

The Long-term Evolution of the Family Structure of Teenage and Older Mothers*

By: SHEPPARD G. KELLAM, REBECCA G. ADAMS, C. HENDRICKS BROWN, and MARGARET E. ENSMINGER

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Abstract:

Research into the evolution of the family structure is important in understanding the consequences of teenage motherhood. In this longitudinal study of black, urban mothers in Woodlawn, a Chicago community, we compare 15 years of family evolution of teenage and older mothers. Teenage mothers not only frequently begin child rearing as the only adult at home but also are at high risk of becoming the only adult and remaining so as long as 15 years after the child's birth. This tendency towards mother aloneness is associated with less help in child rearing and less participation in voluntary organizations.

Article:

INTRODUCTION

The combinations of adults in the homes of young children provide an important way of classifying types of families (Kellam et al., 1977). Different combinations will hypothetically result in different roles, child rearing, and child outcomes. In this paper we report on the ways in which becoming a mother during one's adolescent years influences family structure over the span of the mother's child-rearing cycle. We first trace the evolution of the teenage and older mother's family structure from the birth of her child to 16 years later. We next explore how family structure as defined by the adults at home is related to the amount of help in child rearing. We then examine the effects of teenage motherhood and family structure on the woman's social ties

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to social institutions and individuals outside the family. Finally we explore the theoretical and policy implications of the results.

The results are based on longitudinal, mostly prospective data on the mothers and their families. The data span the period from the birth of the mother's first child to the time the study children were 16 or 17 years of age.

Our population consists of the natural mothers of the 1966-1967 first-grade children in Woodlawn, a black, poor, urban community on Chicago's South Side. This total population of children and families was assessed in 1966-1967 and followed up 10 years later as part of a prospective, longitudinal, epidemiological, social psychiatric program of research and service. Teenage motherhood was common in this population, which consisted of women of various ages and at various stages of child rearing.

In recent years many people have become concerned about teenage motherhood, based on the belief, increasingly supported by evidence, that women who begin childbearing early in life are at a disadvantage which makes it difficult for them to rear their children effectively. Teenage motherhood seems to be associated with a variety of negative sociological and psychological consequences, such as marital instability (Norton and Glick, 1976), welfare dependency (Moore and Caldwell, 1977), illegitimacy (Baldwin, 1980; Osofsky, 1970), low achievement in education (Hofferth and Moore, 1979), and psychological distress (Brown et al., 1981).

The transition to motherhood requires women to take on many complex and demanding roles and to modify or abandon others (Bacon, 1974). Potentially, this transition is more difficult than other role transitions as the change occurs abruptly and is irreversible (Rossi, 1968). Although much greater specification of both the developmental and socialization processes is needed, adolescence is a rapidly evolving period during which much psychological development and socialization occurs. The impact of motherhood on both the developmental and socialization processes is obviously likely to be profound (Baizerman et al., 1974). Research on the consequences of early motherhood is important in understanding adolescence as well as teenage mothering.

Teenagers who marry seem to have difficulty in maintaining marital ties. Many researchers have documented this instability compared to the marriages of older women (Johnson, 1974; Hardy et al., 1978). Osofsky et al. (1973) reported that when adolescent pregnancy is accompanied by marriage, divorce has been three to four times more frequent than among couples married later in life. Reporting on 1960 and 1970 census data, Glick and Mills (quoted in Chilman, 1978) found that early marriages (at less than age 20 for males and less than age 18 for females) are more likely to end in divorce for both white and black males and females.

How the teenage mother's childbearing history is related to her success at maintaining marital relationships remains an important area of study. Women have not been studied often over the duration of the childbearing years, so that spacing, family structure, and number of children as functions of the age of mother at first birth are not fully understood. An exception is the work of Trussell and Menken (1978), who found that women who begin childbearing early are likely to have more children, to space them closer together, and to have more unwanted and out of

wedlock pregnancies than women who start childbearing later. These findings hold within racial, educational, and religious subgroups. However, these investigators did not describe the evolving family structure. Among young mothers in New Haven and Hartford clinic samples, Jekel et al. (1973) found that those who were married were more likely to conceive a second child within 18 months after childbirth than were the unwed mothers.

The research thus far points to the tendency of teenage mothers to be unwed, to experience instability in their marital histories, and to have more children possibly spaced closer together than do older mothers. This work provides a background but is yet an incomplete picture of the evolution of the family structure of teenage mothers and of their success at maintaining ties with individuals and institutions outside of the family.

The literature on teenage motherhood suggests the need for study of the longitudinal evolution of the mother's family structure, including its alternative types. Furstenberg and Crawford (1978) have described the residential careers of the East Baltimore teenage mothers they investigated through five years postpartum. The most common arrangement was for the teenage mother to be living with one or both of her parents or with another family member throughout the five years. Few of these teenage mothers lived alone from the start, but the proportion increased over time. By the end of the five-year study, 26% of the young mothers were established in households in which they were the only adult. Our data, on a racially and economically similar population of first-grade children and their families, extends retrospectively to birth of the mother's first child, and prospectively to when the study child was aged 16 or 17.

Evolving family structure should be studied over a sufficiently long period to include the entire child-rearing stage. Many of the important studies of teenage motherhood have included measures of effects over only a short time span (Stone and Rowley, 1966; Presser, 1974; Jekel et al., 1973; Lorenzi et al., 1977). Thus, it is not yet clear which are short-term and which are long-term consequences of teenage motherhood. In order to build further on this work, one needs to study a population in which (a) the frequency of teenage motherhood is sufficient, (b) there are mothers of various ages in various family structures, and (c) mothers are followed long enough to distinguish between short-term and long-term effects. The research reported in this paper generally meets these criteria in a specific kind of community, namely, poor, black, and urban.

THE WOODLAWN STUDY POPULATION

Age-specific, community-specific studies of social, biological, and psychological structure and function are necessary complements of broader studies such as those on national probability samples. Because community studies focus on defined populations, they may reveal patterns of family structure that differ from those in other communities or in less specific samples. In *Mental Health and Going to School* (Kellam et al., 1975), the advantages of community studies have been discussed more completely. Rutter et al. (1970) also noted the necessity of community studies, saying that one cannot base national-scale planning on nationwide statistics, which do not reflect the differing characteristics and needs of different areas. Mental health and illness, as well as family structure, may vary considerably from one community to another and, therefore, warrant attention from studies within specific kinds of communities. Indeed, the relationship between age of mother at first birth and the evolution of her family structure may vary from one kind of community to another.

