 45%

Creedal $\frac{6}{29}$ = 21%		Domestic $\frac{19}{25}$ = 76%	
Religious	Secular	Urban	Rural
$\frac{4}{20}$ = 20%	$\frac{2}{9}$ = 22%	$\frac{15}{19}$ = 79%	$\frac{4}{6}$ = 67%
Eastern	Christian		
$\frac{3}{11}$ = 27%	$\frac{1}{9}$ = 11%		

B. Number of Participants Moving into the Commune Life Style After the Birth of the Baby, by Sub Category.

Total = 9

Creedal 3		Domestic 6	
Religious	Secular	Urban	Rural
3	0	1	5
Eastern	Christian		
2	1		

1960s—a rural community, building one's own house, having a garden—is still alive among at least some California families.

As measured by lifestyle change, the relative stability of the physical and social setting for the infant differed dramatically, not only between conventional and communal fami-

lies, but also between creedal and domestic communes (Table 4, Section A). Three-fourths of the families who were living in them by the babies' eighteenth month, compared to only 20% of creedal families who left their groups. All types of creedal groups had a low rate of attrition. Both rural and urban domestic groups lost members much more rapidly both through moves out and dissolution of the groups. It is interesting that of the four surviving urban domestic living groups, three were the three triadic marriages. This fact supports interviewers' impressions that this type of experimental family is a conscious and serious commitment for its partners, comparable in many ways to conventional marriage (cf. Constantine and Constantine, 1973).

Moves out of communal settings were sometimes related to marital change as well. Domestic communal mothers, just as they were more likely to leave communal lifestyle, also were more likely than creedal mothers to change mates or leave their mates after the birth of their infant. Other commonly cited reasons for leaving the domestic group were a desire for privacy and more space or to strengthen the sense of the family as its own unit.

Participants also made frequent residential and geographic moves, sometimes associated with lifestyle change, but sometimes not. (Several communes are multilocal, for example.) Table 5 summarizes the comparison between conventional and communal families for location changes through the babies eighteenth month. Commune-born babies were more likely to move and to move more frequently than were babies born into conventional families. Unlike communal parents, the reasons for the moves of conventional families were typically related to buying a house or moving to a location where the father had a better job opportunity—although a few, as noted before, were associated with separation and divorce.

The domestic and creedal groups were not notably different in stability of residence, but, while the moves by domestic group members were primarily also away from the lifestyle, the moves in the creedal groups were frequently *among* various branches of the creedal organization. Thus,

TABLE 5
Number of Geographical Moves Between Birth and 18 Months, in Conventional and Communal Families

Number of Moves	Conventionally Married Families (N=52)		Communal Families (N=54)	
	Number	Column Percent	Number	Column Percent
0	23	44%	15	29%
1	21	40	18	33
2	7	14	11	20
3-6	1	2	10	18
	52	100%	54	100%

$X^2 = 10.18$, df = 3, $p < .025$.

although the physical locale and the people around the baby would change, the routine and cultural milieu would be quite consistent from place to place.

From the infant's point of view, these moves mean changes in physical and social environments, daily routines and caretakers, and changes in the availability and identity of male or father figures early in life. Although creedal groups provide multiple caretaking and a diversified setting for a young child, the complexity and cultural characteristics of the setting are likely to remain fairly stable. Babies born into domestic communes, however, are likely to experience sequential changes in setting; in routine; and in number, sex, and identity of the people around them.

Creedal groups use many more of the commitment mechanisms suggested by Kantor as associated with long-term survival of nineteenth-century communities (but cf. Gardner, 1978, chapter 14, who suggests that the length of time in judging survival is crucial, and that only some forms of commitment were related to longevity in his sample of 13 modern Western U.S. rural communities). The mothers drawn to each lifestyle no doubt also differ in their person-

ality and commitment to experimentation. All of these factors and many others relate to the needs of new mothers (Kornfein, Weisner, and Martin, 1977) and influence the differential rate of change in creedal and domestic communes.

