

MATERNAL EMPLOYMENT AND TIME WITH CHILDREN: DRAMATIC CHANGE OR SURPRISING CONTINUITY?*

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Despite the rapid rise in mothers' labor force participation, mothers' time with children has tended to be quite stable over time. In the past, nonemployed mothers' time with children was reduced by the demands of unpaid family work and domestic chores and by the use of mother substitutes for childcare, especially in large families. Today employed mothers seek ways to maximize time with children: They remain quite likely to work part-time or to exit from the labor force for some years when their children are young; they also differ from nonemployed mothers in other uses of time (housework, volunteer work, leisure). In addition, changes in children's lives (e.g., smaller families, the increase in preschool enrollment, the extended years of financial dependence on parents as more attend college) are altering the time and money investments that children require from parents. Within marriage, fathers are spending more time with their children than in the past, perhaps increasing the total time children spend with parents even as mothers work more hours away from home.

The most revolutionary change in the American family in the twentieth century, I would argue, has been the increase in the labor force participation of women, particularly married women with young children. The only other trend to rival it in importance is the increase in divorce and non-marriage that removes fathers, but usually not mothers, from day-to-day child rearing. Many would argue that even this trend in family disruption is intertwined with women's dramatic movement into the paid workforce (Becker, Landes, and Michael 1977; Bumpass 1990; Cherlin 1992; but see Oppenheimer 1997 for a critique).

The puzzling thing about the reallocation of mothers' time to market work outside the home is that it appears to have been accomplished with little effect on children's well-being. In 1984, in an insightful and provocative presidential

address to the Population Association of America (PAA), Samuel Preston argued that the mix of public and private investment in the United States might be poorly serving the nation's children. In that address, he posed the following question:

How, you might ask, can we talk about the neglect of children without mentioning their abandonment by mothers heading into the labor market? The answer is that it's not at all clear that mother's work is a source of disadvantage for children, at least not as a direct determinant. Recent reviews of studies of the effect of working mothers on child development find very few and inconsistent effects, far less clear-cut than those associated with marital disruption... (Preston 1984:451)

My own reading of the literature, from a vantage point of an additional two decades of research, is that Preston's basic conclusion still stands. A number of studies have used the National Longitudinal Survey of Youth to assess the effect of maternal employment on children's cognitive ability and behavioral adjustment. Maternal employment may have some negative effects when employment occurs early in the first year of life (Belsky and Eggebeen 1991; Blau and Grossberg 1990; Han, Waldfogel, and Brooks-Gunn 2000), perhaps for middle-class sons (Baydar and Brooks-Gunn 1991; Desai, Chase-Lansdale, and Michael 1989; Greenstein 1995), though even here the evidence isn't entirely consistent (Parcel and Menaghan 1994), or when maternal employment is combined with other stressful conditions such as the birth of another child or unusually long work hours for the father (Parcel and Menaghan 1994). But given the effort that has been devoted to searching for negative effects of maternal employment on children's academic achievement and emotional adjustment, coupled with the scarcity of findings (either positive or negative), it would appear that the dramatic movement into the labor force by women of childbearing age in the United States has been accomplished with relatively little consequence for children.

I find this situation perplexing. How could the time allocation of our family caregivers, women, change so dramatically without a negative effect on the time and attention children receive? Perhaps the time mothers spend with children does not matter all that much, although maternal education tends to be associated positively with the "quality" of mothers' activities with children and with children's cognitive development (Bianchi and Robinson 1997; Datcher-Loury 1988; Hill and Stafford 1974, 1980; Leibowitz 1974, 1977;

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but see Behrman and Rosenzweig 1999, and Desai and Alva 1998, who question the *causal* relationship between maternal education and children's well-being). But if that is the case, then why wouldn't removal of mothers' time, especially among the highly educated mothers now increasingly employed outside the home, ultimately harm children?

Some of our most influential theoretical traditions suggest that mothers' time with children should be consequential for good child outcomes and that activities that interfere with maternal investment in children are problematic. In sociology, Coleman's (1988) notion of social capital is invoked increasingly in the discussion of child outcomes and parental investments. Coleman argued that children might be experiencing a decline in social capital, not only because of more family disruption, but also because mothers' time was being removed in two-parent homes by greater maternal employment. He asserted that because there are more households where all parents are working outside the home, parents (usually mothers) are removed from neighborhoods during the day; in contrast, in the past, they were presumably more available to supervise not only their own children but also their neighbors' children (Coleman 1988:S111). As a consequence, family and community control of children may be disintegrating, and antisocial behavior by youths may be increasing.

More influential in the demographic and the economic literature on the family is the work of Gary Becker (1991), which focuses attention on parental time investments in producing "quality" children. In this theoretical tradition, parents desire children, derive utility from raising children, and hence engage jointly in bearing the cost of rearing children. Typically mothers divert large amounts of time, forgoing earnings, to rear children, while fathers take on the role of primary income provider to the family. Parents specialize according to their comparative advantage, and (ideally) children receive both the time and the money investments they need. When this does not happen, partnerships become less stable and children become less likely to receive adequate parental investments.

In recent years, a number of PAA presidential addresses have highlighted the importance of parental time investments in children. In addition to Preston's (1984) address, to which I have already alluded, Harriet Presser (1989) argued in 1989 that structural changes in the workforce were making it increasingly difficult for parents to balance work and family so as to spend time with their children. In 1990 Larry Bumpass (1990) suggested that "family relationships occupy an important but ever-shrinking space in our lives" and posed the question of whether changes in the family were interfering with adequate care of children. In 1995 Linda Waite (1995), noting the often acrimonious debate about whether the family was disintegrating as an institution, elaborated the benefits of marriage, including benefits for children such as greater, more consistent parental investment. In 1999 Andrew Cherlin (1999) discussed the role of parental divorce in children's lives and argued that a lack of parental involvement causes modest long-term negative consequences for

children, although extreme positions on parental investment were not advancing social policy.

Family demographers seem to agree that the lack of two-parent families—increasingly because they are not formed or because, once formed, partnerships are unstable—is problematic for children (Cherlin 1999; McLanahan and Sandefur 1994). The most compelling evidence is that a father's absence harms children because money does not flow to them (Furstenberg, Morgan, and Allison 1987; Garfinkel, McLanahan, and Robins 1994). Lack of a father's involvement may disadvantage children in other ways, but the findings on those aspects are far less definitive (Amato and Gilbreth 1999; V. King 1994).

Family disruption, however, has not withdrawn mothers from children nearly so much as it has removed fathers—except insofar as it compels greater labor force participation by mothers. Yet if one believes the research, children suffer tremendously when men withdraw money; when women withdraw time, however, it is of little consequence for children. When mothers bring home money, is the result so positive as to overshadow any effect of their time forgone in the home? If this is the case, it is little wonder that mothers have turned increasingly to providing financially for their families, following fathers' lead as to how to care best for children.

I want to suggest a somewhat different answer. Perhaps the increase in female employment outside the home has occurred with less reallocation of time away from child rearing among parents than would first appear. Why has women's movement into the paid workforce not been accompanied by a dramatic decrease in maternal time with children?

First, we tend to overestimate maternal time with children in the past. Because we know relatively little about women's nonmarket activities, we tend to exaggerate the amount of a mother's time in the home that is actually available for investment in children.

Second, in our amazement at how rapidly women's market work has trended upward in the United States, we may have failed to appreciate how much working mothers do to protect investment in children even as they enter the paid labor force. This leads us to overestimate how much market work currently takes mothers away from their children.

Third, childhood is not fixed and unchanging: Smaller families reduce the number of years with very young children, and more preschool-age children spend time outside the home in school-like settings regardless of their mother's employment status. At the same time, older children need time and monetary investment for an extended number of years as more attend college. These changes in children's lives tend to minimize differences in maternal time with children, as families both with and without employed mothers are affected by changing notions of "what children need."

Fourth, and perhaps most controversial, women's reallocation of their time probably has changed men. The increase in women's market work has facilitated the increase in men's involvement in child rearing, at least within marriage. In the United States, most of children's "time-intensive" preschool years are still spent in households with two parents rather

than one; therefore this shift in men's behavior is extremely important in enhancing parental time with children.¹

In sum, my thesis is this: The movement of women into paid, outside-the-home work should have resulted in declining time investments in children. Probably it has done so in regard to fertility: Americans are having fewer children and spending a smaller proportion of their adult lives parenting (Hogan and Goldscheider 2000; R. King 1999). Among those who decide to have children, however, mothers' increased market employment has not decreased the quality—and perhaps not even the quantity—of time invested in children.

Why not? Because in most settings and at most times, the great majority of mothers have not had the luxury of overindulging in time with children. Because of our failure to measure adequately what women do with their time, we overestimate maternal investment in children when mothers are in the home and fail to understand how much mothers do to protect their time with children when they leave home for paid work. As income rises, often we also fail to consider how children's lives—how children spend their time and how we think children *should* spend their time—change so as to alter what maternal investments are possible or necessary. And, finally, in our frequent lament about what men are not doing, we may be missing what they *are* doing. That is, we also may be underestimating how much women's changed market roles are altering men's domestic roles, including men's investment of time in child rearing.

