

Working In the Evenings: Revisiting How to Measure Non-Day Work.

This paper revisits the ways non-day work is usually measured and suggests a new measure focusing solely on work that occurs during the evening (6 p.m.–9 p.m.). Traditionally, non-day work is measured by determining the worker's shift or categorizing all work not done during the traditional day as “non-standard” work. These measures of work are often used to measure how work affects activities such as childcare, time with spouse, and time for social activities. These activities, however, normally cluster during the evening. The rise in quality and availability of time diary data allows instead for a direct examination of evening work, rather than asking the respondents to talk about their usual day. The American Time Use Survey (ATUS) allows for an examination of how well shift and non-standard work measures evening work. This close examination shows the shift measure underestimate the prevalence of evening work, while the non-standard work measure overestimates the amount of evening work done in the overall population. The article concludes by showing the evening work measure is effective at predicting commonly held hypotheses about evening work and time with children.

Michael R. Corey
Department of Sociology
University of Chicago
1126 E. 59th Street
Chicago, IL 60637
Mobile: 773.322.3706
mcorey@uchicago.edu

Keywords: Time Use; Shift Work; Work; Family; Non-Standard Work.

1. INTRODUCTION

The theoretical section of this dissertation focuses on the importance of measuring temporal location as an indicator of the quality and synchronicity of activities. In essence, being at work when your family is free is qualitatively different than being at work while they are at work or school. Including temporal location in measuring daily activity is necessary to measure the possible burden of work, or at least to measure the work-life balance in an effective way. Previous research has started on this path by classifying work into broad shifts, and thus the results are often muddled. In this chapter, I propose directly measuring work during the evening hours rather than measuring the type of workday. I focus on parents with children at home, and show that the effects of overall shift of work on time with children are mild. When time in the evenings is measured, many workers show up that are missed by the shift calculation. Using a more detailed and direct measure of evening work produces stronger and more accurate estimate.

The movement of mothers into the workplace alongside fathers and the extension of the workday as we move towards a twenty-four-hour society have produced a large literature about how working a non-day shift shapes time with family. The purpose of this paper is to examine how to best capture the conflicts created between work and family by the extension of the workday outside of usual business hours. Previous research has focused on measuring work outside of daytime hours (usually around 8a.m.–6 p.m.) or the time of day when the majority of hours are worked (day, evening, night). Using these definitions, researchers have found considerable differences in how much time between day and non-day employees spend in different family activities. However, it is possible these authors

are measuring different types of workers, rather than the effects of working at different times of day. I advocate measuring the amount of time workers spend working in the evening, since the family activities usually measured tend to cluster in the evenings. Directly measuring working in the evenings will provide a much more concise estimation of working at times that are likely to conflict with family time, and may show the current and broad non-standard work or shift measurements incorrectly estimate work during the evening.

1.1. *Measuring Non-Day Work.*

Recent scholarship has focused on how work outside the usual daytime hours shapes time with family (Han 2004; Hook and Wolfe 2011; Presser 2005; Wight, Raley, and Bianchi 2008). Categorizing work outside of the usual daytime hours has taken two distinct paths: measuring "non-standard work" as all time outside of some portion of daytime defined as standard, usually 8a.m.-6 p.m.; asking the respondent what shift they usually work (Strazdins et al. 2006); and constructing that from data on workdays, with the median hour defining the shift as a day shift (8a.m.-4 p.m.), evening shift (4 p.m.-midnight), or night shift (midnight-8am) (Presser 1994; Wight et al. 2008). It is reported that night work is on a steep decline (Hamermesh 1999), and it is often dropped from the analysis (Wight et al. 2008) or combined with the evening shift measure (Hook and Wolfe 2011).

Prior research on shift work can be broken into two broad categories. The first examines the negative outcomes of private sphere activities—socialization, health, and especially time with family and spouses—as a result of working non-day shifts. A second camp attempts to define who does non-day work and why they do. Thinking about work timing

in terms of the activities it conflicts with and testing the competing models of work timing on these same activities can bridge the gap between these two camps.