CONCLUSIONS

COMPARISONS BETWEEN CONVENTIONAL AND COMMUNAL FAMILIES

We have presented a few critical learning environment variables likely to influence childrearing in communal and conventional homes. Differences were strong and consistent between conventional and communal lifestyle categories for feeding practices (more communal babies were breastfed, breastfed longer, and fewer were given early solid food); family size and household size (communes were larger and more diverse); a series of demographic factors; numbers and variety of people actually present around infants (communes had more, and more different people); the numbers of primary caretakers and the variety of kinds of caretakers (communes had more and more kinds, but mothers were actively involved throughout the sample); the mother's work load (commune mothers had fewer tasks but may have had a heavier overall work load); social supports for the mother (conventional mothers reported more contacts with kin, although communal mothers did remain in contact and had more nonkin supports); values and beliefs (conventional parents generally were more traditional across six value dimensions and in naming practices); and in change and mobility (communal parents were much more likely to change mates, lifestyles, and locations).

On other variables, babies in communes and conventional nuclear families shared a fairly similar early learning environment. Two important examples of similarity were: mothers were the most important primary caretakers of their infants in almost all families, regardless of lifestyle;

and there were no consistent patterns of differences in neonatal or infant physical growth and development or health.

Learning environment differences also were discovered within the communal lifestyle—in this article contrasting creedal and domestic types of communes. Differences included size and density of household (creedal groups larger and denser); a small number of demographic characteristics of parents; values and beliefs about sex roles (creedal group parents less egalitarian); the ease or difficulty in child care reported by mothers (creedal mothers reporting an easier time); and change and mobility (domestic group families moving out of communal lifestyles more often).

All of the data analyses presented have focused on lifestyle comparisons, yet lifestyle is confounded by and interacts with demographic characteristics of the families. In addition, the qualitative descriptions of some of the communal settings at the beginning of the article show how much family and child-rearing styles themselves are parts of an ideological and community context. Thus, the comparisons are descriptively informative about social organizational features of lifestyle differences and children's learning environments, but their interdependence with each other and with related demographic variables suggests caution in making generalizations about conventional and nonconventional family influences on children.

FUTURE FINDINGS

Subsequent analyses as the infants grow older will explore the consequences for both parents and children of the home environmental differences reported here. We anticipate lifestyle differences to become increasingly important in children's behaviors when speech, imitation, and modeling begin, and as the children begin comparing their own family lifestyles to those of others.

Furthermore, the lifestyle memberships used for initial sampling of nonconventional families are themselves

changing rapidly, and the most rapid changes are occuring in the communes. The differential attrition in creedal and domestic groups (Tables 4 and 5) and the resultant changes in marital and child care arrangements vividly shows this rapid change. For longitudinal analysis, therefore, the learning environment variables—rather than the lifestyle categories themselves—will more and more often be used to describe the children's families and to compare various outcomes. For example, children who experienced more than three primary caretakers in their first two years of life can be compared with those who did not; children whose parents remained in communes for the first three years of childrearing can be compared to those with only one year, to those with none, and so on. Within a longitudinal, natural experimental study, changes in the initial sampling categories are inevitable and their exact incidence cannot be anticipated. However, it is the *sequence* and *pattern* of critical environmental and other factors which characterized each child and family that will be used in analysis, rather than merely the initial sampling categories.

Different strategies for analysis of the longitudinal effects of different lifestyles on children is the appropriate strategy, rather than reliance on a single paradigm. Much of the analytical strategy depends on the kinds of outcome variables being considered and the level of analysis. The present study focused on differences in specific social organizational features of communal and conventionally married groups related to children. That is, from the point of view of an infant during the first year of life, what does a creedal commune "look like" and what are some of the things about it that might affect that infant's development? These are social organizational or ethnographic questions, rather than individual difference questions related to psychological or social outcomes later in life.