A NOTE ON DEVELOPING COUNTRIES AND HISTORICAL RESEARCH ON MOTHERS' "WORK"

Before I elaborate on the evidence for my thesis, I wish to acknowledge my intellectual debt to those who research women's labor in developing countries or historical settings. In the past three decades, a burgeoning literature on women's productive and reproductive labor has emerged: demographic and anthropological investigation of women's work in developing countries as well as social and economic histories of the relationship among women's employment, use of nonmarket time, and care of children in the United States and other developed countries. This body of research questions the taken-for-granted relationships between maternal employment and care of children in developing countries and asks related questions about the interleaving of mothers' (and daughters') productive activity and family care in historical settings in the United States and Europe (see, for example, Goldin 1990; Sassler 1995; Tilly and Scott 1987).

Demographers have been particularly interested in women's work in developing countries because of the presumed relationship between maternal employment and outcomes of key interest, namely fertility decline and child survival. In the United States and other developed countries, women with fewer children are more likely to be employed; also, over the long term, women's employment reduces fer-

tility (Angrist and Evans 1998; Cramer 1980). Research on this connection in developing countries is much more equivocal: The relationship between fertility and maternal labor force participation is often nonexistent, and sometimes even positive (Lloyd 1991; Mason and Palan 1981). The failure to replicate the negative association between fertility and maternal employment, combined with the great variation in women's economic activities across developing countries, has pointed to the need for a broader assessment of patterns of women's time use in order to understand what determines fertility and child survival outside the West (DeGraff and Anker 1999; Donahoe 1999; Lloyd 1991; Van Esterik and Greiner 1981).

Research on developing countries also has illustrated the need to reexamine childcare before assuming that women's nonmarket activities are compatible with child rearing but that women's market activities curtail their time with their children. For example, ethnographic studies call into question how easily nonmarket work and childcare can be combined in some agricultural settings (e.g., work on Nepal by Levine 1988 and on the Embu of Kenya by Paolisso, Baksh, and Thomas 1989). Care of children other than "mother-care" (e.g., child fostering or care by grandparents or older siblings) is common in many contexts, and care by mothers is often rather insensitive to the extent of mothers' economic activity. Desai and Jain (1994), for example, showed that mothers' time spent in direct childcare in rural India did not vary greatly with the extent of mothers' involvement in economic activity. Even among the least economically active women in their sample, mothers spent no more than 1.5 hours per day in childcare. Children received much more attention than an hour and a half per day (it was more on the order of four or five hours), but most of the time someone other than their mother cared for them.

Almost two decades ago, Mason and Palan (1981) pointed to numerous factors that needed to be considered in attempts to determine when women's work limits their time in bearing and rearing children: factors such as what labor (and educational) opportunities are available for children, parents' willingness to allow older siblings to care for younger siblings, the sheer availability of older siblings or other household members such as grandparents or elder relatives to attend to children while the mother does things other than caring for her own children, and the relevance, to parents' and children's time use, of parents' views of what children will be doing in the future.

In developing countries, interesting descriptions have emerged on the role of older children, usually daughters, as mother substitutes in care of younger siblings (e.g., Ho 1979; Holmes and Tiefenthaler 1997; Paolisso et al. 1989; Tiefenthaler 1997). In the historical literature on developed countries, the use of daughters as family caregivers is often noted. For example, in a study of childhood at the turn of the twentieth century among immigrant working-class families in the United States, David Nasaw (1985) describes how older daughters tended younger siblings on tenement streets while their mothers took in laundry, did piecework,

1. Despite the increase in single parenting, almost 70% of children under age 6 live with two parents. (Tabulations were provided by Jason Fields, U.S. Census Bureau, based on the detailed household relationship matrix collected in the 1996 Survey of Income and Program Participation.)

and cooked and cleaned for boarders to earn additional income for their families.

In sum, the research on women's work and childcare in the developing countries (and historically in the United States) suggests that we must broaden our analysis of mothers' time use beyond an examination of hours in the paid labor force if the goal is to understand changes in what mothers do for and with children. Furthermore, we must be attentive not only to the "investors" but also to the recipients of parental time: children, and how their lives may be changing. And finally, we must assess who within the family may be substituting for mothers as they reallocate time to paid market work outside the home. Historically, and in developing countries, daughters or older female relatives often fill this position. In the contemporary United States this work is unlikely to be done by daughters, but fathers (as well as grandmothers; see Bumpass and Raley 1995; Presser 1989) deserve investigation.

DO WE OVERESTIMATE THE NONMARKET TIME THAT MOTHERS INVEST IN CHILDREN?

It is difficult to estimate changes in parental time with children in the United States because we have relatively little direct measurement of trends in time use. Keith Bryant and Cathleen Zick (1996a, 1996b; Bryant 1996; Zick and Bryant 1996) have done the most careful and most extensive work on maternal time with children, piecing together trends from time diary studies conducted between the 1920s and the early 1980s—that is, from studies in which interviewers walk respondents through the previous day, recording all activities sequentially as they occur (Juster and Stafford 1985; Robinson and Godbey 1999). Bryant (1996) notes that diary studies were conducted as early as the 1920s, in part because of the concern that industrialization would lead to "too much leisure" for men as jobs were automated but to "too much drudgery" for women as they continued to be responsible for the least automated workplace, namely the home. Because of data limitations, Bryant and Zick's analysis is restricted to white, two-parent families with children, and they examine only the time in which parents report that they are engaged primarily in family care.

Per family, Bryant and Zick show virtually no change between the 1920s and 1975: They estimate that mothers spent an average of 1.2 hours per day in care of family members in both the 1920s and the 1970s. Also, Bryant and Zick (1996a:373) argue that their 1920s estimate may be too high because of a bias in the data toward middle-class, rural families who tended to spend greater amounts of time in direct childcare. Per child, their estimates suggest an increase from 0.6 to 0.9 hour per day in direct care, primarily because families were smaller by 1975. These estimates may seem low because they capture only the time in which mothers report that they are directly involved in caring for children; they do not include time that the mother spends with children while she is engaged in other activities such as housework.

Why might mothers in the 1920s, when maternal employment rates were much lower than in the 1970s, have

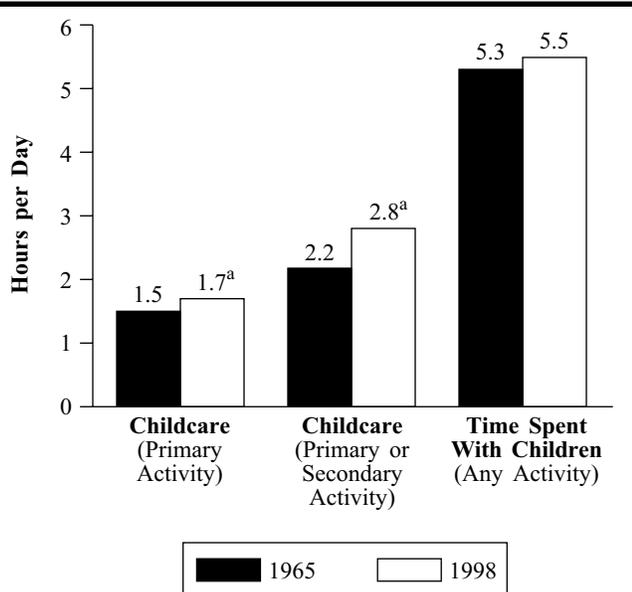
spent so little time in direct childcare? Bryant and Zick remind us that almost half of the population was rural in 1925, compared with only about one-quarter of the population in 1975. Mothers on farms in the 1920s tended to be engaged not only in childcare but also in unpaid family work and domestic chores, which were more onerous and presumably more time-consuming than in 1975 (Byrant 1996; Cowan 1983; but see Vanek 1974, who finds no change in housework time). Larger families at the earlier time also provided more older children who could mind younger children and substitute for mothers.

Bryant and Zick acknowledge that employment outside the home reduces time spent caring for children, other things being equal. Increases in female employment rates should have reduced maternal time with children during the period they examine. Their results, however, indicate that the reduction would be overestimated without considering changes in family size, observing who was actually looking after children in the large families of the 1920s, and investigating the competing "unpaid" work that mothers were doing instead of childcare at the earlier time. In addition, Bryant and Zick note that over time, as mothers moved into the paid workforce, average educational attainment also increased. More highly educated mothers spend more time in direct childcare, other things being equal.

