The work schedules of low-educated American women and welfare reform

Low-educated employed mothers have a higher prevalence of working nonstandard hours and days, nonfixed daytime schedules, and weekends than do their more educated counterparts; thus, welfare reform will have to consider improving the fit between the availability of child care and these working mothers' schedules

Harriet B. Presser
and
Amy G. Cox

Harriet B. Presser is professor of sociology and director of the Center on Population, Gender, and Social Inequality, Department of Sociology, University of Maryland, College Park, MD. Amy G. Cox is a graduate student in sociology at the same university.

In 1996, the President signed the Personal Responsibility and Work Opportunity Reconciliation Act, initiating a major reform of the U.S. welfare system. Researchers and policymakers, regardless of their political disposition, are unclear as to what the consequences of the new law will be for various demographic groups—the working poor, single mothers, minorities, and others, be they currently on welfare or not. This article examines the work schedules of low-educated employed mothers in the United States, with an eye toward pointing to a potential problem that needs to be considered when one assesses the feasibility of reform. Our analysis produces several interesting conclusions: (1) less educated mothers are more likely to work a nonstandard schedule than are other women; (2) the main reason they work such schedules relates to the occupations in which they work; and (3) these occupations will probably grow in the future. Given that formal day care, which these women often require in order to be gainfully employed, is less available at the nonstandard times they work, a direct implication of our findings is that, if low-educated women on welfare are to be encouraged to take jobs similar to those of other low-educated women, then their "off-hours" child care needs will have to be attended to.

Related research

Previous national studies have shown that employment during nonstandard hours and days, among both men and women, as well as parents and nonparents, is by no means uncommon.[1] Although data on trends are not available, a rising prevalence of such work is assumed from the growth of the service economy, which in turn is linked to the increasing employment of women and the aging of the population. As more and more women are employed during the daytime, the demand for nondaytime and weekend services increases, because women are less available to shop during the daytime and on weekdays. Increasingly, family members are eating out and purchasing other homemaking services that previously would have been performed during the day by full-time housewives. Moreover, the rise in families' real income resulting from the growth of dual-earner couples has heightened the demand for recreation and entertainment during evenings, nights, and weekends. And finally, the aging of the population has increased the demand for medical services over a 24-hour day, 7 days a week.

One microlevel analysis of the determinants of employment during nonstandard hours and days produced several findings.[2] First, such nonstandard schedules are pervasive throughout the occupational hierarchy, but are most evident in service occupations and in personal service industries. In addition, the likelihood of working these times is greater the less education a person has. These results obtain for both men and women, although there are gender differences in the relevance of family factors, even when con-

trolling for various employment and background characteristics. For example, being married reduces women's, but not men's, likelihood of employment during nonstandard hours, and the presence of children affects women's, but not men's, hours and days of employment. Among women, those with preschool-aged children are almost 1½ times more likely to work nonstandard hours than are women without children, whereas women with school-aged children are only nine-tenths as likely to work such hours as are childless women.

The relatively great likelihood of employment during nonstandard hours among mothers with preschool-aged children raises the question of whether such employment is an accommodation to child care needs. If this is the case, then working at nonstandard times may be a preference for many low-educated mothers, facilitating their employment. Research has shown that when two-earner married couples work different (but not rotating) shifts, virtually all fathers are the principle providers of child care when mothers are employed.[3] Moreover, many grandmothers work "split shifts" with their daughters to provide child care, especially when the daughters are not married.[4] That child care is an important consideration is evident by the fact that about one-third of mothers of young children working nonstandard schedules give this as their major reason for working other than daytime.[5]

Still, two-thirds of women report reasons other than child care as paramount. Clearly, these employed women have made child care arrangements, even though their main reason for working nonstandard schedules is unrelated to child care. Based on other research, we would expect them to rely disproportionately on spouses, grandmothers, and other informal networks to provide the child care they need.[6]

There is a body of literature on the extent to which problems of child care availability constrain women's employment, without regard to their work schedule behavior. It is estimated that about 10 percent to 20 percent of nonemployed American mothers with young children do not seek employment because of child care availability and affordability problems.[7] In addition, about 20 percent to 25 percent of employed mothers would work more hours if they did not experience child care constraints.[8] Problems of child care availability are undoubtedly especially great for mothers who work—or have an opportunity to work—late hours and weekends, particularly low-income mothers.[9]

