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Children’s Time Use and Parental Involvement in Low-income Families

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Despite evidence of a small decline in child poverty in the second half of the 1990s, recent reports from the Census Bureau shows that the number of children in poverty increased by nearly one-half million children so that in 2002, 16.7% of children live below poverty line. Children under 6 living in female-headed households were particularly vulnerable to poverty, 48.6% of them were poor (Census Bureau, 2003; New York Times, September 23, 2002). Since 1995, the percentage of poor children living with working parents has risen steadily (Child Trend, 2002). Twenty seven million American children live in families in which their parents made 200% of the federal poverty line or below; and more than 85% of them have at least one working parent (National Center for Children in Poverty, 2003). How children in low-income families are impacted by the increased work effort is unclear.

Low-income families, including many single-parent families and working poor two-parent families, face great challenge of supervising children and spending time on developmentally appropriate activities with them. There maybe tradeoffs between parents' work hours and their time with children for low-income families. When employed, low-income parents often have less control over their work schedules and have fewer resources to purchase quality childcare services, thus are likely to experience intense work family conflict. These scheduling conflicts, coupled with daily economic pressures may be detrimental to parents' psychological well-being, making them more anxious or depressed, which in turn may lead to less energy in providing children with supportive interaction and stimulating environment (McLoyd, 1990; Yeung, et. al. 2002). On the other hand, employment can be beneficial for children if it results in additional income to provide better food, housing, medical care, and more

stimulating and supportive environment for children, improved parental psychological well-being, and a positive role model for children. The work requirement stipulated by the welfare reform raises questions about the implications of maternal employment on the well-being of children in low-income families. While some argued that children would benefit from the regularity and routine provided by a working parent, others expressed concern about the likely negative consequence of the policy on children through reduced time parents would spend with their children (Huston, 2002).

One potentially important aspect of children's well-being that has received little attention in poverty research is children's time use. Research has shown that the productive use of children's time in activities such as reading, studying, extracurricular activities, and volunteer work tends to contribute to successful development in children (Eccles & Barbers, 1998; Leone and Richards, 1989; Timmer et al., 1985). The time children spend with parents, siblings, peers, and relatives is indicative of the quality of the social support network surrounding the child that relates importantly to children's achievement (Folbre, 1997). Time use studies, when used to complement traditional statistical information such as demographics, parents' earnings and employment, can provide an otherwise unavailable glimpse of children's organization of life and social connections across multiple contexts.

This paper uses both time diary data and non-diary data to address two research questions – (1) Do children in low-income families spend less time with parents or in activities that are conducive to learning and in activities that are associated with behavior problems? (2) Do low-income working mothers have a lower level of involvement with children than non-working low-income mothers?

Previous Literature

Results from existing research on maternal employment and children's well-being have yielded mostly negligible or positive effects (Belsky, 1990; Parcel & Menaghan, 1994; Perry-Jenkins et al, 2000), except for maternal employment during the very early stage of child's life (Rhum, 2004; Han et al., 2001). Maternal employment is found to be associated with better maternal mental health (Hoffman & Youngblade, 1999). Much of this body of literature, however, has focused on middle-class two-parent families (Brooks-Gunn, Han & Waldfogel, 2002; Harvey, 1999). Among low-income families, results from the literature range from no effect (Zaslow et al. 1999) to a modest but overall positive effect of maternal employment for children's cognitive and social development (Vandell & Ramanan, 1992; Moore & Driscoll, 1997; Zaslow & Emig, 1997). Research that examines parental work schedule shows that parents who work split shifts in order to reduce their child care costs are sacrificing overlap time with one another partly to reduce paid care costs (Kiser 2002; Presser 1994). Research investigating the processes through which maternal employment affect children's well-being is more limited.

This paper examines how maternal employment affects parents' psychological well-being and parent-child interaction. Figure 1 presents a conceptual framework for understanding the relationship between maternal employment and children's well-being. Maternal employment is seen to have a direct impact on family income, parent's psychological well-being and their parenting behavior. Based on a large body of previous literature (Conger et al., 1992, 1995; McLoyd, 1990; McLoyd et al, 1994), financial resource of a family is hypothesized to affect parents' psychological well-being, which in turn affects parenting behavior. Parents who have a high level of emotional stress are less likely to be supportive and involved parents. In this paper,

we conceptualize parenting behavior broadly to include how parents structure children's lives, the emotional support of the parents, as well as parents' involvement in children's daily activities and in providing materials and experiences that are conducive to healthy child development. These are important mechanisms identified in the literature through which income affects children's well-being (Demo & Cox, 2000; Guo & Harris, 2000; Mayer, 1997; Shonkoff & Phillips, 2000; Yeung, Linver, Brooks-Gunn, 2002). A study on children in some local Head Start programs observes that increased parental work hours and earnings are associated with improved maternal mental health and reduced punitive parenting behavior (Raver, 2003). Other studies, however, find that unless employment leads to a reduction in financial strain, mothers tend to become less supportive and less involved (Jackson et al. 2000). These studies are limited in their generalizability because of the selective samples used.