What about recent decades, when the most dramatic changes in mothers' labor force participation occurred in the United States? In Figure 1, I compare mothers' time with children in 1998 with comparably collected data for 1965. The figure shows three measures of time with children: time when the main (or primary) activity was a childcare activity,² time when childcare was mentioned as a secondary use of time in response to the query "Were you doing anything else?" (e.g., cooking dinner but also helping a child with homework), and time in which a parent reported any activity (childcare or other) "with children" present. Despite increases in single parenthood and maternal employment, when we compare mothers' reports of the hours per day they spend caring for children directly (either as a primary activity or with the addition of secondary activities) or time with children in any activity, mothers today report spending as much time with their children as did mothers during the baby boom, if not more. If we were to adjust for the smaller family sizes in 1998, these estimates suggest that mothers may be spending significantly more time per child than during the "family-oriented" 1960s.

One of the most thoughtful investigations of parental time with children was conducted by Steven Nock and Paul Kingston (1988) with time diary data collected on two-parent families in the late 1970s and early 1980s. They asked a question similar to the one I pose here: Why has there been so little evidence that increased maternal employment results in negative child outcomes? From their investigation of single-

2. The time diary data collections include the following under childcare: child and baby care, helping/teaching, talking/reading, indoor/outdoor play, medical/travel/other child-related care.

FIGURE 1. CHANGE IN MOTHERS' HOURS OF CHILDCARE AND TIME WITH CHILDREN

Sources: "Americans' Use of Time" (1965–1966); Bianchi and Robinson (1998–1999).

Notes: Estimates are based on one-day "yesterday" time diaries collected from 417 mothers in 1965–1966 and 273 mothers in 1998–1999, all with children under age 18 at the time of the interview. Childcare includes child and baby care, helping/teaching children, talking/reading to children, indoor/outdoor play with children, medical/travel/other child-related care.

^aTest of 1965–1998 difference in means is statistically significant, $p < .05$.

earner and dual-earner, two-parent families, they concluded that dual earners did not substitute "quality" for "quantity" of time with children: Employed mothers, on their longest workday, spent less time with children than did nonemployed mothers (with no significant differences on Sunday), and spent less direct "quality" time with children: less time educating or playing with preschool-age children, and less time "having fun" with children of all ages.

The most striking feature of Nock and Kingston's findings, however, was that most of the time nonemployed mothers spent with their preschoolers was not devoted to childcare or direct play; rather, the mother was engaged in cooking and doing household chores at that time. Nonemployed mothers spent more than twice as much time per day with their preschoolers (nine hours, compared with a little over four hours), but the difference in time for direct childcare and play/education was less than one hour. Nock and Kingston found an additional one-hour difference in "having fun" with preschoolers; this included activities such as trips to museums and movies, which a high-quality childcare setting also might provide. For school-age children, they found no differences in childcare or play/education time between employed and nonemployed mothers, although nonemployed

mothers spent a couple of hours more with their children on weekdays: 40 minutes more "having fun" with their children and the remainder with the children present while they did household work.

Nock and Kingston (1988:81) suggested that perhaps part of the reason why children of employed mothers suffered so few negative effects was that even nonemployed mothers spend a relatively small portion of their time interacting directly with their children, and this tends to minimize differences between employed and nonemployed mothers. Whether or not this assessment is correct depends on the importance, to children, of their mothers' (or fathers') "being there," because the large difference between employed and nonemployed mothers lies in the time when mothers are available but not directly engaged in activities with their children. In a world of cellular phones and beepers, it also raises the question of whether working mothers (and fathers) can increasingly fill children's need to have parents "on call" without being physically present in the home; this question is only beginning to be researched (Galinsky 1999; Waite 2000).

DO WE OVERESTIMATE HOW MUCH MOTHERS' MARKET WORK CURTAILS TIME WITH CHILDREN?

I am not arguing that women's market work outside the home does not reduce time spent with their children, especially very young children. Virtually every time diary study shows that employed mothers spend less time with their children than nonemployed mothers (Bryant and Zick 1996a, 1996b; Gershuny and Robinson 1988; Hofferth forthcoming; Nock and Kingston 1988; Robinson 1989; Robinson and Godbey 1999; Zick and Bryant 1996). The question, first, is this: How significant is the reduction in time with children, and how large is the gap between mothers who do more and do less market work? Second, do changes occur in the types of activities that, if reduced, we would expect to lead to less desirable child outcomes, or do mothers protect the most "valuable" time with children?

If the rapid increase in mothers' labor force participation is to translate into equally dramatic reductions in time children spend with at least one parent, one or more of several conditions must be met. First, children would have to be virtually always available to be "invested in" when parents are working; this is highly unlikely, once children reach school age and are required to spend a sizable number of hours away from home during the school year. Second, if dramatic differences between employed and nonemployed parents are to occur, parents would have to invest in their children during most of the hours when they were not employed. This too seems unlikely, given the evidence (just reviewed) that even "stay-at-home" mothers spend much of their day engaged primarily in activities other than childcare. Finally, working parents would need to make little attempt to maximize their coverage of hours when children were in the home by adjusting work schedules. Yet research suggests that fathers are important childcare providers when mothers

work outside the home (Casper and O'Connell 1998), and shift work is common in two-parent homes with young children (Presser 1989, 1999).

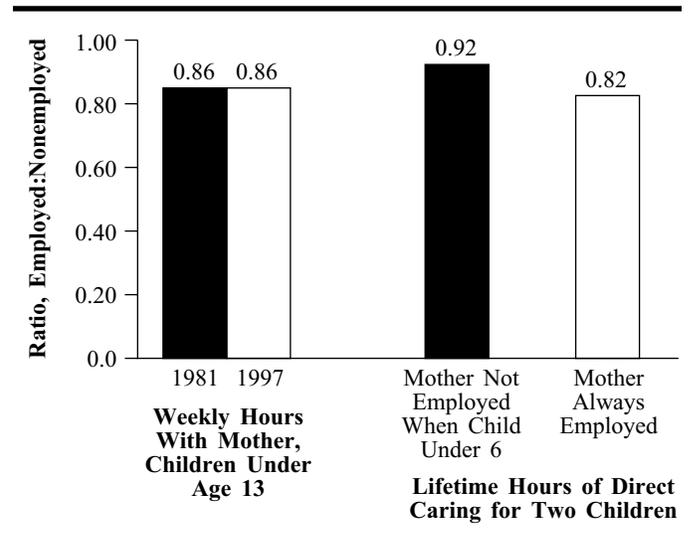
Studies vary in their estimates of how much labor market hours reduce maternal time with children; these estimates are affected by estimation procedures and covariates included in multivariate models. In tobit regressions, for example, controlling for child's age, which is the most significant determinant of childcare time, Zick and Bryant (1996) estimate that the effect of each additional hour of maternal employment is as small as a three-minute decline in direct childcare per day. Larger estimates are offered by Nock and Kingston (1988), who examine total time with children and show the importance of the time of day when mothers commit hours to the paid workforce. Maternal hours of market work between 3:00 p.m. and 6:00 p.m. reduce time with children twice as much as hours of employment between 9:00 a.m. and 3:00 p.m.: an estimated 42-minute reduction in time with children, compared with a 22-minute reduction. Yet even the more "costly" time period does not result in an hour-for-hour reduction in time with children for each hour of market work.

John Sandberg and Sandra Hofferth (1999) provide estimates (from a child's point of view) of the average weekly (waking) hours a child spent with his or her mother in 1981 and 1997. In 1997, a child of a working mother spent four fewer hours per week with his or her mother: 27 waking hours compared with 31 hours for children of nonemployed mothers. Taking a ratio of the estimates, Sandberg and Hofferth report (as shown on the left-hand side of Figure 2) that children with employed mothers spent 86% as many hours with their mothers at both time points as did children with nonemployed mothers.

Zick and Bryant (1996) use time diary data for two-parent families to construct synthetic estimates of the number of hours mothers will spend in childcare activities while raising two children to age 18. Their "lifetime" estimates suggest that mothers who are not employed when their children are under age 6 but who seek employment when their children reach school age spend 92% as many hours in childcare activities as do mothers who remain out of the labor force throughout their children's childhood. (See the right-hand panel of Figure 2.) Mothers who are employed throughout their children's childhood are estimated to spend 82% the number of hours spent by nonemployed mothers on childcare activities. (Zick and Bryant also provide a second, model-based set of estimates showing even smaller differences in time with children by maternal employment: no difference between nonemployed mothers and those who do not work during the preschool years but are employed later, and 91% as many hours devoted to childcare by mothers employed throughout their children's lives as by mothers who are never employed.) The suggestion, again, is that mothers who are employed spend less time with their children, but perhaps—as Nock and Kingston (1988) argued—not much less time.

How could the time investments in children be so similar for employed and nonemployed mothers? We must enter-

FIGURE 2. RATIO OF EMPLOYED TO NONEMPLOYED MOTHERS' HOURS WITH AND CARE OF CHILDREN



Sources: Sandberg and Hofferth (1999); Zick and Bryant (1996).

tain the possibility that working mothers may "shed load" in other areas, reallocating priorities to protect time with children. Candidates worth mentioning here are housework (exclusive of childcare), volunteer work, sleep, and free-time pursuits.