The shift measure only considers when the majority of hours are worked, and sometimes only when the majority of hours for the primary job. It is possible the increase in holding two or more jobs, long hours, or starting work at mid-day may create situations where the worker is at work long into the evening, despite having the majority of their hours worked during the day (e.g. working from 9 a.m.–8 p.m., 11 a.m.–8 p.m., or working from 8 a.m.–2 p.m., and again from 6 p.m.–10 p.m.). Measuring non-standard work usually entails measuring any work outside of a "typical day", often defined as 8 a.m.–6 p.m. This measure is likely to overestimate the conflict between work and family because of recording non-standard hours as hours worked when there is little probability for spending time with the family, such as working 10 p.m.–2 a.m. Despite these limitations, using either a shift or non-standard work measure has produced strong results showing non-day work to have detrimental effects on time with family, but it is unclear if the shift measurement captures the entire population at risk of the work-family conflicts.

1.2 Non-Day Work and Family Time

The constructions used to measure non-day work have been useful predictors for family time in a number of ways, such as time with children (Hook and Wolfe 2011; Nock and Kingston 1988; Stewart and Allard 2008; Stewart 2009) and time with spouse (Becker and Moen 1999; Presser 2000, 2005; Wight et al. 2008). Because these studies tend to focus on working parents, they implicitly or explicitly focus on activities that primarily occur in the evening.

Evening workers who are married or have children face unique negative outcomes from the arrangement of their work timing. In general marriages are far more fragile if either or both partners work a non-day shift (Presser 2005; Strazdins et al. 2006; White and Keith 1990). The processes by which this marital discord occurs is often explained by conflicts due to time pressures, such as a lack of time for intimacy and discussion, leading to negative outcomes on marital happiness, sexual relations, and child health (Hochschild 2001; White and Keith 1990).

The effects of evening work on the desynchronization of spouses and housework are more mixed for couples. In general men do more housework when their spouse is not co-present, especially typically female tasks (Hochschild and Machung 1989; Presser 1994). In some ways this removal of gender roles from housework can be seen as a benefit of shift work, but the total hours of housework done in a shifted household tends to be lower than a synchronous household (Presser 2005). However, with time use data it is possible to directly measure the amount of time workers spend on housework in the evening, and how this shapes other activities on that day.

1.3 Work and Child Care

The amount of time parents spend with their children differs dramatically if either parent works a non-day shift. Time with children generally increases in these situations, often in an amount that balances some of the time lost with their spouse, especially for men (Han 2004; Presser 2005; Wang and Bianchi 2009; Wight et al. 2008). Hochschild and Machung (1989) propose an exchange theory of work timing, explaining how some shift workers choose to desynchronize to arrange childcare. This has limited support demographically as time with children generally goes up for non-day workers while time

with spouses goes down (Presser 2005; Wight et al. 2008). Some few couples may both work off the day shift and thus also be synchronized, but that situation is unusual (Presser 1994). Since family time generally occurs in the evenings (Stewart 2009), directly measuring working time in the evenings should be the most effective way to measure potential conflicts between work and family.

2. HYPOTHESES

I propose to examine if constructing a shift or non-standard measure accurately predicts the amount of time spent in work during the evenings. My first research question asks if constructing a shift measurement accurately captures individuals doing evening work. I hypothesize:

H_{1A}: Shift measurements will under-estimate evening work as reported in time diary data.

My second question is if the measurement of non-standard work as any work outside of 'usual' daytime hours, defined here as 6a.m.–6 p.m., accurately predicts the number of individuals participating in evening work. I hypothesize:

H_{1B}: Non-standard work measurements will over-estimate evening work.

These two hypotheses will help to determine if evening work is represented by the two most commonly used measures of non-day work: what shift the majority of hours are worked or how many non-standard hours are worked over the entire day. The two measures will then be compared to a direct measure of evening work to test if the amount of evening work is accurately predicted. These results will show that both shift and non-standard work measures are biased in their measurement of work in the evenings.

The second research question asks if the effect of evening work on time with children differs significantly from the shift and non-standard work measures. The second hypothesis is:

Hyp₂: The effect of evening work will greatly decrease time with spouses and children.

While this may hold true for the other measures, the effects from evening work should be clearer, and can be measured as a minute-to-minute tradeoff.

