## The Impact of Nonstandard Work on Caregiving

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The twentieth century was a period of dramatic transformation in the role that women play in society, highlighted most clearly by the rapid rise in paid employment of mothers with young children. Currently, 60 percent of mothers with children under age six participate in the paid workforce. As mothers have increased their paid work efforts, conflicts between employment and family responsibilities have grown, leading researchers to explore more fully the role that caregiving responsibilities play in mothers' time choices, the effects that these choices may be expected to have on their children, and related policy concerns.

Our paper will focus specifically on how mothers' employment choices (full-time versus part-time) and work schedules (standard vs shiftwork) affect mothers' caregiving, including total time spent with children as well as the activities engaged in during that time with children. This analysis will permit the examination of several important questions such as whether there is a difference in mothers' time spent on human capital investment for her children among full time working, part time working and nonworking mothers; what role education plays in the way mothers spend time with children, controlling for employment choices; and does shiftwork permit more direct child contact or affect the quality of that contact? Other studies have found that employment hours are a predictor of hours spent with children, however, the empirical findings imply that mothers shield their children from the full impact of their employment by cutting back on personal time, sleep, leisure and home production other than child care (Howie, et al, 2005; Bianchi, 2000; Reimers, 2002; Sandberg and Hofferth, 2001).

The paper will begin with a descriptive assessment of these and other questions, and then will proceed to a series of econometric models using the newly released American Time Use Survey (ATUS) to study how time spent with children and the nature of that time is affected by the choice of full time versus part time employment and the choice of standard versus shiftwork. Of course, working full time versus part time or standard versus shiftwork is itself a choice and so we model the simultaneity of the time spent with children and employment status. We focus on full time/part time work status and standard/nonstandard work status in separate estimations. The methodology we will use for both will be a two-step estimation strategy in which we first estimate a model of full time versus part time employment (and then standard versus nonstandard employment) and use this first stage estimation to construct predicted probabilities of part time employment (and then nonstandard employment) that can be used as generated regressors in the second stage estimation of caregiving time. The second stage estimation will involve estimating a two-equation system of primary and secondary caregiving time use using a seemingly unrelated Tobit model. This estimation will provide information regarding the role that work status, controlling for economic and demographic factors, plays in time spent with children.

Note that the above estimation incorporates information on caregiving as a primary as well as secondary activity, a distinction available in the ATUS data. Previous time use data reveals that much of mothers' caregiving time is performed as a secondary activity, with other

<sup>&</sup>lt;sup>1</sup>Connelly and Kimmel (2003) examined the role of fulltime/parttime employment status on child care modal choices, while Kimmel and Powell (2005a, 2005b) focused on day work versus shiftwork.

home production as the primary activity.<sup>2</sup> We will experiment with including all child care time, primary and secondary combined in a single equation, versus estimating primary and secondary caregiving time in separate but error-connected regressions. Mothers who are employed full time may use a different mix of primary versus secondary child care time and this mix, like the time inputs themselves, may have implications for child development. We complete our estimation by decomposing caregiving time into specific key activities and repeating the estimation for these activities.<sup>3</sup>

This research has relevance for the growing literature on the relationship between maternal employment and maternal child care time. It also relates to policy issues concerning our nation's goals regarding school readiness for children and the concern that work requirements within TANF may negatively impact parental investment in their children. Previous research has shown substantial differences in non parental child care modal utilization patterns by employment type, and we expect that work schedules also will affect time devoted to parental child care. Given that low wage workers are disproportionately represented in nonstandard employment, this estimation has relevance for the advisability of "Work First" welfare policies that may further increase the likelihood that the welfare-to-work population will engage in nonstandard employment (Kimmel and Powell, 2005b).

<sup>2</sup>For an analysis of UK mothers' primary and secondary caregiving activities using time use diaries, see Kalenkoski, Ribar, and Stratton (2005).

<sup>&</sup>lt;sup>3</sup>We plan to select the five or six most common activities that mothers engage in with their children for our analyses.

## **Works Cited**

- Bianchi, Susan, 2000, Maternal Employment and Time with Children: Dramatic Change or Surprising Continuity? *Demography* 37, pp. 401-414.
- Connelly, Rachel and Jean Kimmel. 2003. "Marital Status and Full-time/Part-time Work Status in Child Care Choices," *Applied Economics*, 35(7), pp. 761-77.
- Howie, Peter, John Wicks, John M. Fitzgerald, Douglas Dalenberg, Rachel Connelly. 2005. "Mothers' Time Spent in Spent in Care of Her Children and Market Work: a Simultaneous Model with Attitudes as Instruments," forthcoming in *Applied Economics Letters*.
- Kimmel, Jean and Lisa M. Powell. 2005a. "Nonstandard Work and Child Care Choices of Married Mothers," forthcoming in *Eastern Economic Journal*; earlier draft circulated as WMU Department of Economics WP # 03-03.
- Kimmel, Jean and Lisa M. Powell. 2005b. "Nonstandard Work and Child Care Choices: Implications for Welfare Reform," book chapter to be included in forthcoming conference volume titled *From Welfare to Child Care*, Lawrence Erlbaum Associates, Inc.
- Reimer, Cordelia. 2002. "Parents' Work Time and the Family," *The Economics of Work and Family*, Jean Kimmel and Emily Hoffman, editors. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, pp. 71-104.
- Sandberg, J. and S. Hofferth, 2001. "Changes in Children's Time with Parent, U. S. 1981-1997," *Demography*, 38, pp. 423-436.