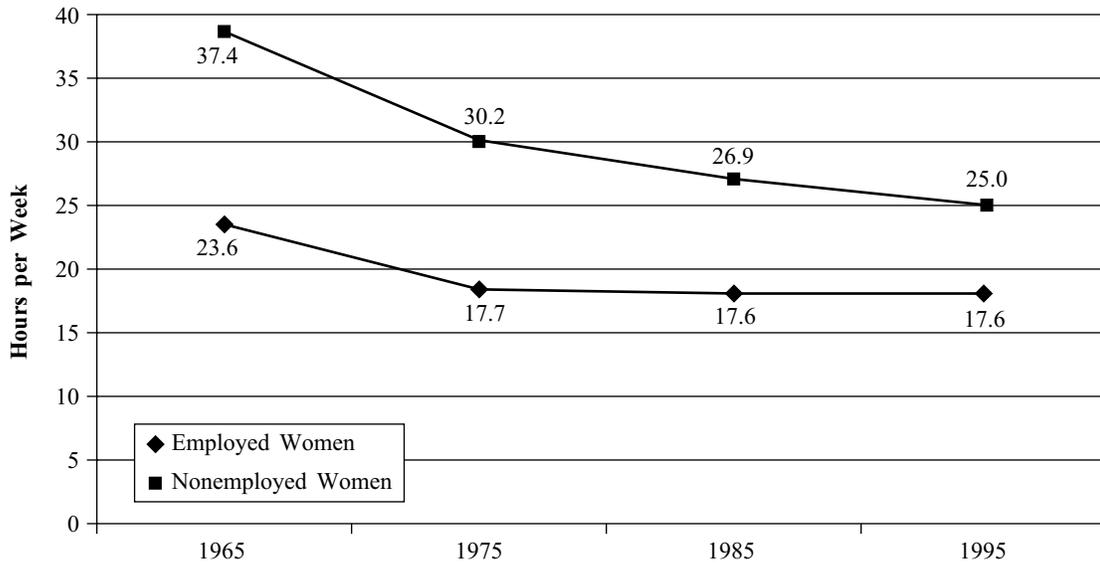
With respect to housework, the evidence is equivocal: Housework hours declined significantly for working mothers between 1965 and 1995, as shown in Figure 3. Housework hours declined more steeply, however, for mothers not employed outside the home (Bianchi et al. 2000). The reduction in time spent on household chores is widespread among women, and the hours "gained" are just as great for nonemployed as for employed mothers. The unanswered question is whether employed and nonemployed mothers are equally likely to use these additional hours for activities involving children.

With regard to volunteer activities, it is difficult to gain a clear picture of trends over time (Hayghe 1991), but a number of studies indicate that hours of employment crowd out hours that women commit to volunteer activities (Caputo 1997; Lichtenstein 1983; Robinson and Godbey 1999; Segal 1993; Statham and Rhoton 1985). Time diary data for 1998 suggest that employed and nonemployed mothers' time allocations differ in other ways as well: Employed mothers report less sleep (55 hours per week, compared with 61 hours reported by nonemployed mothers), spend slightly fewer hours in personal care (69 hours compared with 74 hours), and report significantly fewer "free-time" or "leisure" hours (29 versus 41 hours).³

The argument that mothers protect time with children even as they increase their rates of labor force participation

3. Unpublished tabulations from Bianchi and Robinson (1998–1999).

FIGURE 3. DECLINE IN HOURS OF HOUSEWORK: EMPLOYED AND NONEMPLOYED MOTHERS WITH CHILDREN UNDER 18



Sources: “Americans’ Use of Time” (1965–1966, 1975, 1985, 1995).

is also supported by a closer look at a factor we have measured relatively well, consistently, and continuously across time: women’s annual employment rates and hours of market work in the March Current Population Survey (CPS). Although women’s labor force rates certainly have risen dramatically in the past three decades, particularly for women in the most intensive childbearing and child-rearing years, we may have emphasized the *trend* at the expense of attending to the *level* of maternal employment in the contemporary United States (Cohen and Bianchi 1999).

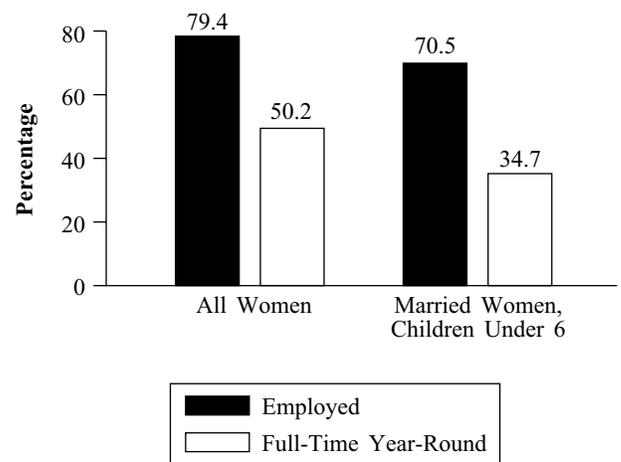
The two most commonly used indicators of women’s paid work are the percentage in the labor force (or the percentage employed) and the percentage of the employed who are full-time workers. According to March CPS data, close to 80% of women age 25 to 54 worked in 1998, and about 70% of those who worked for pay were employed full-time, year-round (see Figure 4). These rates of labor force attachment are very high.

Yet because full-time, year-round employment is usually calculated as a percentage of the employed, the sizable minority of women *not* in the labor force in a given year is often left out of employment trends. On the basis of *all* women age 25 to 54, about half were employed full-time (35+ hours per week), year-round (50+ weeks per year) in 1998, unquestionably more than the 32% reported two decades earlier. This means, however, that half of the women of prime working age are not working full-time and year-round in any given year. That percentage declines to 35% employed full-time, year-round for married women with children under age 6. Mothers—at least when they have some economic

choice—continue to balance paid work with child rearing by curtailing hours of work that conflict with periods of the day or times of year when their children are at home.

By far the modal experience, at least for a married mother of preschoolers, is to be working either less than 35

FIGURE 4. PERCENTAGE EMPLOYED AND PERCENTAGE EMPLOYED FULL-TIME, YEAR-ROUND: WOMEN AGE 25–54



Source: Cohen and Bianchi (1999).

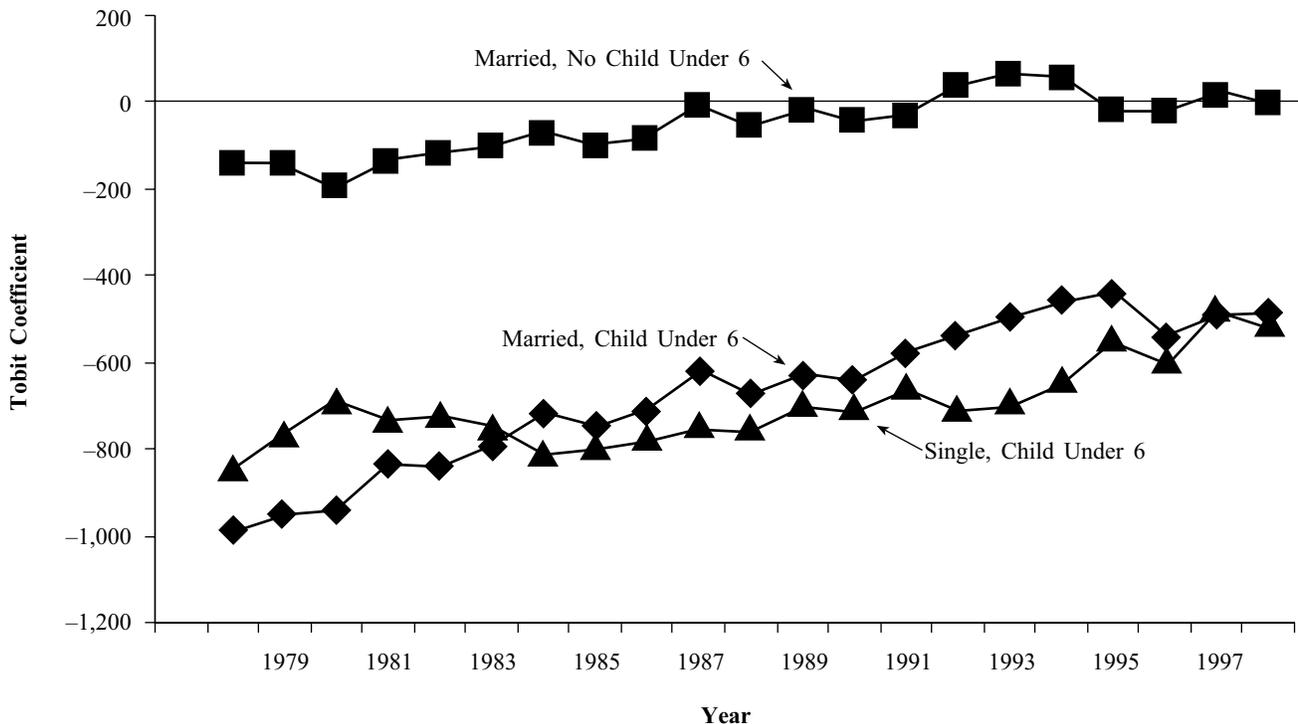
hours per week or not at all in a given year when she has young children in the household. Figure 5, which plots the trend in tobit coefficients estimating annual hours of paid work, shows that marriage by itself no longer depresses paid work. Children under age 6 are much less a deterrent to market work in 1998 than in 1978, but young children still exert a sizable downward pressure on both single and married mothers' commitment of time to paid employment.