Woodlawn is an urban, poor community on Chicago's South Side. Between 1955 and 1966, it changed from 40% to almost totally black and became substantially overcrowded, with lower median income and higher unemployment (de Vise, 1967). By 1966, it ranked among the four most impoverished Chicago neighborhoods. However, there was and is heterogeneity within Woodlawn, some sections having higher median income and more home ownership than others.

Between 1964 and 1969 we made assessments of the mental health of all the first- graders in Woodlawn at several points in each first-grade year. Further assessments were made on samples of these children in their third-grade years. Interviews were conducted in the spring of 1965 and the spring of 1967 with the mothers (or mother surrogates) of the children who were in first grade in those two years. These assessments were coupled with service and evaluation programs (Kellam et al., 1975). In all of these service and research ventures, we were supported by a community board composed of leaders from the community's largest citizen organizations (Kellam and Branch, 1971; Kellam et al., 1972).

For the long-term follow-up study, the target population has been the entire first- grade population of 1966-1967, the 1241 students who remained in the Woodlawn first-grade classrooms during the entire school year, together with their families. By 1975, when we began our search for families for the follow-up, over two-thirds of this group no longer lived in Woodlawn. Our study began with a specific community population and has followed it through time and geographic mobility.

In 1975-1976 we located and reinterviewed 939 (75%) of the mothers or mother surrogates of the 1241 families from the 1966-1967 study. The mothers' refusal rate was 5.9%. An additional 18.5% of the mothers could not be reinterviewed because we could not find them or because the families had moved from Chicago. The mothers' refusal rate is low by current survey standards, and we think this reflects the efforts of the community board and the fact that services were provided as back-up to the research.

We compared the early information on the mothers whom we reinterviewed with that on the mothers we did not. The mothers whom we could not reinterview were somewhat younger (young mothers tended to refuse more often); they were more mobile before and during the child's first-grade year; and their children were somewhat more likely to have been in parochial schools in first grade. No differences were found between the mothers' 1966-1967 psychological well-being, early family income, welfare status, or the variety of combinations of adults at home. It was somewhat harder to trace families of parochial school students because these schools lacked the centralized, computerized records that the Chicago public school system maintains. Further information on how we relocated our population is contained in a recent paper (Agrawal et al., 1978).

Variation in Family Structure

Family types were classified in terms of the adults present at home, on the basis of information obtained in the 1967 family interview with the mothers (or mother surrogates) of the first-grade children. A taxonomy of the various combinations of adults present in the households of the 1966-1967 population of first-graders' families was presented in Kellam, Ensminger, and Turner (1977). There were 86 different combinations of adults in the homes of first-grade children in

1966-1967. In 1964-1965 we found 79 different combinations of adults, which were very similar to those found in 1966-1967. The taxonomy illustrated the diversity that existed in the households of first-grade children in the community, and guides the combinations of types for analyzing particular questions regarding the structure and function of the family.

Ten major classes of families were defined. Mother alone, mother/father, mother/ grandmother, mother/aunt, mother/stepfather—all with or without others—were the largest categories raising first-grade children in 1966-1967 in Woodlawn.

Clear differences in child outcomes have been shown to occur among these very different varieties of families (Kellam et al., 1977). Family type was found to be strongly related over time to the child's social adaptational status (SAS) and his or her psychological well-being. The results suggest that (a) mother-alone families entail the highest risk in terms of social maladaptation and psychological well-being of the child; (b) the presence of certain second adults has important ameliorative functions—mother/ grandmother families being nearly as effective as mother/father families, with mother/ stepfather families similar to mother alone in regard to risk; and (c) the absence of the father was less important than the aloneness of the mother in relation to risk.

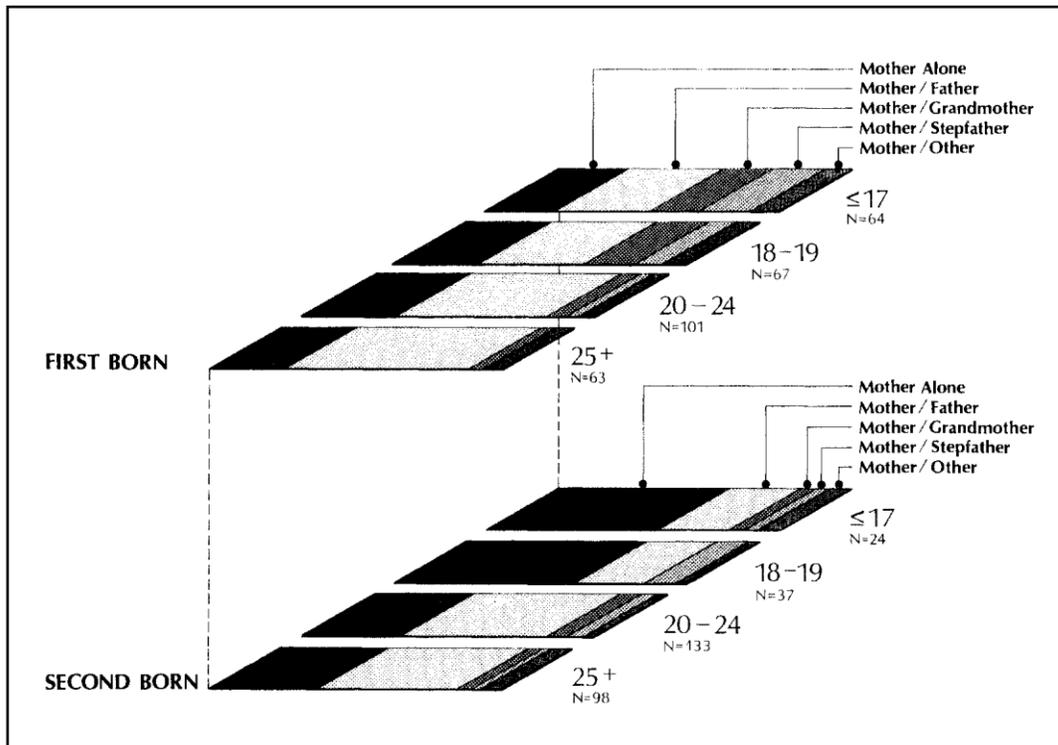
RESULTS

In this section we first report on the adult compositions of the families of mothers in 1967. We demonstrate the important relationship to her family structure of both the mother's age and whether the study child was her firstborn or second born. The mothers have been separated into four age categories according to their age at the birth of the study child: 17 years old or younger, 18 to 19, 20 to 24, and 25 years or older.