For mothers who receive Aid to Families with Dependent Children (AFDC), child care problems can keep them from moving off welfare. In one study of such recipients, 60 percent reported that a lack of child care prevented them from participating in work programs.[10] Child care constraints, including the need for subsidies, also are critical to continuing one's employment.[11] That such constraints can push many mothers into poverty is suggested by a multivariate analysis of urban mothers in Los Angeles.[12] This study shows that the odds of living in poverty are more than twice as great when

nonemployed parents (mothers or fathers) report having concerns about child care that keep them from looking or applying for jobs than when nonemployed parents report no such concerns.

In sum, related research on the determinants of working nonstandard schedules among employed Americans and the relevance of family characteristics to those schedules shows that children are an important consideration for low-educated mothers in determining their employment schedules; overall, however, such research is sparse. This article is a first look at the determinants of working nonstandard schedules, including family characteristics, specific to low-educated employed mothers.

Description of sample

Our analyses are based on the May 1991 Current Population Survey (CPS). The CPS is a nationally representative monthly survey of about 58,000 households in the United States, conducted by the U.S. Bureau of the Census primarily to estimate the extent of unemployment in the Nation. The May 1991 CPS included a supplement with questions on work schedules for all first and second jobs. We drew a subsample of all civilian women aged 18 to 34 with a high school education or less, with at least one child under age 14, who had at least one job for pay the previous week, and whose primary job (the one in which they worked the most hours) was in a nonagricultural occupation.[13]

Our main sample is thus employed women aged 18 to 34 with a high school education or less and at least one child under 14 at home. The number of respondents with these characteristics on the work schedule variables is 2,862 and represents about 5.4 million persons. This number is reduced to 2,671, representing about 5.0 million persons, when we focus on low-educated mothers with values on *all* variables under consideration in the later multivariate analyses. For comparative purposes, we also present data on the broader sample of all employed women aged 18 to 34 with children under age 14 (5,033; 4,934 with complete work schedule data), all employed women with children under age 14 (9,511; 9,307), and all employed women regardless of education, age, or motherhood status (27,845; 27,254).

Work schedule measures

We consider two dimensions of work schedule behavior: whether the person was employed nonstandard *hours* and whether the person was employed nonstandard *days*. For the 3.7 percent of low-educated employed women aged 18 to 34 with a child under 14 (6.0 percent of all employed women) who hold multiple jobs, these hours and days relate to the principal job; that is, they refer to the job in which women worked the most hours during the reference week. The work hours of those employed are grouped into specified shifts as follows:[14]

Fixed day: At least half the hours worked during most days the previous week falling between 8 A.M. and 4 P.M.

Fixed evening: At least half the hours worked during most days the previous week falling between 4 P.M. and midnight.

Fixed night: At least half the hours worked during most days the previous week falling between midnight and 8 A.M.

Irregular day: Usually an irregular schedule, as determined by the employer, with at least half the hours worked the previous week falling between 8 A.M. and 4 P.M.

Irregular evening or night: Usually an irregular schedule, as determined by the employer, with at least half the hours worked the previous week falling between 4 P.M. and 8 A.M.

Irregular, no hours given: Usually an irregular schedule, but whether the hours fall mostly in the day, evening, or night cannot be determined.

Rotating: Schedules changing periodically from days to evenings or night.[15]

We define persons as working standard hours when they worked fixed day schedules the previous week; all other hours are regarded as nonstandard, including irregular days.[16]

Workdays are categorized as to whether specific weekday and weekend combinations were worked the previous week. (See table 1, stub.) Nonstandard workdays are Saturday, Sunday, or variable days (which may or may not include weekends; this can-

not be determined from the CPS response category, "days vary.")

Work schedule behavior

What kind of work schedules are characteristic of low-educated employed American mothers aged 18 to 34? Specific to the reference week, we can see from table 1 that about three-fourths (75.8 percent) work fixed daytime hours, and almost two-thirds (65.2 percent) work weekdays only. When measures on hours and days are combined, we see that only slightly more than one-half (56.7 percent) of low-educated employed mothers work a "standard," fixed daytime schedule during weekdays only—and close to one-half do not. Moreover, about one-sixth of the women (15.8 percent) work both nonstandard hours *and* weekends.