3. DATA AND METHODS

I use the pooled 2003–2010 waves of the American Time Use Survey (ATUS) for analysis, built from the ATUS-X database (Abraham et al. 2011). The ATUS records a time diary for a single day for select non-institutionalized civilian selected from a subset of completed respondents from the Bureau of Labor Statistics Current Population Survey (CPS). The time diary records the primary activity, duration, location, and who else is present, among other information, for each episode in a diary day from 4 a.m. on the survey day to 4 a.m. on the following day. Respondents are telephoned and asked to report their activities on the previous day in sequence to a telephone interviewer.

3.1 *Sample*

For this analysis the sample is restricted to individuals working at least two hours on the diary day that have children at home. Workers with two or more hours of work are included to allow for part-time workers, and alternative specifications for the minimum number of hours worked did not provide significantly different results.

3.2 Dependent Variable

The measure of evening work is created by summing the number of minutes on the interview day the respondent spends working from 6 p.m.–9 p.m. The majority of individuals finish work by 6 p.m., and the largest spike in family time is seen then, as shown in the tempogram provided in figure 1. Note that about 80% of individuals are done working by 6 p.m., and a spike in time spent in childcare can be seen during the hours of 6p.m.–9 p.m. A dummy variable for doing evening work is created for those individuals who do at least the mean number of minutes (fifteen minutes) of evening work in a day. The number of minutes worked in the evening is left censored, so some analyses are broken out to show no work in the evening, less than fifteen minutes of work in the evening, or fifteen or more minutes of work in the evening. A continuous variable for the number of minutes worked in the evening is also used to show the direct tradeoff in time between evening work and time with family.

3.3 Independent Variables

Shift work is measured by coding which of the three shifts the majority of the respondent's work falls into, as used in the common presser definition. The day shift designation means the majority of work happens between 8 a.m. and 4 p.m., the evening shift designates the majority of work from 4 p.m. to midnight, and the night shift describes the majority of work being done between midnight and 8a.m. The night shift measure counts work from midnight to 3:59 a.m. and the first four hours of the diary day (4 a.m.–7:59 am). These measures include any time that is classified as work outside the home, as that work is most likely to affect time with family. Second and third jobs are treated the same as primary jobs, which corrects the risk of undercounting multiple job holders found in previous studies.

Non-standard work is measured by recording any working time that is *not* done between 8a.m. and 6 p.m. and is outside the home. The non-standard work categorization follows the usual work hours as seen in figure 1, and is similar to that used in the studies referenced above. A dummy variable for non-standard work is constructed for any individual who works fifteen minutes or more outside of 8 a.m. to 6 p.m.

3.4 Plan for Analysis

I take two approaches to compare the shift measurement to the amount of evening work done by individuals in each shift. First, I show the distribution of the number of minutes in evening work for those individuals on the day and evening shift. Then, I show how many of the individuals who are in the top four quintiles of evening work fall into either the day or evening shift.

The non-standard work measure of all work outside of 8 a.m.–6 p.m. automatically includes working 6 p.m.–9 p.m. Because the hypothesis describes the non-standard work measure as overestimating the amount of work done in the evening, a comparison is made between the numbers of individuals doing fifteen or more minutes of evening work versus those doing fifteen or more minutes of non-standard work. The two measures are also compared in a scatterplot.

Next, I consider the overlap between the shift measurement and the non-standard work measurement, using the procedures outlined above: showing the number of minutes in non-standard work for workers on each shift, and the number of non-standard workers missed by the shift measurement. Together, these analyses test if the shift and non-standard work measurements effectively measure work in the evenings.

Finally, the effects of the different measures on time with spouse and time with children are examined. These measures are shown to produce similar results. However, the evening work measure will be shown to produce results that are more definitive than the results of the other measures.

4. RESULTS

Table 1 shows the average number of minutes of evening work done by individuals on the day shift, evening shift, and night shift. The initial results indicate that evening shift workers do much more work between 6 p.m. and 9 p.m. However, workers on the day and night shifts average fifteen minutes of evening work. In fact, when conditioning on doing any evening work at all, the measurements for day and night shift workers are over seventy minutes each.

