Discussion Notes for Paper on Shift Work by Anne Polivka: ATUS Early Findings Conference

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Paucity of shift work research despite pervasiveness among the employed

IS IT

• because shift work doesn’t matter for issues of interest?

  (I.E., HOW MANY hours people work matters but not WHICH ones?)

OR

• Are we ignoring a significant labor force phenomenon that affects individual and family well-being?

For sure, a complex issue, as paper attests.
Some results from my own research (May 1997 CPS) to highlight the pervasiveness of shift work—using same definition of shift work as Ann Polivka—except reference period is “last week.”

[Important that the BLS go back to using “last week” as reference period for time work begins and ends questions on CPS—BLS changed to “usually” in 2001 and 2004 and got large proportions say “it varies.” Question loses most of its usefulness with this unfortunate change.]
Non-daytime and weekend employment


- **1 in 5** employed Americans work mostly during the evenings, nights, or on rotating or highly variable schedules.

- **1 in 3** employed Americans work Saturdays and/or Sundays.

- **2 in 5** employed late shifts and/or weekends

Source: Presser, 2003
Percentage of Married Dual-Earner Couples With At Least One Spouse Who Works Most Hours at Nonstandard Times

- All two-earner couples: 27.8
- Two-earner couples and
  - Child < age 14: 31.1
  - Child < age 5: 34.7

### Percentage of Employed Mothers With Children Under Age 14 Who Work Mostly Nonstandard Hours and Weekends by Marital Status

<table>
<thead>
<tr>
<th></th>
<th>Single</th>
<th>Married</th>
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<tbody>
<tr>
<td>Nonstandard hours</td>
<td>20.8%</td>
<td>16.4%</td>
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<tr>
<td>Weekends</td>
<td>33.2</td>
<td>23.9</td>
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May CPS estimates are consistent with other national surveys that ask about WHICH hours people work:

National Survey of Families and Households, 1987-88 and 1992-94 (2 waves; includes questions about time spent in household activities)

Medical Expenditure Panel Survey (starting in 1996; includes questions on disability status)

[Also consistent those aged 19 to 26 in 1985 CPS and the National Longitudinal Survey of Youth cohort when aged 19-26 in 1984]
ATUS estimates of shift work in Polika’s paper

• 2003-2004 ATUS estimates of shift work based on one 24-hour period (2003 and 2004 pooled) highly concordant with estimates from the May 2004 CPS based on usual work schedule:

  -- uses when “most hours” are worked (day, evening, or night) to define a shift;

  -- finds about 17% work other than a day schedule.

• My analyses of May CPS 1997 data closer to 20%

  -- I also used the “most hours” shift definition

  --my sample includes self-employed; the ATUS analysis is limited to wage and salary earners.
Problem with CPS shift work questions in 2001 and 2004

--prior to 2001, reference period on time work begins and ends was “last week”

--2001 and 2004, reference period on time work begins and ends changed to “usually” --and response category of “time varies” jumped substantially to over 20%

--strongly recommend that the CPS go back to “last week” as reference period
--seasonal concerns for May focus seem unwarranted (e.g. 1996 MEPS over year consistent with May 1997 CPS)
Paper points to the need for both CPS and ATUS shift work data

• Pros and cons of both sources of data:

  one day ATUS vs. usual or last week, CPS;

  detailed time-specific activities for one day, ATUS vs. recall errors for longer period of time, CPS;

  larger sample for CPS needed for detail about different types of shifts, shift of spouse, age of children, detailed occupation—although CPS supplement does not ask time use.
Some methodological concerns about ATUS findings

• Small sample sizes for each of the nonday shifts in analysis of time use—and problem with grouping all nonday shifts together.
  
  – Would be especially good to have a large enough sample to look at people with young children (under age 5) separately (not just as control variable).

  -- Would be especially good to do analyses separately by gender (not just as a control variable).

• Rotators on the day shift are not classified as rotators. (One third of all nonday shift workers are rotators.)

• 24 hour period is 4am one day to 4am next day…problem for assessing sleep time. For many respondents, sleep time is actually sum of parts of two days sleep (except for those who sleep during the day only).
Substantive findings

Mixed results on time use—to be expected.
Relationships often conditional on type of shift (e.g., dinner time less for evening workers; sleep issue more relevant for night workers and rotators.)

Re: finding, less time eating for shift workers. Eating dinner alone or with family/friends? (Unfortunately can’t get at nutritional differences in meals by shift.)

Re: finding, little difference in sleep. Counter to large body of research showing chronic sleep problems for night workers and rotators.

Re: section missing on spouse’s shift (obtained from match with 2004 CPS) important, especially since fathers are doing so much child care when spouses work different shifts.
Percent of children under age 5 who are cared for by fathers when mothers are at work:

When mother works **days**: 29.2%

When mother works **evenings or nights**: 80.9

When mother on **rotating schedule**: 61.5

Source: Presser 2003 (National Survey of Families and Households)