We then trace the evolution in family structure of the three most frequent 1967 family types from the birth of the study child, through first grade, and to the long-term follow-up. The most frequent 1967 family types were mother/father, mother alone, and mother/grandmother.¹

Our sample includes only the 487 mothers of firstborn and second-born study children who were successfully followed up 9 to 10 years later. By imposing this sample restriction, we focus on those mothers on whom we had long-term data and who were at a similar early stage of their child-rearing cycle.

FIGURE 1. AGE OF MOTHER AT BIRTH OF CHILD, AND FAMILY TYPE AT FIRST GRADE



Family Structure at First Grade, Birth Order, and Age of Mother

First we examine how family structure differed for mothers of different ages when the study child was in first grade (Figure 1). Each large rectangle in Figure 1 represents the distribution of family types for each age group of mothers for either firstborn or second-born children. We first report on the relationship between mother's age at birth of her first child and 1967 family structure; then we report on the relationship for second-born children; and finally we compare family structure for first- and second-born study children.

For firstborn children, family structure is clearly related to mother's age.² Six years after the birth of the study child, older mothers (those over 20) were more likely than teenage mothers to be in mother/father families. Well over half of these mothers lived with the child's father, whereas only one-third of the teenage mothers of firstborn children lived with the father.

The chance of a firstborn child being in a mother-alone family was similar regardless of the mother's age. However, firstborn children of teenage mothers often were living with an adult other than the father, notably a grandmother or stepfather; these family types were uncommon among older mothers.

For second-born children there is an even stronger relationship between age of mother at study child's birth and family type.³ Again, more than half of the older mothers lived in mother/father families, while only one-fifth of the teenage mothers of second-born children were living with the father. Second-born children of teenage mothers were twice as likely to be living in mother-alone families in first grade compared to second-born children of older mothers.

Teenage mothers of second-born children were much more likely to be in mother-alone families than teenage mothers of firstborn children. One can see this in Figure 1 by comparing the sizes of the darkest shaded areas (mother alone) for first- and second-born children. Teenage mothers of firstborn children were also much more likely to be in mother/grandmother families than were teenage mothers of second-born children.

For the older mothers, there was no difference in family structure between the firstborn and second-born study child; the risk of mother aloneness was about the same in both. The percentage living in mother/father families remained fairly high.⁴ The percentage living in mother/grandmother households did not decrease.

Generally, teenage mothers were less likely to be living in mother/father families than were older mothers. Alternatives to mother aloneness which had been available for teenage mothers with one child—such as mother/grandmother or mother/stepfather families—were very infrequent among teenage mothers with two children.

For most of our subsequent analyses, we combine the categories of firstborn and second-born children because this distinction does not affect the relationship of age of mother to evolving family structure in ways other than those described above.

The Long-term Evolution of Family Structure

It has been shown that the family structure of the first-grade child was much influenced by the mother's age at the study child's birth. We describe how these family structures evolve over a much longer span of years, to the time when the first-grade study child is 16 or 17 years old. We also report on when the father leaves the family as well as the number of children, since these are functions of age of the mother at study child's birth. Two measures of father's separation are used: the percentage of fathers for each family type that never lived in the home, and the mean age of the child when (and if) the father left the home.

For each major family type represented by Figures 2 through 4, there appears to be a relationship between age of mother and sample loss at follow-up. Overall, the sample attrition was 27% among the mothers reported in these analyses. Those mothers who were lost to follow-up did not differ in their 1966-1967 family structure from those followed up. However, teenage mothers tended to refuse to participate in the follow-up interview more often than did older mothers.⁵ Although refusal was not the largest source of sample attrition (more families moved from the Chicago area or could not be located), it does show the strongest relationship to age of mother among causes of sample loss.

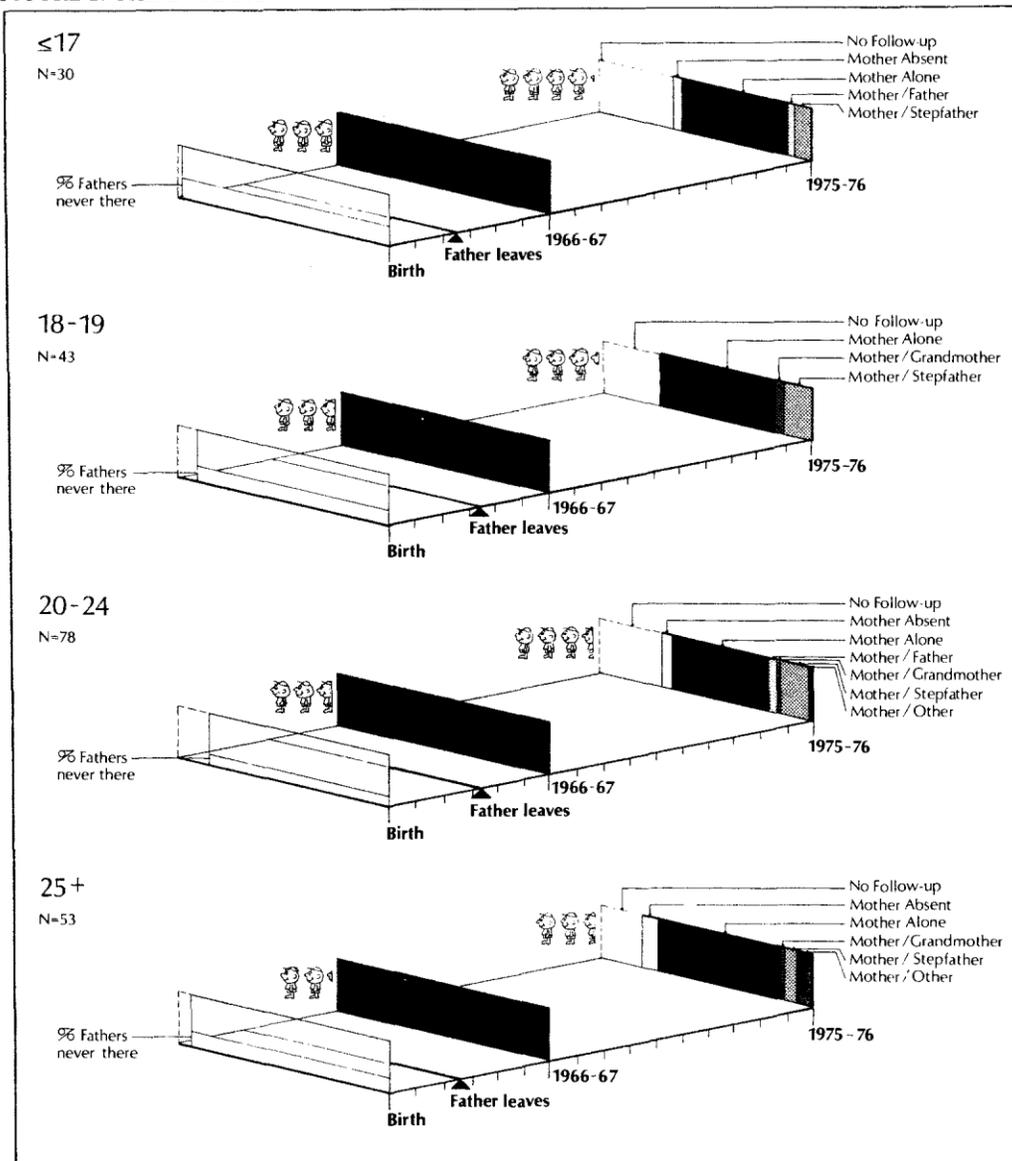
It is possible that the missing mothers may have left a distorted picture of evolving family structure. For example, it is possible that a sizeable number of the teenage mothers who refused to be reinterviewed were happily married in 1975-1976. Arguing against this is the trend toward mother aloneness already present in 1966-1967, when the presence of a second child severely limited alternative family structures for teenage mothers. Also, the refusal of teenage mothers to be reinterviewed fits the picture, described later, of the social isolation of mothers who were living alone.