Table 1 also shows the number of workers doing at least 15 minutes of work between 6 p.m. and 9 p.m. that are recorded by the shift measurement. Over 19 percent of day shift workers do at least fifteen minutes of evening work, and 12 percent of evening shift workers do not do at least fifteen minutes of evening work. Of those individuals doing 15 minutes or more of evening work, nearly 70 percent are classified as working the day but discounted by the shift measure. Overall, nearly 25 percent of working parents do at least fifteen minutes of work after 6 p.m.

Figure 2 shows a scatterplot of evening work compared to the non-standard work measurements, as does table 2. This figure shows the systematic over-reporting of non-standard work compared to evening work. This is a mathematical certainty, as the measure of non-standard work includes the evening work measure. However, it is likely

that many of the hours non-standard workers are at work would not be likely times to spend with children or spouses. As such, the measure is too broad to be as helpful as a more focused measure.

The results above make it clear that the shift and non-standard work measurements are systematically biased at estimating work in the evenings. However, the question remains if the results from these measures are fundamentally different than the results when using an evening work measure. Table 3 shows the average number of minutes shift workers spend with spouses and children during the evening (6 p.m.–9 p.m.) and at all other times. Evening workers spend fifty less minutes of time with their spouses than workers on the other shifts. In addition, both evening (7%) and night (31%) workers spend a smaller portion of time with their spouses in the evening than the day shift, as would be expected if individuals during these shifts are working in the evenings. Evening shift workers show little difference in time spent with their children, though that time is far more likely to occur outside the evening hours than for individuals on another shift.

Table 4 shows the results of time with spouse and children for individuals who do no evening work, do zero to fifteen minutes of evening work, or do fifteen or more minutes of evening work. Doing one to fifteen minutes of evening work leads to a decline of fifteen minutes in time with spouse, doing over fifteen or more minutes of evening work correlates with a forty–eight minute drop in time with spouse. There is also a steady decline in the number and amount of time individuals spend with their spouse in the

evening and as a percentage of all time spent with their spouse¹. Parents doing evening work also see a decline in the amount of time they spend with their children. Parents doing fifteen or more minutes of work in the evening spend over an hour less with their children per day, and lose most of that time in the evenings, since they spend about sixty minutes less with their children during the evenings than parents who do no or very little evening work.

The results of Table 4 are similar in nature to the results found for shift workers as concern time with spouse. The results are different when it comes to time with children. Measuring evening work directly shows a substantial decrease in the amount of time parents spend with their children, which should be expected since majority of childcare occurs in the evenings and these parents are working in the evening. However, the difference may be that the evening shift measure does a better job of predicting time with children for evening workers than the day shift measure does for day shift workers. If this is the case, the difference would only appear when removing day shift workers who work in the evening from the sample. Table 4 shows this to be the case; evening workers tend to spend about two hours and twenty minutes with their children on an average day, whereas those parents doing no or very little evening work spend over three hours of time with their children on a diary day. These results suggest two possibilities: the evening shift may overestimate the amount of time evening workers spend with their children, or the day shift may underestimate the amount of time evening workers spend with their children. In fact, both are likely occurring. Nearly 20% of day workers do fifteen or more

¹ The results for 1–15 minutes of evening work only contain 110 cases for time with spouse and 139 for time with children. These results may be biased by the small sample n for those cases.

minutes of work between 6 p.m. and 9 p.m., which is a prime time for spending time with children and spouses. When those individuals are taken out of a day shift classification that seemingly excludes evening work, large differences start to appear in the amount of time spent with children. Reports of time with spouse do not seem to differ between the two measures, which could be consistent with spousal time having a greater possibility of occurring outside of the 6 p.m.–9 p.m. timeframe (for example, 9 p.m.–11 p.m., after younger children go to bed).

Table 5 shows the results of the shift measurements when conditioning on working fifteen or more minutes in the evening. When the mean number of minutes in childcare are calculated for day shift workers conditional on not doing any evening work, they spend an average of 205 minutes with children, compared to 189 minutes for dayshift workers overall and 127 minutes for day shift workers who do more than fifteen minutes of evening work. Interestingly, evening and night shift workers who work in the evening (nearly all of them) seem to have developed ways to spend time with their children that does not require as much evening contact. They are still spending ten to thirty minutes less with their children than the overall average, and twenty to forty minutes less than day shift workers who do no evening work, but they seem to be finding another time of day to spend time with their children. When and how that time is spent is a question for a later chapter.