Recent work by Klerman and Liebowitz (1999) suggests that mothers may sort into two fairly heterogeneous groups around the birth of the first child: Some remain highly committed to the labor force, and others embark on a much more intermittent work career. Heterogeneity between "committed" full-time working women and others would be consistent with historical evidence on women workers (Goldin 1990; Smith and Ward 1989). Despite extraordinarily high rates of labor force participation before the birth of their first child (80% employed, although only 50% employed full-time), only about one-third of mothers have returned to full-time work six months after the birth of their first child. For the majority of mothers—those either not working or working part-time six months after their first birth—there seems to be continued sifting across time as the first and second

births are accommodated. These estimates suggest that one-third of new mothers remain firmly attached to full-time work during their childbearing years, while two-thirds follow other patterns during the years when childcare demands are most intense.

We also find other, indirect evidence that women may be doing something beyond curtailing work hours to accommodate care of children, something sizable enough to affect wages. Jane Waldfogel (1997) shows that children depress mothers' wages, in part because mothers work more part-time years over their children's lives than do fathers. This fact, however, is not sufficient to explain the whole wage penalty. Waldfogel hypothesizes that women minimize "work and family conflict" by shifting occupations or jobs, altering their place of work—that is, making changes that enhance their ability to retain control of their children's lives but also exact a price in terms of their own earnings trajectories. Employers also may change their perceptions of women workers who become mothers, and may engage in discriminatory practices. Paula England and Michelle Budig (2000) estimate a wage penalty for each additional birth, even in recent cohorts and in fixed-effects models that should correct for unobserved heterogeneity among women of different parities.

FIGURE 5. TOBIT ESTIMATES OF ANNUAL HOURS WORKED, AS DIFFERENCE FROM SINGLE WOMEN WITH NO CHILDREN UNDER 6, 1978–1998



Note: Controls for age, education, other income, and race or ethnicity.

Source: Cohen and Bianchi (1999).

Claudia Goldin (1997) also estimates that only a small percentage (14%) of college-educated women, even in recent cohorts, reach midlife having successfully combined marriage, motherhood, and economic success in the labor market—that is, with earnings that begin to approach those of comparably educated men.

These trends, taken as a whole, at least raise the possibility that part of the reason why women’s increased employment has not been found to have many direct, negative effects on children is that time with children does not vary greatly with employment, and has been far more stable across recent decades than might be indicated at first by the rise in maternal employment rates.

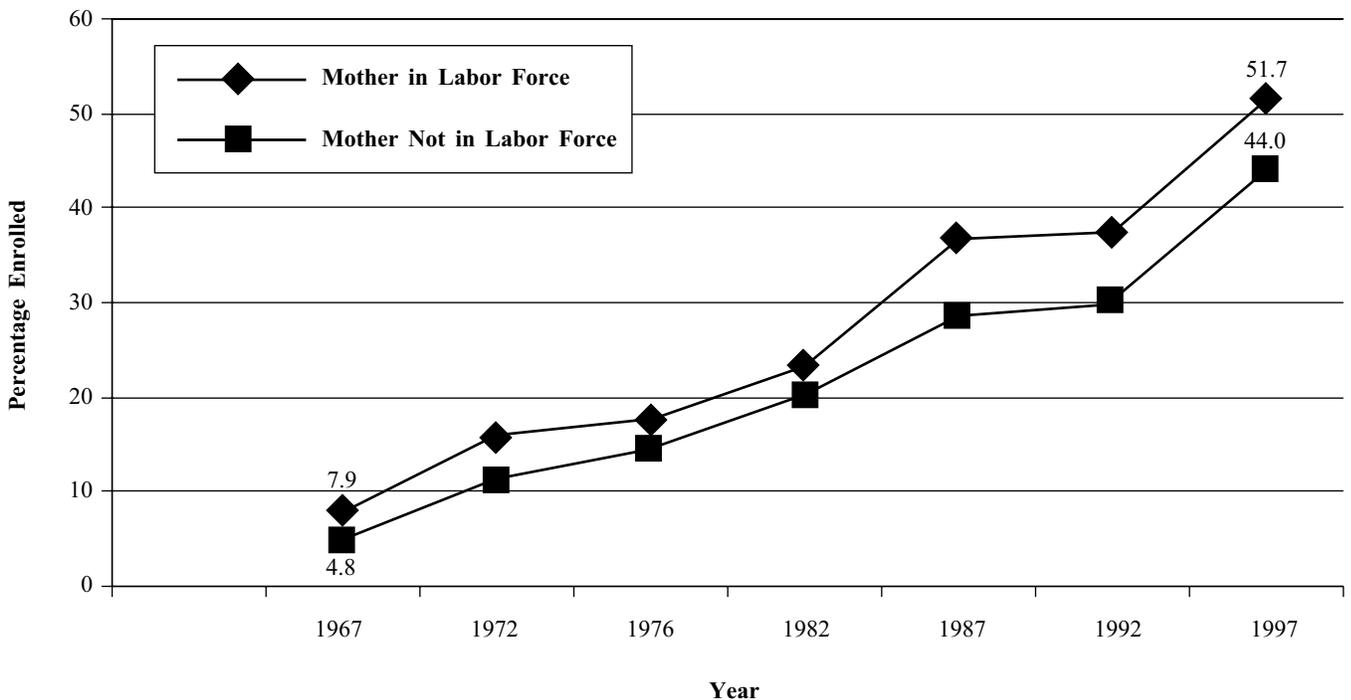
DO WE OVERESTIMATE HOW MUCH TIME CHILDREN ARE AVAILABLE TO BE “INVESTED IN”?

One of the few school enrollment changes in the past few decades has been the increase in preprimary-school enrollment, involving children ages 3 to 5 who are enrolled in some type of educational setting for at least part of the day or part of the year. When researchers began tracking these trends at the Census Bureau, they supposed that the increase in maternal labor force participation was propelling the enrollment growth: More working mothers created demand for

early education as part of childcare, for full-day kindergartens, and so forth. And indeed, for children of working mothers, the line trended upward from less than 10% of children of this age enrolled in the late 1960s to over 50% currently. The surprising development was not the trend for employed mothers (Figure 6, upper line) but the trend for nonemployed mothers (Figure 6, lower line). The level of preprimary enrollment remains lower for children of mothers not in the labor force, but has climbed as rapidly as for children of employed mothers.

Children who spend at least part of their day or part of the year in educational settings are generally removed from parental care for the hours in those settings. At least during the school year, school-age children are mandated to be away from home for a relatively large number of hours during the day (six to eight, depending on the length of the school day, whether transportation to and from school is provided by others, and the child’s after-school activities) unless they are home-schooled. Thus, for large periods of time, it would be quite difficult for parents to spend time with their school-age children. The numbers for preprimary enrollment suggest that the removal of children from the home has begun at younger ages; at these ages, in the past, children would have been available for continuous, home-based (maternal) care.

FIGURE 6. PERCENTAGES OF CHILDREN AGES 3 TO 5 ENROLLED IN PREPRIMARY EDUCATIONAL PROGRAMS, BY MOTHER’S LABOR FORCE STATUS: SELECTED YEARS



Source: Casper and Bianchi (forthcoming).

Note: Preprimary enrollment includes nursery school programs, child care settings with educational programs, Head Start, and full- and part-day kindergartens.

This has happened in the homes of both employed and non-employed mothers.

These enrollment trends are indirect indicators, but they raise the possibility that along with the increase in mothers' paid work, perhaps in part as a consequence of mothers' movement out of the home, we have changed the standards of what constitutes good mothering. It has become widely acceptable even for "stay-at-home" mothers to place preschool-age children in nonmaternal care, at least for some hours per week. We also have changed our notions about the good use of children's time, especially for preschool-age children, in the United States. Today children have fewer brothers and sisters with whom to interact; regardless of the mother's employment status, they are often judged to "need" prekindergarten socialization to launch them on their educational careers.