The study of these children will continue until they reach public school age. One of the central questions of interest is the importance of the family learning environment variables and the parents' extremely wide-ranging attitudes toward school achievement on such outcomes as cognitive

development and formal measure of "school readiness." It is also interesting to speculate on the issue of family conventionality itself. As the culture and lifestyles of American families become more varied and diverse, the communal, social contract, and single mother families we are following may be less unusual against the background of American family settings of the future.

NOTES

1. This work is supported in part by the United States Public Health Service Grant No. 1 RO1 MH 24947, and Carnegie Corporation Grant B-3694. The work is also supported by Research Scientist Award 5 105 MH 70541-06 to Bernice T. Eiduson, Ph.D., who is Principal Investigator. Thomas S. Weisner is Co-Principal Investigator. Senior Investigators include Jannette Alexander, D.C.S.W.; Jerome Cohen, Ph.D.; M. R. Mickey, Ph.D.; and Irla Lee Zimmerman, Ph.D. Computing assistance was obtained from the Health Sciences Computer Facility, University of California, Los Angeles, supported by the National Institute of Health, Special Research Resources Grant RR-3. See Alexander 1976; Eiduson 1974; Cohen and Eiduson 1975; and Eiduson and Weisner, 1978 for additional information. An earlier version of this paper was presented at the American Anthropological Association, Washington, D.C., November 1976, in a Symposium on "Intracultural Variation and Early Childhood Socialization."

2. Some authors distinguish "communes" from "living groups," communes being considered as significantly more committed financially and philosophically and living groups as more loosely bound together. This distinction is applicable to some extent to the creedal/domestic dichotomy, creedal groups having more of the qualities of "communes." We have used the generic term communes in this article.

3. The Ns for the four initial sampling categories were as follows: social contract, 52; single mothers, 50; conventionally married, 52; communal, 54. The sample sizes reported in the tables throughout the article vary slightly due to missing data in a few cases, changes in lifestyle at different points in data collection, or data not relevant for certain family lifestyles (e.g., questions on fathers for single mothers living without a man).

4. An elaboration of Table 1 and a descriptive summary of creedal and domestic communes are available from the authors.

5. Data on values and beliefs are taken from a study by Weisner et al., 1976, "Ideology, Values and Family Life Styles", submitted to the Applied Research Branch, National Institute of Mental Health. Additional values data are currently being added by Burke Rochford of the Family Styles Project, in collaboration with Jerome Cohen.

6. These scores are canonical coefficients corresponding to lifestyle in a 3 (lifestyle groups) x 4 (value dimension score divided into quartiles) contingency table. The values are scores for each lifestyle group that maximize the correlation with each value dimension. The data give a clear graphical display of the relative

position of each group on each dimension. Since the scores are scaled to have unit standard deviation over the combined set of subjects, the strength of the relation to each value dimension is indicated by the canonical correlation (R) and its statistical significance. For 3 x 4 tables, two canonical correlations are computed, and there is a subdivision of the six degrees of freedom chi-square into a 4 df main-effect chi-square (corresponding to the larger R) and a 2 df chi-square. The correlation between the row (lifestyle groups) and column (values) categories is well summarized by the larger R and the corresponding score value for the categories if the larger main-effect R is statistically significant and the smaller R is not significant (this is indicated by an "a" superscript). If both canonical correlations are statistically significant (indicated by the "b" superscript), the interrelation between the row and column categories is more complex than that indicated by the larger R only. A "c" superscript indicated that neither the main effect nor the residual effects are significant.

7. The profile of value orientations for the fathers of our babies are quite similar to the mother's profiles. This regularity in pattern is not the same as agreement or disagreement within individual couples, but rather says only that the overall distribution of the scores for fathers resembled the scores for mothers.

8. Our sex egalitarianism items are focused on mothers' plans for early childhood and many were asked as open-ended items and postcoded. Although they are not based on standardized and/or normed research instruments, they follow in content many of these kinds of scales.

9. These names are pseudonyms, but reflect the style and intent of the originals.

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