Table 6 shows the regression coefficients when considering evening work, and the dummy for doing fifteen or more minutes of evening work, as predictors of time with

spouses and children across the entire day and in the evening, controlling for relevant covariates such as total work hours, race, education, age, and gender.

The results for minutes of evening work are similar to those for the dummy. Ten minutes of evening work decreases the amount of time spent with spouse by three minutes.

Likewise, ten minutes of evening work decreases the amount of time spent with children by over one and a half minutes (table 7). These results are more pronounced when considering childcare in the evenings, with ten minutes of evening work related to a nearly five minute drop in time with spouses and children during the 6 p.m.–9 p.m. period. To put this into context, working an hour between 6 p.m. and 7 p.m. will decrease the overall amount of time spent with a spouse by over eighteen minutes, which is double the effect of having a college education. Likewise, an hour of evening work will decrease the amount of time spent with children by nine minutes—nearly half of the expected effect of having a college education.

5. CONCLUSIONS

Traditionally, studies of the interaction between work and family time have focused on measuring the timing of the work as relates to the industrialized workday. Prior studies have focused either on what shift the majority of work occurs, or on how much of the work is done outside of 'usual' business hours. These types of employment-focused categorizations have been explicitly linked to workday activities, and there are significant results. However, each type of measurement is systematically biased against recording evening hours, which, as has been discussed, have a very high correlation with time spent with family. The shift measurement misses a number of evening workers who do the majority of their work either during the day or at night. These workers are still at work in

the evening and are therefore disadvantaged in the time they can spend with family. The non-standard work measurements overestimate the amount of time individuals spend working when they could be participating in family time by counting time at work in the early mornings, late evenings, and overnight at the same value as work in the evenings. Instead, measuring only the evening hours by using time diary data is a more concise and accurate predictor of the amount of time workers spend at work that may conflict with family time. This chapter introduces a direct measure of family time, and the results should prove useful for other scholars of the work–family discipline by identifying a measurement of time at work that is rooted in its potential conflict with family time, not in the bare categorization of work time.

The results described above indicate evening hours make up a significant portion of the time parents spend with children on weekdays, regardless of what time, or shift, they work. As such, evening work has a distinct negative effect on the overall amount of time workers spend with children and spouses, especially in the evenings. This effect appears because family time clusters in the evening, and is not entirely mobile to other times of the day.

Interestingly, the workers that make up the majority of evening work are day workers, rather than evening or night shift workers. Rather than overestimating the amount of time non-day workers spend with their children, the shift measurement actually underestimates the amount of time day workers spend with their children, assuming one follows the logic that workers on the day shift are not exposed to evening work in a way that will affect their time with children. In fact, 20% of day workers are involved in fifteen or more

minutes of evening work, and those workers spend the least time with their children overall than any other group of workers. When compared to workers on other shifts who work during the evening, day workers are still spending more evening time with their children than other workers, but they are not making up the missed overall time in other portions of the day, compared to workers on evening and night shifts who spend extra time with children outside of the evening hours. The parents spending the most time with their children are day workers who do not engage in evening work, and this result strengthens the assumption that the evening is prime family time.

Overall, both the shift and non-standard work measurements underestimate the proportion of workers doing evening work. Specifically, they miss the nearly 20% of parents on the day shift who work at least fifteen minutes in the evenings. These parents who are missed by the shift definition spend the least amount of time with their children, and this deficit deserves further exploration. Perhaps, the shift definition measures workers and families that are able to rearrange their entire day. It may also measure workers who are going to work late in the 6-9 p.m. evening period, but have spent the time before work with their children, as chronicled by Hochschild (2001). However, the implicit assumption that an evening shift captures evening work, which is made in many quantitative studies, does not hold up when empirically tested. In fact, it ignores the majority of workers who work past 6 p.m.

In conclusion, I propose that measuring work-family conflict on weekdays should focus on measuring work in the evenings—the work most likely to conflict with family activities. The results show measures of evening work are good predictors of changes in

time with children, and help explain some of the prior contradictory results between time with spouse and time with children in the literature around shift work and family life. A final advantage of measuring the *amount* of evening work rather than when the *majority* of work usually occurs is the ability to test the direct minute-to-minute association between evening work and time with spouse or children. These findings allow for a new way to measure evening work, and new approaches to understanding how work at different times may conflict with family responsibilities.