In other ways as well, children's lives change more generally in all types of families, even if the initial impetus for change is the employed mother's increased need for child-care. Not all children's families can afford summer programs or camps or after-school lessons. As family income rises, however, in part because of the mother's increased earnings, more children today than in the past engage in these activities, which take them outside the home and away from their parents' direct care. These childhood experiences are probably defined more strongly by social class than by whether the mother works outside the home, though mother's employment is a component of the family resources that help determine social class.

Determining causality may be hopelessly complicated because changes in mother's time use, children's time use, and family income are determined jointly. For my argument here, however, sorting out causality is less important than the end result: a redefinition of childhood that tends to push mothers toward market work because "good" childhoods increasingly include components that cost money. When mothers engage in market work, they initially create demand for childcare services provided by day care centers and summer camps. But as "quality" programs emerge to meet this demand and as mothers' earnings increase, we see an increase in the array of (expensive) choices for the way children spend their time.

Children as well help to redefine what makes a "good" childhood (Corsaro 1997). Especially as they grow older, children want to spend time in settings where their friends are; and if those settings are increasingly day care centers, after-school programs, and summer camps rather than neighborhood streets and backyards, children probably also pressure parents to provide those experiences.

As the general level of affluence and educational attainment rises, parents desire increasingly to provide their children with educational experiences. Children still require substantial investments of parental time, especially in their preschool years. Smaller family sizes, however, reduce the proportion of all child-rearing years spent with time-intensive preschoolers. At the same time, the lengthening of children's dependency (in many cases beyond age 18, as more children

attend college) shifts the time demands toward older children. The type of time investment required by older children, however, differs from the direct and constant supervision needed at younger ages (Teifenthaler 1997; Zick and Bryant 1996).

With the rise in the educational expectations for children, there has been an increase in the proportion of parenting years requiring sizable monetary investment in children. Parents provide both time and money, but the change in the nature of childhood may be presenting mothers with increasing pressures or incentives to invest in (older) children's lives in much the same way as fathers traditionally have done in the United States: by providing not only time but income to buy specialized child services. As educational requirements for successful entry into the labor force are ratcheted upward, the ultimate in this type of "quality" investment, of course, is college education. Even before college, however, special classes, travel with school groups, camps, and summer programs offering educational experiences give parents ample opportunity to provide income as well as time in an attempt to enrich their children's lives and enhance future opportunities. If "good" mothers provide what children need most, and if children increasingly require extended years of financial support to become successful adults (or at least if we think they need such investments), mothers' calculations about how to allocate time between market and nonmarket activities will include their guesses, hopes, and expectations about what their children need (currently and in the future) and how they meet those needs most effectively.

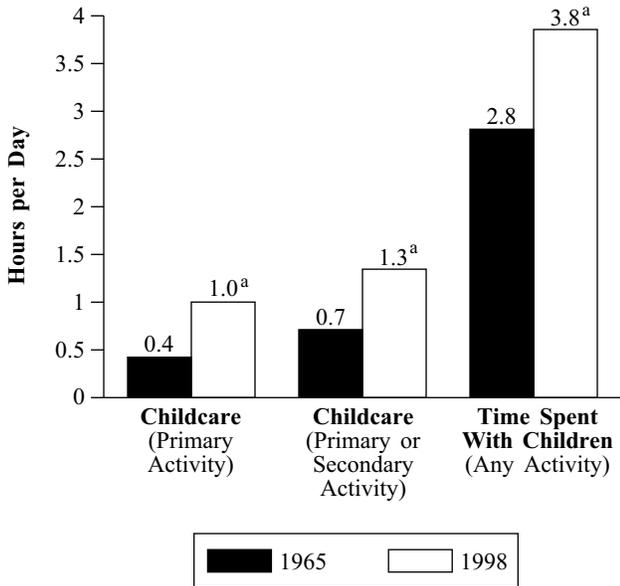
DO WE UNDERESTIMATE HOW MUCH TIME FATHERS ARE SPENDING WITH CHILDREN?

If the only change in the past 30 years had been that more mothers now work for pay, children should be spending less time with parents. This point, however, includes the assumption that mothers and fathers have not made other adjustments to accommodate this dramatic change. Mounting evidence suggests that mothers, on average, have not reduced their time with children and that fathers, at least married fathers, have significantly increased the time they spend with children.

I can calculate three direct measures of married fathers' time with children from roughly comparable time diaries in the United States, conducted in the mid-1960s and the late 1990s. The data and measures are the same as shown earlier for mothers. Figure 7 depicts how much time a married father reports that his main activity is a childcare activity, how much time he says his main or secondary activity is childcare, and how much time he says he is with his children, no matter what the activity. Each measure shows an upward trend for married fathers.

Most interesting are the relative estimates of mothers' and fathers' time with children shown in Figure 8: In 1965 the time fathers reported spending primarily on childcare was about one-quarter the mothers' estimate of their time with children; this figure increased to 30% of mothers' estimates if secondary childcare time was included. By 1998, fathers' (primary) childcare time was 56% of mothers' time, and 45% of mothers' time when secondary childcare time was added.

FIGURE 7. CHANGE IN MARRIED FATHERS' HOURS OF CHILD CARE AND TIME WITH CHILDREN



Sources: "Americans' Use of Time" (1965–1966); Bianchi and Robinson (1998–1999).

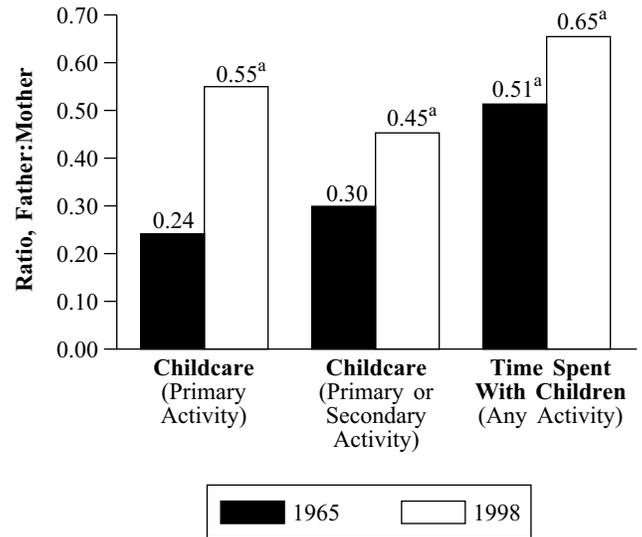
Notes: Estimates are based on one-day "yesterday" time diaries collected from 326 married fathers in 1965–1966 and 194 married fathers in 1998–1999, all with children under age 18 at the time of the interview. Childcare includes child and baby care, helping/teaching children, talking/reading to children, indoor/outdoor play with children, and medical/travel/other child-related care.

^aTest of 1965–1998 difference in means is statistically significant, $p < .05$.

In 1965, fathers reported having children with them about half as often as did mothers. By 1998, fathers' time with children was two-thirds that of mothers. Recall from Figure 1 that fathers' time with children relative to mothers' time did not increase because mothers' time decreased; mothers' time held steady or increased. Instead married fathers' time with children increased because it expanded faster than mothers' time, although from a low base in 1965. (At both time points, fathers more often than mothers had their spouse present when spending time with children, and this "joint" time is included in the estimates.)

Any single set of numbers, such as these, is not compelling. Time diary samples tend to be small (e.g., estimates in Figures 7 and 8 are based on only 194 fathers in 1998 and 326 fathers in 1965), and diaries are subject to limitations connected with recall. Other sources, however, offer noteworthy corroboration. John Sandberg and Sandra Hofferth (1999) report parallel findings based on time diaries for children under age 13. Despite the increase in single parenting and in maternal employment, children's time with at least one parent changed little between 1981 and 1997. In two-parent families, children's time with mothers and fathers in-

FIGURE 8. RATIO OF MARRIED FATHERS' TO MARRIED MOTHERS' HOURS WITH CHILDREN, 1965 AND 1998



Sources: "Americans' Use of Time" (1965–1966); Bianchi and Robinson (1998–1999).

Notes: Estimates are based on one-day "yesterday" time diaries collected from 358 married mothers in 1965–1966, 326 married fathers in 1965–1966, 194 married mothers in 1998–1999, and 141 married fathers in 1998–1999. Ratios are averages across married men and women with children under age 18, not couples married to each other.

^aTest of 1965–1998 difference in means is statistically significant, $p < .05$.

creased sufficiently to counteract any decrease of time in the home associated with increased maternal employment.

Similar findings also characterize several other industrialized countries (Niemi 1988). Michael Bittman (1999a, 1999b) shows that fathers' (and mothers') time in childcare increased substantially in Australia between 1974 and 1992. The age profile of fathers' time with children also shifted so as to suggest that fathers are much more involved in infant care now than in the past. Fischer, McCulloch, and Gershuny (1999) show similar trends for Britain: an increase in childcare time on the part of fathers (and mothers) between the mid-1970s and 1999, with an especially sharp rise since 1985 for those with children under age 5. Heather Joshi (1998: table 2) showed, in her 1996 presidential address to the European Society for Population Economics, that men's share of work in the home (including childcare) increased from around one-quarter in the 1960s or early 1970s to 35 to 40% by the late 1980s in the United Kingdom, the Netherlands, and Denmark.