First-grade mother-alone families. Family evolution for mothers who were the only adults at home when the study child was in first grade is shown in Figure 2 along a time axis from birth to 16 years later. A separate axis is shown for each of the four age groupings of mothers. All of the mother-alone families in 1966-1967 are depicted in Figure 2 by the black rectangle placed at the 1966-1967 point along the time axis. The percentage of fathers who were never present is shown by the level of the horizontal line within the rectangle at the birth point along the axis. The mean age of the study child when father left, if he was ever present in the household, is shown by the horizontal line along the axis labeled father leaves. The 1975-1976 rectangle shows the distribution at follow-up 9 to 10 years later of the mother-alone families, including that fraction not found at follow-up. The child figures depict the average number of children at first grade and at long-term follow-up.

In mother-alone households, the age of the mother at the study child's birth does not influence the timing of the father's departure. Neither the percentage of fathers who had never lived in the families nor the mean age of the child when the father left differed by the age of the mother at the birth of the study child.⁶

Mother-alone families tend to stay mother alone: between 68% and 79% in the various age groups remained mother alone (Figure 2). These percentages are essentially constant throughout the four age groups.⁷ The only

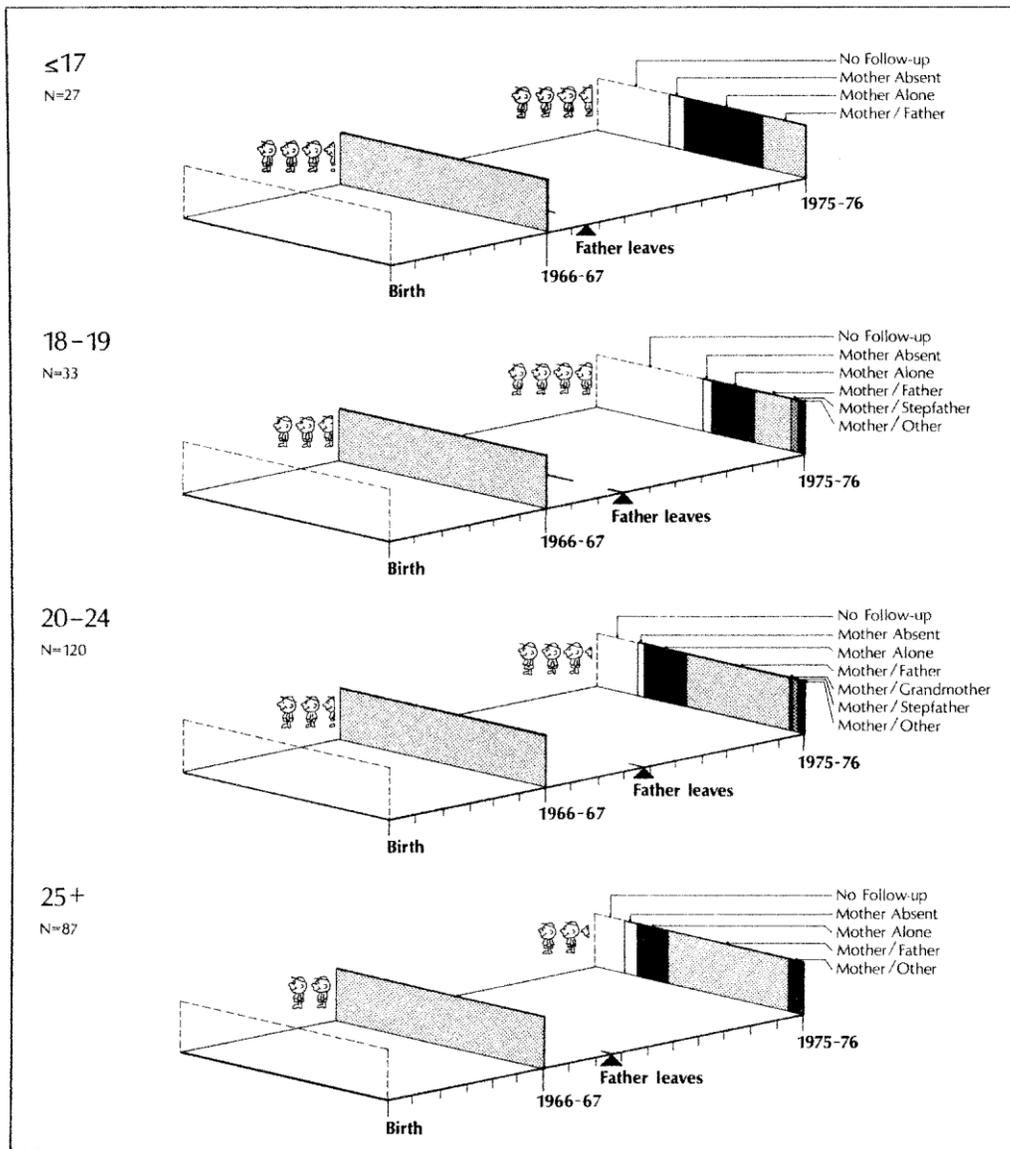
FIGURE 2. THE EVOLUTION OF MOTHER-ALONE FAMILIES BY AGE OF MOTHER



other family structure into which mother-alone families evolve with any frequency is that of mother/stepfather. Among mother-alone families, those who were 25 years of age or older at birth of study child bore the fewest children.⁸ On the average, by the time of first grade, the mothers younger than 18 had one more child than did the mothers 25 or older and 1.5 more children within the 15 years following the study child's birth.⁹