REFERENCES

- Abraham, Katherine G., Sarah M. Flood, Matthew Sobek, and Betsy Thorn. 2011. *American Time Use Survey Data Extract System: Version 2.4 [Machine-readable database]*. Maryland Population Research Center, University of Maryland, College Park, Maryland, and Minnesota Population Center, University of Minnesota, Minneapolis, Minnesota. Retrieved (<http://www.atusdata.org>).
- Becker, Penny Edgell, and Phyllis Moen. 1999. "Scaling Back: Dual-Earner Couples' Work-Family Strategies." *Journal of Marriage and Family* 61(4):995–1007.
- Hamermesh, Daniel S. 1999. "The Timing of Work Over Time." *The Economic Journal* 109(452):37–66.
- Han, Wen-Jui. 2004. "Nonstandard work schedules and child care decisions: Evidence from the NICHD Study of Early Child Care." *Early Childhood Research Quarterly* 19(2):231–56.
- Hochschild, Arlie Russell. 2001. *The time bind: When work becomes home and home becomes work*. Holt Paperbacks.
- Hochschild, Arlie Russell, and Anne Machung. 1989. *The second shift: Working parents and the revolution at home*. New York: Viking.
- Hook, Jennifer L., and Christina M. Wolfe. 2011. "Parental Involvement and Work Schedules: Time with Children in the United States, Germany, Norway and the United Kingdom." *European Sociological Review*. Retrieved October 24, 2011 (<http://esr.oxfordjournals.org/content/early/2011/10/18/esr.jcr081.abstract>).
- Nock, Steven L., and Paul William Kingston. 1988. "Time with Children: The Impact of Couples' Work-Time Commitments." *Social Forces* 67(1):59–85.
- Presser, Harriet B. 1994. "Employment Schedules Among Dual-Earner Spouses and the Division of Household Labor by Gender." *American Sociological Review* 59(3):348–64.
- Presser, Harriet B. 2000. "Nonstandard Work Schedules and Marital Instability." *Journal of Marriage and Family* 62(1):93–110.
- Presser, Harriet B. 2005. *Working in a 24/7 economy: Challenges for American families*. New York: Russell Sage Foundation Publications.
- Stewart, Jay. 2009. *The Timing of Maternal Work and Time with Children*. U.S. Bureau of Labor Statistics. Retrieved April 18, 2012 (<http://ideas.repec.org/p/bls/wpaper/ec090030.html>).

- Stewart, Jay, and Mary Dorinda Allard. 2008. *How Does Employment Affect the Timing of Time with Children?* U.S. Bureau of Labor Statistics. Retrieved April 18, 2012 (<http://ideas.repec.org/p/bls/wpaper/ec080050.html>).
- Strazdins, Lyndall, Mark S. Clements, Rosemary J. Korda, Dorothy H. Broom, and Rennie M. D'Souza. 2006. "Unsociable Work? Nonstandard Work Schedules, Family Relationships, and Children's Well-Being." *Journal of Marriage and Family* 68(2):394–410.
- Wang, Rong, and Suzanne M. Bianchi. 2009. "ATUS Fathers' Involvement in Childcare." *Social Indicators Research* 93(1):141–45.
- White, Lynn, and Bruce Keith. 1990. "The Effect of Shift Work on the Quality and Stability of Marital Relations." *Journal of Marriage and Family* 52(2):453–62.
- Wight, Vanessa R., Sara B. Raley, and Suzanne M. Bianchi. 2008. "Time for Children, One's Spouse and Oneself among Parents Who Work Nonstandard Hours." *Social Forces* 87(1):243–71.