CONCLUSION

Even during periods of rapid transformation in women's position in society, such as we could argue has taken place in

the United States in recent decades, change in the family, our most important sphere, sometimes occurs more slowly than we realize. On the basis of the evidence I have provided, I conclude that mothers' time and attention to children has been far more constant over the past few decades (and that the gap between employed and nonemployed mothers regarding time with children is far smaller) than we might have expected, given the increase in women's labor force participation.

Research on developing countries and historical work on developed countries have led me to reevaluate the situation in the contemporary United States, where we assume that market work is generally incompatible with child rearing. Much of what women do has not been measured adequately because it is outside the realm of market work; this failure limits our understanding of the changes in the lives of mothers, fathers, and children. If we are interested in child quality and parental investment, we need more accurate assessments of all uses of time, both reproductive and productive.

We especially need to broaden our concern about inequality in parental investment so that we assess time as well as money. Increase in parents' educational attainment, along with the decline in family size, tends to be forgotten in assessments of trends affecting children's well-being; yet for some children, these factors may have greatly enhanced parental time. Research by Steve Martin (1999, 2000) suggests that delayed childbearers, who tend to be well educated, are increasingly likely to raise their children in stable marriages, whereas early childbearers, who often are not well educated, may be increasingly likely to raise their children outside marriage. We may be seeing a bifurcation of parents and children into two groups. In one group, the fathers are not present and the mothers have neither adequate time nor money to invest in children. At the same time, in another group, both mothers *and fathers* are able and willing to spend time and money on their children as never before.

I conclude that mothers, for the most part, continue to be "sweepers" (to borrow a soccer analogy), even in the United States today. Their job is to be ever attentive to what needs to be done to assist in covering the goal—to what they must do to ensure their well-being and that of their family. In protecting the goal, first things come first: Mothers may have the luxury of worrying about providing fun, stimulation, and educational outings for their children, but only after they can ensure that their children are clothed, well nourished, and safe. If they have more to attend to than is possible for one person, they ultimately step back and allow others to provide the "fun" or "rewarding" contributions if that step is needed to get the job done.

Married women in the West were the last to move into paid market work. The historical and anthropological literature yields an image of mothers' time as residual time: picking up the slack, doing whatever cannot be allocated to children or adult relatives, or is not considered appropriate for men. Mothers do both what it makes sense to do and what has to be done, whether it makes sense or not, because no one else is available, able, or willing to do the job.

My one concern is that I have given the impression that women have found it quite easy to balance increased labor force participation with child rearing, to reduce hours of employment so as to juggle childcare, and to get their husbands more involved in child rearing; and that fathers have found it easy to add more hours with children to those they already commit to supporting children financially. I do not think these changes have been easy for American families, particularly for American women. Why have women so increased their hours of paid employment? Many observers would emphasize constraints—men's poor labor force prospects—and this is probably part of the story. But this explanation is not sufficient, for it gives too little attention to the dramatic change in opportunities for women and in women's own conceptions of what a successful, normal adulthood should entail. Yet I suspect that every mother has felt self-doubt about the path taken, and has been concerned about whether she has done the best thing for herself and/or her children, and that these feelings continue to give women pause and to slow change both in the marketplace and at home.

REFERENCES

- Amato, P.R. and J.G. Gilbreth. 1999. "Nonresident Fathers and Children's Well-being: A Meta-Analysis." *Journal of Marriage and the Family* 61:557-73.
- "Americans' Use of Time." 1965-1966. Institute for Social Research, University of Michigan.
- . 1975. Institute for Social Research, University of Michigan.
- . 1985. Survey Research Center, University of Maryland.
- . 1995. Survey Research Center, University of Maryland.
- Angrist, J. and W.N. Evans. 1998. "Children and Their Parents' Labor Supply: Evidence From Exogenous Variation in Family Size." *American Economic Review* 88:450-77.
- Baydar, N. and J. Brooks-Gunn. 1991. "Effects of Maternal Employment and Child-Care Arrangements on Preschoolers' Cognitive and Behavioral Outcomes: Evidence From the Children of the National Longitudinal Survey of Youth." *Developmental Psychology* 27:932-45.
- Becker, G. 1991. *A Treatise on the Family*. Cambridge: Harvard University Press.
- Becker, G., E.M. Landes, and R.T. Michael. 1977. "An Economic Analysis of Marital Instability." *Journal of Political Economy* 85:1141-87.
- Behrman, J.R. and M.R. Rosenzweig. 1999. "Does Increasing Women's Schooling Raise the Schooling of the Next Generation?" Unpublished manuscript.
- Belsky, J. and D. Eggebeen. 1991. "Early and Extensive Maternal Employment and Young Children's Socioemotional Development: Children of the National Longitudinal Survey of Youth." *Journal of Marriage and the Family* 53:1083-98.
- Bianchi, S.M., M. Milkie, L. Sayer, and J.P. Robinson. 2000. "Is Anyone Doing the Housework? Trends in the Gender Division of Household Labor." *Social Forces* 79:191-228.
- Bianchi, S.M. and J. Robinson. 1997. "What Did You Do Today? Children's Use of Time, Family Composition, and the Acquisi-

- tion of Social Capital." *Journal of Marriage and the Family* 59:332–44.
- . 1998–1999. "Family Interaction, Social Capital, and Trends in Time Use." Time diary data, University of Maryland.
- Bittman, M. 1999a. "Recent Changes in Unpaid Work." Occasional paper, Australia Social Policy Research Centre, University of New South Wales.
- . 1999b. "Parenthood Without Penalty: Time Use and Public Policy in Australia and Finland." *Feminist Economics* 5(3):27–42.
- Blau, F.D. and A.J. Grossberg. 1990. "Maternal Labor Supply and Children's Cognitive Development." Working Paper 3536, National Bureau of Economic Research, Cambridge, MA.
- Bryant, W.K. 1996. "A Comparison of the Household Work of Married Females: The Mid-1920s and the Late 1960s." *Family and Consumer Sciences Research Journal* 24:358–84.
- Bryant, W.K. and C.D. Zick. 1996a. "Are We Investing Less in the Next Generation? Historical Trends in Time Spent Caring for Children." *Journal of Family and Economic Issues* 17:365–91.
- . 1996b. "An Examination of Parent-Child Shared Time." *Journal of Marriage and the Family* 58:227–37.
- Bumpass, L.L. 1990. "What's Happening to the Family? Interactions Between Demographic and Institutional Change." *Demography* 27:483–97.
- Bumpass, L.L. and R.K. Raley. 1995. "Redefining Single-Parent Families: Cohabitation and Changing Family Reality." *Demography* 32:97–109.
- Caputo, R.K. 1997. "Women as Volunteers and Activists." *Non-profit and Voluntary Sector Quarterly* 26:156–74.
- Casper, L. and S.M. Bianchi. Forthcoming. *Trends in the American Family*. Thousand Oaks, CA: Sage Publications.
- Casper, L. and M. O'Connell. 1998. "Work, Income, the Economy, and Married Fathers as Child Care Providers." *Demography* 35:251–58.
- Cherlin, A.J. 1992. *Marriage, Divorce, Remarriage*. Cambridge: Harvard University Press.
- . 1999. "Going to Extremes: Family Structure, Children's Well-being, and Social Science." *Demography* 56:421–28.
- Cohen, P.N. and S.M. Bianchi. 1999. "Marriage, Children, and Women's Employment: What Do We Know?" *Monthly Labor Review* 122(December):22–31.
- Coleman, J.S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94:S95–120.
- Corsaro, W. 1997. *The Sociology of Children*. Thousand Oaks, CA: Pine Forge.
- Cowan, R. 1983. *More Work for Mother: The Ironies of Household Technology From the Open Hearth to the Microwave*. New York: Basic Books.
- Cramer, J.C. 1980. "Fertility and Female Employment: Problems of Causal Direction." *American Sociological Review* 45:167–90.
- Datcher-Loury, L. 1988. "Effects of Mother's Home Time on Children's Schooling." *Review of Economics and Statistics* 70:367–73.
- DeGraff, D.S. and R. Anker. 1999. *Gender, Labour Markets, and Women's Work*. Liège: International Union for the Scientific Study of Population.
- Desai, S. and S. Alva. 1998. "Maternal Education and Child Health: Is There a Strong Causal Relationship?" *Demography* 35:71–81.
- Desai, S., P.L. Chase-Lansdale, and R.T. Michael. 1989. "Mother or Market? Effects of Maternal Employment on the Intellectual Ability of 4-Year-Old Children." *Demography* 26:545–61.
- Desai, S. and D. Jain. 1994. "Maternal Employment and Changes in Family Dynamics: The Social Context of Women's Work in Rural South India." *Population and Development Review* 20:115–36.
- Donahoe, D.A. 1999. "Measuring Women's Work in Developing Countries." *Population and Development Review* 25:543–76.
- England, P. and M.J. Budig. 2000. "The Effects of Motherhood on Wages in Recent Cohorts: Findings From the National Longitudinal Survey of Youth." Presented at the annual meetings of the American Economic Association, January, New York.
- Fischer, K., A. McCulloch, and J. Gershuny. 1999. "British Fathers and Children." Working paper, Institute for Social and Economic Research, Essex University.
- Furstenberg, F.F., Jr., S.P. Morgan, and P.D. Allison. 1987. "Paternal Participation and Children's Well-being." *American Sociological Review* 52:695–701.
- Galinsky, E. 1999. *Ask the Children*. New York: Morrow.
- Garfinkel, I., S.S. McLanahan, and P.K. Robins, eds. 1994. *Child Support and Child Well-being*. Washington, DC: Urban Institute.
- Gershuny, J. and J.P. Robinson. 1988. "Historical Changes in the Household Division of Labor." *Demography* 25:537–52.
- Goldin, C. 1990. *Understanding the Gender Gap*. New York: Oxford University Press.
- . 1997. "Career and Family: College Women Look to the Past." Pp. 20–58 in *Gender and Family Issues in the Workplace*, edited by F.D. Blau and R.G. Ehrenberg. New York: Russell Sage Foundation.
- Greenstein, T.N. 1995. "Are the 'Most Advantaged' Children Truly Disadvantaged by Early Maternal Employment? Effects on Child Cognitive Outcomes." *Journal of Family Issues* 16:149–69.
- Han, W.J., J. Waldfogel, and J. Brooks-Gunn. 2000. "The Effects of Early Maternal Employment on Later Cognitive and Behavioral Outcomes." Unpublished manuscript.
- Hayghe, H.V. 1991. "Volunteers in the U.S.: Who Donates the Time?" *Monthly Labor Review* 114:17–23.
- Hill, C.R. and F.P. Stafford. 1974. "Allocation of Time to Pre-School Children and Educational Opportunity." *Journal of Human Resources* 9:323–41.
- . 1980. "Parental Care of Children: Time Diary Estimates of Quantity, Predictability, and Variety." *Journal of Human Resources* 15:219–39.
- Ho, T.J. 1979. "Time Costs of Child Rearing in the Rural Philippines." *Population and Development Review* 5:643–62.
- Hofferth, S.L. Forthcoming. "Women's Employment and Care of Children in the United States." In *Women's Employment in a Comparative Perspective*, edited by T. Van der Lippe and L. Van Dijk. New York: Aldine de Gruyter.
- Hogan, D.P. and F. K. Goldscheider. 2000. "Men's Flight From Children in the U.S.? A Historical Perspective." Presented at the annual meetings of the Population Association of America,