First-grade mother/father families. In Figure 3 all of the mother/father families from 1966-1967 are shown in the shaded rectangle placed at that point along the time axis. The distribution of family types in 1975-1976 is shown in the rectangle placed at that point, including the fraction not interviewed or located. In those cases where father left sometime after first grade, the mean age of the study child when the father left is

FIGURE 3. THE EVOLUTION OF MOTHER/FATHER FAMILIES BY AGE OF MOTHER

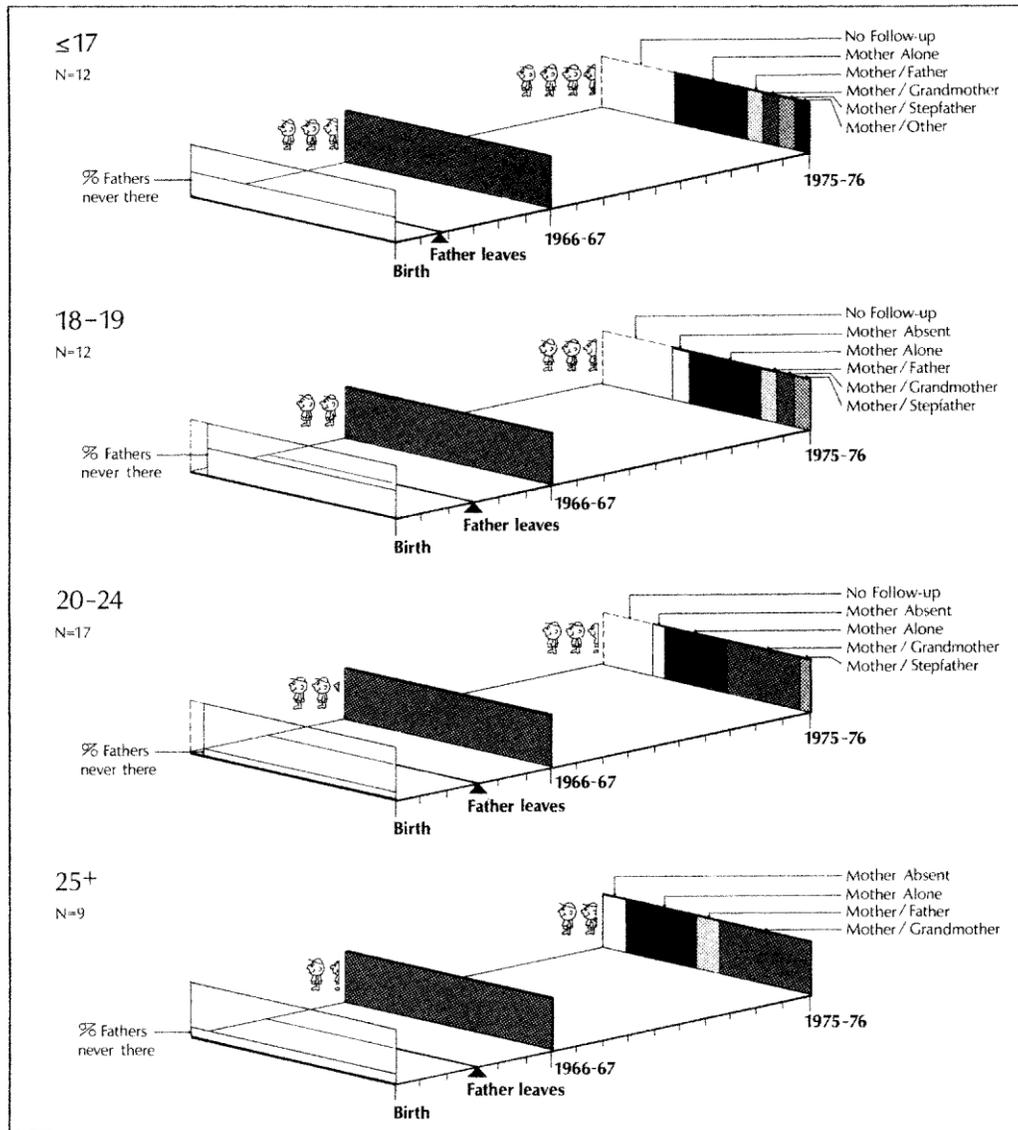


marked along the time axis between first grade and follow-up. The child figures depict the average number of children.

The evolutions in structure of mother/ father families for different age groups were not at all similar¹⁰ and represent important contrasts between teenage and older mothers. Older mothers in 1966-1967 mother/father families were twice as likely to be living with the child's father 10 years later, compared to teenage mothers. While 33% of the youngest mothers and 38% of the older teenage mothers (ages 18 to 19) remained in mother/ father families, 62% of the 20- to 24-year-old mothers and 68% of the mothers 25 years old or older remained in mother/father families.

Over half (54%) of the teenage mothers who originally were in mother/father families in 1966-67 were living in mother-alone families at the time of reinterview. In contrast, only one-quarter (24%) of mother/father families of older mothers became mother

FIGURE 4. THE EVOLUTION OF MOTHER/GRANDMOTHER FAMILIES BY AGE OF MOTHER



alone. At the time of reinterview, mother/stepfather households were not a frequent alternative for the mothers from the 1966-1967 mother/father families of any age group.

In mother/father families which the father left, separation from father occurred earlier for families of teenage mothers than for older mothers. For teenage mothers, the mean age of the child was about 7.6 when the father left, while for the older mothers the mean age was 9.0.

The number of children born to the mother/father families was also related to the mother's age at birth of study child.¹¹ Mothers aged 19 or below had, on the average, 1 more birth in the first six

years after the birth of the study child than did the mothers aged 25 or above. By the time of follow-up, the mothers aged 17 or younger had, on the average, over 1.5 more children than did mothers aged 25 or above.

First-grade mother/grandmother families. Although mother/grandmother families occurred less often than mother-alone or mother/father families, they are of considerable interest since children from these families are equal to mother/father children in their social adaptation to school and psychological well-being, at least as far as third grade (Kellam et al., 1977).