Table 1. Evening Work Details by Shift

	Shift		
	<i>Day</i>	<i>Evening</i>	<i>Night</i>
<i>Evening Work</i>			
Mean Minutes in Evening Work	15.0	146.4	17.6
Mean Minutes Conditional on Any Evening Work	71.5	150.8	91.7
Percent of Shift Doing 15 or More Minutes of Evening Work	19.7%	96.8%	16.9%
Percent of Evening Workers (15 or More Min of Evening Work) Within Each "Shift"	70.6%	27.4	2.0%
N	10,017	793	338

Table 2. Non-Standard Work Details by Shift

	Shift		
	<i>Day</i>	<i>Evening</i>	<i>Night</i>
<i>Non-Standard Work</i>			
Mean Minutes in Non-Standard Work	62.9	290.4	379.3
Mean Minutes Conditional on Any Non-Std Work	87.7	295.2	379.3
Percent of Shift Doing 15 or More Minutes of Non-Std Work	65.7%	98.1%	100%
Percent of Non-Standard Workers (15 or More Min of Non-Std Work) Within Each "Shift"	85.5%	10.1%	4.39
N	10,017	793	338

Table 3. Number of Minutes With Family by Shift

	Shift			All
	<i>Day</i>	<i>Evening</i>	<i>Night</i>	
<i>Mean Minutes with Spouse</i>				
All	154.1	103.2	172.8	151.4
Evening (6 p.m.-9 p.m.)	75.5	11.6	60.0	71.0
Evening as % of All Time w/ Spouse	43.5%	7.0%	30.6%	40.8%
N	7686	533	236	8455
<i>Mean Minutes with Children</i>				
All	189.4	186.6	242.2	190.8
Evening (6 p.m.-9 p.m.)	91.1	12.1	70.3	84.8
Evening as % of All Time w/ Children	44.8%	4.0%	25.0%	41.3%
N	10,017	793	338	11,148

Table 4. Minutes of Time With Family by Evening Work

	Minutes of Evening Work			All
	<i>None</i>	<i>1-15</i>	<i>15+</i>	
Mean Minutes with Spouse				
<i>All</i>	166.6	140.0	108.5	151.4
<i>Evening (6 p.m.-9 p.m.)</i>	83.6	77.7	34.4	71.0
<i>Evening as % of All Time w/ Spouse</i>	45.5%	54.4%	26.6%	40.8%
<i>N</i>	6187	110	2158	8455
Mean Minutes with Children				
<i>All</i>	207.3	187.6	142.5	190.8
<i>Evening (6 p.m.-9 p.m.)</i>	100.1	97.3	39.6	84.8
<i>Evening as % of All Time w/ Children</i>	46.2%	52.7%	26.4%	41.3%
<i>N</i>	8207	139	2802	11148

Table 5. Minutes With Family By Shift if Working At Least 15 Minutes in Evening.

	Shift			All
	<i>Day</i>	<i>Evening</i>	<i>Night</i>	
Mean Minutes with Spouse				
All	166.6	140.0	109.1	108.5
Evening (6 p.m.-9 p.m.)	83.6	77.7	25.4	34.4
Evening as % of All Time w/ Spouse	45.5%	54.4%	18.5%	26.6%
N	1601	511	46	2158
<i>Mean Minutes with Children</i>				
All	127.3	179.6	166.42	142.5
Evening (6 p.m.-9 p.m.)	51.8	8.9	26.9	39.6
Evening as % of All Time w/ Kids	35.7%	3.2%	14.4%	26.4%
N	1977	768	57	2802

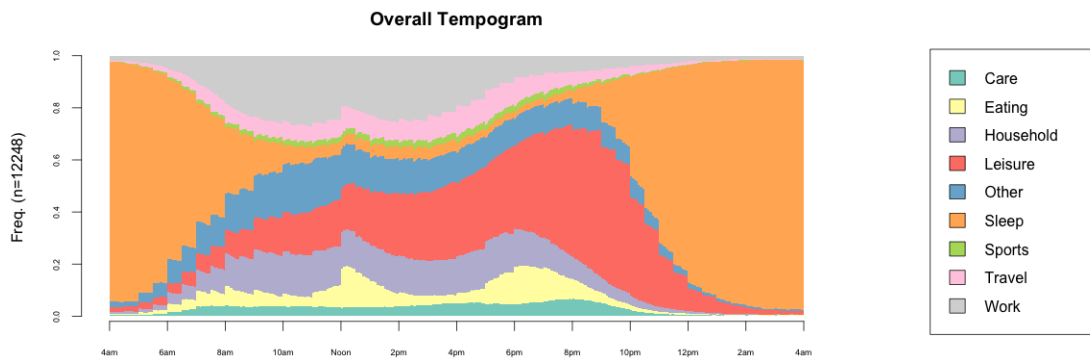
Table 6. Time with Spouse and Children by Minutes Evening Work