Family income may also have direct impact on parenting behavior as time parents spend in caring for children carries an opportunity cost of both the wages forgone and the human capital accumulation forgone (Mincer & Polacheck, 1974). Economists have assumed that parents make a choice between the number of children and the resources they want to allocate to the children and other non-child related consumption so as to maximize their utility subject to an inter-temporal budget constraint and a time constraint. Conceptually, an increase in parental income or earnings capacity leads to a relatively large increase in the desired level of per child well-being. Because this per-child increase applies across children, parents of high earnings tend to have fewer children, but invest more in each (Becker & Lewis, 1973; Willis, 1973). If child well-being is "produced" with both time and money resources, one might expect as parents' wages increase, they will substitute "goods intensive" childcare such as out-of-home daycare for their own time. Hence, parental involvement with children, particularly in the quantity of time

with a child, may be reduced as parents' earning power increases. Studies by Hill and Stafford (1974) and Leibowitz (1974, 1977), however, indicated that high socioeconomic status mothers spend significantly more time caring for their preschool children than do low-status mothers, despite their relatively high potential wages. A few recent research also showed that the substitution between income and time with children was on a limited scope as a desire for high quality children and interaction with children for parents in high-income families leads them to spend more time with children during nonworking hours, particularly on weekends (Hallberg and Klevmarken 2003; Yeung and Stafford, 2003).

Parents transmit critical resources and values to the next generation through a wide range of involvement with children. Spending time with children is an important way for parents to channel these resources to children. Developmental psychology literature demonstrates that children of parents who provide a supportive environment and who spend direct time on important developmental activities have higher levels of cognitive skills and self-esteem (Maccoby & Martin, 1984; Eccles et al., 1997). Recent research has also noted the potentially positive implications of family routines and rituals for children (Fiese et al., 2002; Crouter & McHale, 2003). They found that adolescents who are in families that have dinner together several times a week or have holiday rituals tend to do well in school and to report lower level of anxiety and are less likely of engaging in risky behavior.

Early sociological studies show that parents of different socioeconomic status have different parenting practices (Kohn 1969). Children's time use patterns reflect parents' values, resources, and constraints. More recent studies indicated that children of highly educated parents study and read more and watch TV less (Bianchi & Robinson, 1997; Yeung & Stafford, 2002) and participated in more organized activities (Hofferth & Sandberg, 2001; Lareau, 2002).

The key to understanding parental employment on children's well-being is how parents' employment affect their psychological well-being, the way they structure children's lives, and the extent to which they are involved in children's activities. Our effort in this paper focuses only on how employment and income affect parents' psychological well-being and parenting behavior. We will examine how these parental well-being and parenting behavior affect children's well-being in our future work.

Data

We examine these issues through the study of children's time diaries and stylized survey data collected in the Panel Study of Income Dynamics (PSID). The PSID has collected *annual* data on the socioeconomic characteristics of a nationally representative sample of about 5,000 families since 1968. In 1997, the PSID conducted a Child Development Supplement (PSID-CDS), which contains information about child development for approximately 3,600 children aged 0-12 in 1997.

Children's Time Diary Data

Unique to this data set is the information, collected in a time-diary format in the spring and the fall of 1997, about children's daily activities. Each family was asked to complete a diary for up to two children about what a child did, where the child was, who did the activity with the child, who was present but not involved, and what else the child was doing at that time. The diaries were collected for a random weekday and a random weekend day for each child¹. From these diaries, researchers can construct children's activities over a week, and the role of

¹ Approximately sixty percent of these diaries were completed by the mother of the child alone, 12% of them by the mother and the child together, 6% by the target child alone. 3% were completed by the mother and father together, 2% by the child's father alone, less than one percent were completed by mother, father, and the child together, only 5 diaries were completed by the father and the child together, and 12% were completed by someone else.

caregiver, peers, kinship, and others in a child's life. The response rate for the time diary data is about 80%.

The validity of the time-diary data has been assessed extensively in previous literature (Juster 1985). This method is generally regarded as preferable to other methods of measuring time use in large samples. More traditional "stylized" questions that ask directly about the frequency and duration of time spent in various activities are affected by the pre-defined categorization of activities and possibly by systematic over- or under estimation on the part of respondents of the actual time spent in those activities (Robinson 1985; Stafford and Duncan 1985). Time diaries have been found to be as accurate as, and possibly more accurate than, more expensive methods that assess time use sampled on a real-time basis. These include observationally based data and data from "pager" studies or Experience Sampling Methods (National Academy of Sciences 2000). A schematic view and discussion of the coding system used for the PSID children's diaries and a detailed description of the codes is also available on the PSID website².

We examine how much time children spend in schools, in day care, by themselves, and in various activities such as studying, reading, working on computers, watching TV, participating in arts or sports activities, sleeping, eating, doing housework, participating in religious activities, and in leisure activities. In addition, we examine time with parents, siblings, grandparents, other relatives, non-relatives, and friends. Non-diary measures on parenting behavior will also be used to supplement time diary data in this analysis.

² At <ftp://ftp.isr.umich.edu/pub/src/psid/cds/codingman.pdf>