Age of the mothers at childbirth is related to their likelihood of remaining in mother/grandmother families. About half of the first- grade mother/grandmother families of teenage mothers were mother-alone by the time of long-term follow-up. In contrast, there seems to have been a tendency for the older mothers to remain in mother/grandmother families (see Figure 4). The 20- to 24-year-old mothers were about equally likely to be in mother/ grandmother families or mother-alone families by long-term follow-up. Very few of the original mother/grandmother families became mother/stepfather by the time of the follow-up. These results, however, are based on comparatively low numbers in the various age groups of mothers. No statistically significant relationships between mother's age and family structure at follow-up were found, however, probably because of the small number of mother/grandmother families.

About a third of fathers of children in first- grade mother/grandmother families never lived with their children, regardless of the age of mother.¹² For those families where the father had been present, we found no significant differences in mean age of child when the father left.

The number of children in mother/grandmother families varied by age of mother, the youngest mothers having the most children and the oldest mothers having the fewest children within both 6 years and 15 years of the birth of the study child. These trends, which were also present in the other two family types, are not statistically significant, again probably because of sample sizes.

Mother Aloneness and Social Isolation: Some Additional Analyses

At time of follow-up, mother-alone families are the most frequent family type (48%). Mothers who began childbearing while they were teenagers were clearly much more likely to be ultimately in mother-alone households than were older mothers.

In order to understand the meaning of being the only adult both inside and outside the family, we present data on whether mothers who are the only adult in the household are more socially isolated than other mothers, and if so, in what areas. Does the aloneness of the mother in the household extend into such areas as lack of help from another adult in child rearing, lack of participation in social and political organizations, and lack of informal social involvement? These questions were asked the mother in the follow-up interview, administered when the study children were age 16 or 17.

A growing body of literature suggests that social isolation relates to poor psychological status and poorer health for the individual; several argue (Cutler, 1973; Janowitz, 1976) that the social isolation of individuals also has negative consequences for the stability and social and political order of society.

We examine the relationship of social isolation to both mother's age and family type. In these analyses the mothers were divided into two age groups (not four, because of sample sizes) according to whether they were teenagers or older at the birth of the study child. These two age groups of mothers were further classified according to their evolving family structure. Log-linear analyses, reported in Table 1, were done on a series of three variable tables, including age of mothers, evolving family structure, and a series of variables measuring the various aspects of social isolation.

As can be seen in Table 1, when family evolutionary path is considered, age of mother has no further relationship to the mother's social isolation at Time 2 (1975-1976). In other words, by Time 2, teenage mothers who live alone are no more socially isolated than other women who live alone. We must keep in mind that teenage mothers had had a much higher risk of becoming the only adult at home as their childbearing cycle evolved. As we will describe in more detail, there are strong associations between mother aloneness and social isolation. In order to make these relationships clearer to the reader, and because age is not important in understanding them, we will present the data for family evolutionary paths by various measures of social isolation without considering age of mother.

The first issue concerns whether mothers who live alone actually rear their children without help. We asked three sets of questions that measured whether or not there was an

TABLE 1. MAXIMUM LIKELIHOOD (χ^2) VALUES FOR SOME MODELS PERTAINING TO THE DATA IN THE THREE-WAY TABLES OF AGE OF MOTHER AT BIRTH OF STUDY CHILD (Age), FAMILY EVOLUTIONARY PATH (Fam),^a AND VARIOUS MEASURES OF SOCIAL ISOLATION (Soc).^b

| Hypothesized Model | Likelihood Ratio (χ^2) | df | p |
|------------------------------------|-------------------------------|----|--------|
| Childrearing assistance | | | |
| (Age, Fam) (Soc) | 123.76 | 7 | < .001 |
| (Age, Fam) (Age, Soc) | 118.67 | 6 | < .001 |
| (Age, Fam) (Fam, Soc) ^c | 3.78 | 4 | .437 |
| (Age, Fam) (Age, Soc) (Fam, Soc) | 3.77 | 3 | .286 |
| Organizational membership | | | |
| (Age, Fam) (Soc) | 32.00 | 14 | .004 |
| (Age, Fam) (Age, Soc) | 24.43 | 12 | .018 |
| (Age, Fam) (Fam, Soc) ^c | 7.00 | 8 | > .5 |
| (Age, Fam) (Age, Soc) (Fam, Soc) | 4.12 | 6 | > .5 |
| Church attendance | | | |
| (Age, Fam) (Soc) | 30.69 | 14 | .006 |
| (Age, Fam) (Age, Soc) | 27.40 | 12 | .007 |
| (Age, Fam) (Fam, Soc) ^c | 5.56 | 8 | > .5 |
| (Age, Fam) (Age, Soc) (Fam, Soc) | 4.21 | 6 | > .5 |

^aThe family type Mother and Other Adult includes all family types in which another adult, other than the child's father, was present in addition to the mother. This included the study child's siblings over 18 years of age. The percentages (based on $N = 315$) falling into each family evolutionary path were Mother Alone—Mother Alone (33.3%), Mother/Father—Mother Alone (17.8%), Mother Alone—Mother and Other Adult (10.5%), and Mother/Father—Mother/Father (38.4%). For each Family Evolutionary Path classification, the family type given *before* the dash indicates family type at the time the study child was in first grade. The family type *after* the dash indicates family type ten years later. The four evolutionary paths chosen were those found to occur with greatest frequency.

^bThe symbols in parentheses indicate the model being tested. For example, (Age, Fam) (Age, Soc) (Fam, Soc) specifies a model in which there is a two-way partial relationship between all possible pairs of variables; (Age, Fam) (Fam, Soc), the best-fitting model for all three tables presented here, specifies a model in which there is a partial relationship between family evolutionary path and the specific measure of social isolation indicated. The best-fitting model is one in which the observed data do not differ significantly from predictions based on the model being tested and is the most parsimonious model that fits the data. In the three tables presented here, both (Age, Fam) (Fam, Soc) and (Age, Fam) (Age, Soc) (Fam, Soc) fit the data (χ^2 is not significant); however, (Age, Fam) (Fam, Soc) is more parsimonious, and the more highly specified model does not significantly improve the χ^2 value. Therefore, (Age, Fam) (Fam, Soc) is the best-fitting model in each case.