	All Time with Spouse		Time with Spouse 6-9 p.m.	
	Model 1	Model 2	Model 1	Model 2
15+ Min in Evening Work	-33.336*** (3.288)	--- ---	-50.696*** (1.612)	--- ---
Minutes of Evening Work	---	-0.329*** (0.027)	---	-0.492*** (0.013)
Age	-1.272*** (0.176)	-1.317*** (0.176)	-0.612*** (0.086)	-0.679*** (0.085)
Male	52.104*** (2.885)	51.399*** (2.880)	18.835*** (1.415)	17.812*** (1.387)
<i>Education (HS = Ref)</i>				
Less Than HS	3.374 (4.924)	3.700 (4.912)	3.074 (2.415)	3.582 (2.366)
Some College	7.521* (3.831)	6.526 (3.820)	3.544 (1.879)	2.028 (1.840)
College or More	10.880** (3.513)	7.890* (3.503)	7.968*** (1.723)	3.462* (1.687)
<i>Race (White = Ref)</i>				
Hispanic	-0.428 (3.982)	-0.016 (3.973)	-2.793 (1.953)	-2.189 (1.913)
Black	-19.480*** (5.131)	-17.329*** (5.125)	-17.660*** (2.516)	-14.482*** (2.468)
Asian	0.350 (6.248)	0.628 (6.233)	-0.491 (3.064)	-0.118 (3.002)
Other	-6.254 (12.577)	-5.663 (12.547)	-9.373 (6.168)	-8.480 (6.043)
Total Work Hours	-15.563*** (0.633)	-15.165*** (0.631)	-1.719*** (0.310)	-1.191*** (0.304)
Constant	304.677*** (8.686)	304.406*** (8.648)	107.980*** (4.260)	107.897*** (4.166)
N	8455	8455	8455	8455
Adjusted R ²	0.124	0.153	0.153	0.187

Table 7. Time with Children by Evening Work

	All Time With Children		Time With Children 6-9 p.m.	
	Model 1	Model 2	Model 1	Model 2
15+ Min in Evening Work	-18.322*** (2.988)	--- ---	-58.734*** (1.407)	--- ---
Minutes in Evening Work	---	-0.158*** (0.024)	---	-0.553*** (0.011)
Age	-1.203*** (0.151)	-1.226*** (0.151)	-0.326*** (0.071)	-0.414*** (0.069)
Male	-32.863*** (2.582)	-33.094*** (2.583)	-6.820*** (1.215)	-7.793*** (1.184)
<i>Education (HS = Ref)</i>				
Less Than High School	-4.412 (4.147)	-4.217 (4.146)	-2.897 (1.952)	-2.244 (1.900)
High School	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Some College	10.998** (3.409)	10.474** (3.407)	6.631*** (1.604)	4.953** (1.562)
College	24.465*** (3.264)	22.963*** (3.262)	17.954*** (1.536)	12.940*** (1.495)
<i>Race (White = Ref)</i>				
Hispanic	-8.412* (3.497)	-8.083* (3.497)	-3.405* (1.646)	-2.202 (1.603)
Black	-39.987*** (3.992)	-39.337*** (3.995)	-19.610*** (1.879)	-17.116*** (1.831)
Asian	-6.525 (6.181)	-6.562 (6.180)	1.461 (2.909)	1.601 (2.832)
Other	-2.265 (11.000)	-1.634 (10.998)	-0.379 (5.178)	1.738 (5.041)
Total Work Hours	-23.163*** (0.583)	-23.128*** (0.581)	-1.484*** (0.274)	-0.986*** (0.266)
Constant	439.670*** (7.425)	440.258*** (7.411)	119.573*** (3.495)	120.196*** (3.397)
N	11148	11148	11148	11148
Adjusted R ²	0.206	0.206	0.188	0.231

Figure 1. Tempogram of All Weekday Respondents in 2007^a



^a Work is at top of graph.

Figure 2. Scatterplot of Evening Work and Non-Standard Work Measures