- March, Los Angeles.
- Holmes, J. and J. Tiefenthaler. 1997. "Cheaper by the Dozen? The Marginal Time Costs of Children in the Philippines." *Population Research and Policy Review* 16:561-78.
- Joshi, H. 1998. "The Opportunity Costs of Childbearing: More Than Mothers' Business." *Journal of Population Economics* 11:161-83.
- Juster, F.T. and F.P. Stafford. 1985. *Time, Goods, and Well-being*. Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan.
- King, R.B. 1999. "Time Spent in Parenthood Status Among Adults in the United States." *Demography* 36:377-85.
- King, V. 1994. "Variation in the Consequences of Nonresident Father Involvement for Children's Well-being." *Journal of Marriage and the Family* 56:963-72.
- Klerman, J.A. and A. Leibowitz. "Job Continuity Among New Mothers." *Demography* 36:145-55.
- Leibowitz, A. 1974. "Home Investments in Children." *Journal of Political Economy* 82:111-31.
- . 1977. "Parental Inputs and Children's Achievement." *Journal of Human Resources* 12:243-51.
- Levine, N.E. 1988. "Women's Work and Infant Feeding: A Case From Rural Nepal." *Ethnology* 27:231-51.
- Lichtenstein, M. 1983. "Some Correlates of the Amount of Volunteer Activity in a Sample of Elite Women: The Relative Effect of Previous Volunteer Experiences and Socio-Personal Characteristics." PhD dissertation, Rutgers University, New Brunswick, NJ.
- Lloyd, C.B. 1991. "The Contribution of the World Fertility Surveys to an Understanding of the Relationship Between Women's Work and Fertility." *Studies in Family Planning* 22(May/June):144-61.
- Martin, S.P. 1999. "U.S. Women Who Delay Childbearing: Interpreting Recent Marriage and Fertility Patterns." Unpublished manuscript.
- . 2000. "Diverging Fertility Among U.S. Women Who Delay Childbearing Past Age 30." *Demography* 37:523-33.
- Mason, K.O. and V.T. Palan. 1981. "Female Employment and Fertility in Peninsular Malaysia: The Maternal Role Incompatibility Hypothesis Reconsidered." *Demography* 18:549-75.
- McLanahan, S. and G. Sandefur. 1994. *Growing Up With a Single Parent*. Cambridge: Harvard University Press.
- Nasaw, D. 1985. *Children of the City: At Work and At Play*. New York: Oxford University Press.
- Niemi, I. 1988. "Main Trends in Time Use From the 1920s to the 1980s." Presented at the meetings of the International Research on Time Budgets and Social Activities, June, Budapest.
- Nock, S.L. and P.W. Kingston. 1988. "Time With Children: The Impact of Couples' Work-Time Commitments." *Social Forces* 67:59-83.
- Oppenheimer, V. 1997. "Women's Employment and the Gain to Marriage: The Specialization and Trading Model." *Annual Review of Sociology* 23:431-53.
- Paolisso, M., M. Baksh, and J.C. Thomas. 1989. "Women's Agricultural Work, Child Care, and Infant Diarrhea in Rural Kenya." Pp. 217-36 in *Women, Work, and Child Welfare in the Third World*, edited by J. Leslie and M. Paolisso. Boulder: Westview.
- Parcel, T.L. and E.G. Menaghan. 1994. *Parents' Jobs and Children's Lives*. New York: Aldine.
- Presser, H.B. 1989. "Can We Make Time for Children? The Economy, Work Schedules, and Child Care." *Demography* 26:523-43.
- . 1999. "Toward a 24-Hour Economy." *Science* 284(June): 1778-79.
- Preston, S.H. 1984. "Children and the Elderly: Divergent Paths for America's Dependents." *Demography* 21:435-57.
- Robinson, J.P. and G. Godbey. 1999. *Time for Life: The Surprising Ways Americans Use Their Time*. 2nd ed. University Park: Pennsylvania State University Press.
- Sandberg, J.F. and S.L. Hofferth. 1999. "Changes in Parental Time With Children, U.S. 1981-1997." Presented at the annual meetings of the International Association of Time Use Research, October 6-8, University of Essex, Colchester.
- Sassler, S. 1995. "Trade-Offs in the Family: Sibling Effects on Daughters' Activities in 1910." *Demography* 32:557-76.
- Segal, L.M. 1993. "Four Essays on the Supply of Volunteer Labor and Econometrics (Labor Supply)." PhD dissertation, Department of Economics, Northwestern University, Evanston, IL.
- Smith, J.P. and M. Ward. 1989. "Women in the Labor Market and the Family." *Journal of Economic Perspectives* 3(Winter):9-23.
- Statham, A. and P. Rhoton. 1985. "The Volunteer Work of Mature and Young Women: 1974-1981." Presented at the annual meetings of the American Sociological Association, August, Washington, DC.
- Tiefenthaler, J. 1997. "Fertility and Family Time Allocation in the Philippines." *Population and Development Review* 23:377-97.
- Tilly, L.A. and J.W. Scott. 1987. *Women, Work, and Family*. 2nd ed. New York: Routledge.
- Vanek, J. 1974. "Time Spent in Housework." *Scientific American* 231:116-20.
- Van Esterik, P. and T. Greiner. 1981. "Breastfeeding and Women's Work: Constraints and Opportunities." *Studies in Family Planning* 12(4):184-97.
- Waite, L.J. 1995. "Does Marriage Matter?" *Demography* 32:483-507.
- . 2000. "Parenting From the Office: How Dual-Career Families Stay in Touch With Teens." Presented at the Conference "Work and Family: Expanding the Horizons," March, San Francisco.
- Waldfoegel, J. 1997. "The Effect of Children on Women's Wages." *American Sociological Review* 62:209-17.
- Zick, C.D. and W.K. Bryant. 1996. "A New Look at Parents' Time Spent in Child Care: Primary and Secondary Time Use." *Social Science Research* 25:260-80.