^cBest-fitting model.

additional person, either inside or outside the family, who assisted with child rearing by being available to the child for (a) confiding, (b) activities, or (c) setting and enforcing rules. The percentage of mothers receiving no help in any of these areas of child rearing in 1975-1976 was about 60% for mother-alone families, compared to only 3% to 6% for the households where the mother was not alone (see Table 2). This isolation characterized all mothers who lived alone at Time 2 (1975-1976), both those who had lived with the father at Time 1 (1966-1967) but later separated and those who lived alone during both periods of measurement. Those mothers who reported having another adult living at home, either the father or someone else, almost always reported having someone available for at least one of these child-rearing functions.

Participation in social and political organizations is another area in which the mothers who lived alone were much more isolated than those in families with other adults present (see Table 3). Those mothers who lived alone during both periods of measurement showed the most marked isolation; over half these mothers did not belong to any organizations. Mothers in changing family types—mother alone that became mother plus another adult and mother/father that separated to become mother alone—were in the middle. Families that included mother and father at both Times 1 and 2 were the most involved in organizations.

Although participation in church social activities was included in the scale measuring organizational participation, we also examine actual attendance at religious services. The pattern of attendance at services was similar to what we observed for organizational participation (see Table 4). The level of church attendance was lower among mothers who had separated from the study children's fathers since Time 1, but not as low as the level of

TABLE 2. DISTRIBUTION OF FAMILY EVOLUTIONARY PATH AND HELP WITH CHILD REARING

| Help with Child Rearing | Family Evolutionary Path | | | | Total N |
|------------------------------------|-------------------------------|--------------------------------|---------------------------------------|---------------------------------|------------|
| | Mother Alone— Mother Alone | Mother/Father— Mother Alone | Mother Alone— Mother + Other Adult | Mother/Father— Mother/Father | |
| Number (%) receiving no help | 63 (60.0) | 33 (58.9) | 1 (3.0) | 7 (5.8) | 104 (33.0) |
| Number (%) receiving help | 42 (40.0) | 23 (41.1) | 32 (97.0) | 114 (94.2) | 211 (77.0) |
| Total N | 105 | 56 | 33 | 121 | 315 |

Note: Mothers were asked whether one or more adults inside or outside of the home assisted in (a) setting and enforcing rules, (b) serving as a confidant for the child, and (c) sharing activities with the child. Coded as yes-no dichotomies, these three items were combined to yield a construct of help with child rearing. The combined reliability is given by $\alpha = .734$ (Cronbach, 1951). The resulting construct was coded as a dichotomy—those reporting no help in any child-rearing area and those reporting help in one or more of the three child-rearing areas.

TABLE 3. DISTRIBUTION OF FAMILY EVOLUTIONARY PATH AND ORGANIZATIONAL PARTICIPATION

| Organizational Membership | Family Evolutionary Path | | | | Total <i>N</i> |
|-------------------------------|-------------------------------|--------------------------------|---------------------------------------|---------------------------------|----------------|
| | Mother Alone— Mother Alone | Mother/Father— Mother Alone | Mother Alone— Mother + Other Adult | Mother/Father— Mother/Father | |
| Number (%) no participation | 55 (52.4) | 19 (33.9) | 13 (39.4) | 33 (27.3) | 120 (38.1) |
| Number (%) low participation | 36 (34.3) | 26 (46.5) | 11 (33.3) | 43 (35.5) | 116 (36.8) |
| Number (%) high participation | 14 (13.3) | 11 (19.6) | 9 (27.3) | 45 (37.2) | 79 (25.1) |
| Total <i>N</i> | 105 | 56 | 33 | 121 | 315 |

Note: Organizational participation was assessed on the basis of responses to items concerning membership and regular attendance in eleven types of organizations, including both political and social ones. Respondents showing *no participation* did not belong to organizations of any kind. Those showing *low participation* belonged to organizations of only a single type or belonged to organizations of two types but did not regularly attend any of them. Those showing *high participation* belonged to organizations of three or more types or belonged to organizations of two types and regularly attended an organization of at least one of these types.

TABLE 4. DISTRIBUTION OF FAMILY EVOLUTIONARY PATH AND ATTENDANCE OF RELIGIOUS SERVICES

| Religious Service Attendance | Family Evolutionary Path | | | | Total <i>N</i> |
|---------------------------------|-------------------------------|--------------------------------|---------------------------------------|---------------------------------|----------------|
| | Mother Alone— Mother Alone | Mother/Father— Mother Alone | Mother Alone— Mother + Other Adult | Mother/Father— Mother/Father | |
| Number (%) infrequent attenders | 60 (57.1) | 19 (33.9) | 11 (33.3) | 33 (27.3) | 123 (39.1) |
| Number (%) moderate attenders | 15 (14.3) | 14 (25.0) | 11 (33.3) | 28 (23.1) | 68 (21.6) |
| Number (%) frequent attenders | 30 (28.6) | 23 (41.1) | 11 (33.3) | 60 (49.6) | 124 (39.4) |
| Total <i>N</i> | 105 | 56 | 33 | 121 | 315 |

Note: Infrequent religious service attenders were either not members of a church or attended less than once every few months. Moderate church attenders were members of a church and attended once a month or every two weeks. Frequent church attenders were members of a church and attended once a week or more often.

attendance among mothers who lived alone at both times of measurement.

In contrast, there was no difference between older and younger mothers in the areas of informal social involvement with relatives and friends. Mothers in various family types reported similar numbers of friends, frequency of contact with friends and relatives, and opportunities to confide.

DISCUSSION

The three central results in this paper all concern mother aloneness. First, teenage mothers with more than one child tended to be living alone by the time their children entered first grade. Second, mothers in all age groups who lived alone when their children were in first grade tended to be living alone at the time of follow-up 10 years later. Third, the family structures of teenage mothers tended strongly to evolve towards mother aloneness, regardless of the family structure at the time the study child was in first grade.

Teenage Motherhood and Social Isolation

We concluded from our analyses of social involvement that mother aloneness is the longterm common outcome of teenage mothering regardless of the family structure in which teenagers

began their child rearing. The evolution toward mother aloneness is associated with marked differences in the involvement of such mothers in social and political organizations and help from others with the child-rearing process. However, the mother who lives alone is not isolated from informal social contacts. From such findings it can be inferred that teenage mothering entails, through a higher risk of mother aloneness, a major deficit in family structure and in connectedness with the broader society.

Why do teenage mothers tend to be the only adult in the household? We would like to consider two hypotheses, one psychological and one social. These hypotheses are not alternative explanations. We view them as complementary and probably operating in a unified system of causes of the evolving isolation of teenage mothers.

The psychological hypothesis is that teenage mothers lack competence to develop and maintain long-term intimate, affectionate relationships with other adults within their own households. We can further hypothesize that this incompetence stems from the premature assumption of the role of mother, a role more appropriate to adulthood than to adolescence. Roles appropriate and manageable for adolescents in our society do not include child rearing, and when child rearing is taken on by an adolescent female, the needed socialization and development of adolescence is aborted. Such work, according to this hypothesis, includes the development of competence to form long-lasting affectionate, intimate relations with others within the household, as well as relations to social institutions and political organizations outside the home.

The social hypothesis is that the social role of teenage motherhood isolates these women from those institutions in society that enable them to establish and maintain relationships with other adults in the household and with organizations outside. The assumption of the mothering role before the woman has completed her education and become integrated into the social structure of adults may deprive her of social skills and credentials, as well as label her as a deviant. Institutions such as schools, work, and clinics may offer less interest and be less available to her. Alternative social resources may not exist.

Moore and Caldwell (1977) and others have documented the long-term negative effects of teenage mothering on education and income. Others have discussed the importance of ties with a wide variety of people and social institutions (Granovetter, 1973; Cutler, 1973). These ties give the individual access to information and other resources necessary for successful performance of key social roles. Ties to school and teacher, parents, even friends can be threatened by teenage pregnancy and childbearing, let alone child rearing.

The evolution of family structure is clearly different for young, teenage mothers than for older mothers. Understanding these family evolutionary paths is essential in examining not only the early but also the continuing impact of the family on the growing child. Since the work of Freud, Goldfarb, Spitz, Bowlby and many others, we have generally accepted the view that early family life has a permanent impact on the long-term development of the child.¹³ More recently, several social and developmental investigators have called for a reassessment of these earlier assumptions regarding the permanency of the effects of early family. Clarke and Clarke (1976) have collected a set of papers which point to the need for further investigation and have added an

important theoretical and historical framework in their recent book. Their central thesis is as follows:

Our main general conclusion is that, in man, early learning is mainly important for its foundational character. By itself, and when unrepeated over time, it serves as no more than a link in the developmental chain, shaping proximate behaviour less and less powerfully as age increases. . . . It can be stated here that our major research need in this important area is to determine more precisely the factors that initiate, accentuate and maintain alternation in human characteristics, as well as determine the ultimate limits of these effects and the causes of individual differences in responsiveness to change. [p. 18]

Any reassessment along the lines called for by these authors will require an understanding of evolving family structure beyond the period of early child rearing. In prior epidemiological analyses of Woodlawn data, we have demonstrated that the child's social adaptation to the early years of school and psychological wellbeing are clearly associated with certain family types (Kellam et al., 1977). This present paper carries these analyses further by providing a longitudinal view of the evolution of family structure, in particular by contrasting families of teenage mothers and older mothers.

Another recent paper reports on the impact of teenage motherhood on the psychological well-being of the mother over the course of her child-rearing cycle (Brown et al., 1981). Analyses are currently directed at short- and long-term outcomes of the child.

These results and hypotheses discussed above have important implications for research into the design and implementation of intervention programs. At the Social Psychiatry Study Center, we have found it useful to conceptualize a mental health system in which there are three levels of care (Kellam et al., 1975; Kellam et al., 1979). The first level has a community-wide focus and is highly integrated in the social and political structure of the community. This level is epidemiological in that it is involved with the distribution of illness and health in the total population of a community. It includes those aspects of service related to prevention and early intervention. The second level of care occurs in more traditional outpatient clinic settings and treats populations defined as "in need." The third level consists of hospitals and their variations and serves a more disturbed population in need of domiciliary as well as other care.

The findings reported in this paper suggest that it is the first level of care that is critical in engaging with teenage mothers as well as other mothers who are alone. It is probable that teenage and other mothers who live alone would be less likely to seek treatment at second-level clinics. This suspicion is strengthened by the isolation of teenage mothers and their higher rate of refusal to be interviewed at follow-up, in spite of the advance notice that we were offering a service program to all mothers and their teenage offspring. In order to engage these mothers, their informal social ties with other members of the community may provide an opportunity to reach them.

CONCLUSION

This paper represents a continuation in our interest in the determinants and consequences of family structure. In an earlier paper, we showed that mother-alone families have detrimental consequences for the child's early psychological well-being and early success in school. In this paper we demonstrate that the teenage mother is more likely to begin as the only adult at home and remain so, or to become the only adult member. Further, we show that the mother who is the

only adult in a child-rearing family does in fact have less help in child rearing and participate less in voluntary organizations. We suggest that detrimental outcomes for the teenage mother or her children need to be examined in the context of the evolving family structure of the mother. We also suggest that treatment for the teenage mother or her children might make use of informal contacts with significant others and should provide opportunities for these mothers living alone to participate in a broader social context.

FOOTNOTES

1. Mother/father families may contain other adults. Mother-alone families have no adult except the mother. Mother/grandmother families may contain other adults, but not the father. In this paper we chose to consider adult family composition and time of father's separation rather than marital status per se. Family composition obviously includes much more information as to who is actually present and when father left, if he left. The distinction as to death versus separation versus divorce of spouse will be dealt with in other reports.
2. Chi-square = 35.9 on 12 *df*, $p < .01$ for firstborn children.
3. Chi-square = 27.0 on 12 *df*, $p < .01$ for second- born children.
4. In testing the independence of firstborn or second- born status and family type for the four age groups we have, in order of increasing age, chi-square = 9.3, 10.8, 0.1, 3.8, each on 2 *df*; the first two age categories-the teenage categories-are significant.
5. Chi-square = 11.49 on 1 *df*, $p < .001$ for testing association between age of mother (teenage versus nonteenage) and refusal to complete interview. Analyses with age of mother and family composition showed that age, not family composition, satisfactorily explained different rates of sample loss.
6. Chi-square = 1.6 on 3 *df* $p > .05$ for a test of age relationship to percent of fathers present. By F-test, the time of departure was not significantly related to age ($p > .05$) for either time period.
7. Chi-square = 4.0 on 3 *df*, $p > .05$.
8. By F-test, the average numbers of children within age category did significantly vary ($p < .05$) for both time periods.
9. The firstborn and second-born study children had almost equivalent numbers of younger siblings, in spite of what one might expect. Explanation of this finding rests on the small proportion of mothers who had only one child.
10. Chi-square = 13.6 on 3 *df*,
11. $p < .01$. 11. $p < 0.01$ by F-test.
12. Chi-square = 5.4 on 3 *df* $p > .05$.
13. See Clarke and Clarke (1976) for an excellent review of this issue.

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