Comparing columns in the table, we observe that low-educated employed women aged 18–34 with children under age 14 are more likely to work nonstandard schedules—in terms of both hours and days—than are their counterparts who have some education beyond high school. Then, comparing the first group of mothers with (1) all employed mothers under age 35 who have children under age 14, (2) all mothers with children under age 14, regardless of education, and (3) all employed women regardless of motherhood status suggests that, while

Table 1.	Percent distribution[1] of employment schedules for selected groups of women, May 1991				
	Employed women, 18–34 years, with children under 14,—			All employed women with children under 14	All employed women
Employment schedule	With a high school education or less	With more than a high school education	Total		
Hourly shift:					
Total	100.0	100.0	100.0	100.0	100.0
Fixed day	75.8	78.8	77.1	80.3	80.1
Fixed evening	12.2	10.0	11.3	8.5	8.2
Fixed night	2.9	3.1	3.0	3.1	2.5
Irregular day	3.7	3.4	3.6	3.6	4.0
Irregular evening or night	1.9	1.5	1.7	1.5	1.7
Irregular shift, no hours given	.7	.4	.6	.6	.7
Rotating shift[2]	2.8	2.8	2.8	2.4	2.8
Weekly schedule:					
Total	100.0	100.0	100.0	100.0	100.0
Monday to Friday only	65.2	69.7	67.1	68.9	68.1
Some or all days during weekend	16.6	13.7	15.4	14.6	15.5
Varying days	18.3	16.6	17.6	16.5	16.4
Combined schedule:					
Total	100.0	100.0	100.0	100.0	100.0
Fixed daytime, weekdays only	56.7	64.0	59.8	62.3	62.2
Other than fixed daytime, weekdays only ...	8.4	5.7	7.3	6.6	5.9
Fixed daytime with at least some weekend ...	19.1	14.8	17.3	17.9	18.0
Other than fixed daytime, plus weekend	15.8	15.4	15.6	13.1	13.9
N	2,862	2,072	4,934	9,307	27,254

[1] Percentages are weighted, *N*'s are not weighted.
[2] Includes a small number of women with 24-hour shifts: 1 among the less educated mothers, none among the more educated mothers, 4 among all women with children under 14, and 26 among all women.

a low education and a younger age may enhance the likelihood of working a nonstandard schedule, whether one is a mother does not appear to have this effect.

Occupations and work schedules

A highly relevant source of variation in work schedule behavior is the occupations that people hold. Based on prior research, we expect many of the service occupations to show relatively high percentages of nondaytime and weekend work. This has special relevance for the female labor force, because women are disproportionately in the service sector and are crowded into relatively few occupations compared to men.[17] This crowding is particularly evident when we focus on employed women aged 18 to 34 with at most a high school education and with children under 14 years of age. Close to half (45.9 percent) of such women fall into 15 occupations, listed in table 2; indeed, one-quarter are in the top five occupations.[18]

Exceptionally high proportions of women in many of the 15 occupations listed in the table work nonstandard hours (in fixed nonday, rotating, or irregular shifts) and nonstandard days (weekends or variable days). While this is not true of the first occupation listed, secretaries, it does hold for the next three occupations: about two-fifths of our sample of employed mothers who are cashiers, two-fifths who are nursing aides, orderlies, or attendants, and close to one-half of all waitresses work both nonstandard hours *and* nonstandard days. In addition, the table shows higher-than-average rates of those working both

nonstandard hours and nonstandard days among cooks, supervisors and proprietors in sales occupations, and hairdressers and cosmetologists. Maids (other than those in private households) have high rates of working nonstandard days, but not nonstandard hours. In sum, young, low-educated mothers are quite likely to be in occupations with relatively high rates of working nonstandard times.

Reasons for working nonstandard times

Do women with children actually prefer working nonstandard times, given other scheduling considerations or pay incentives, or do they work these times because they have no other alternative? The 1991 CPS includes a question as to why respondents worked other than a fixed day shift (but not why they worked weekends). The responses are shown in table 3.

We see that only about two-fifths (38.2 percent) of women give reasons related to either child care or the care of other family members for working nonstandard hours; the figure is closer to one-third (35.7 percent) for those with a high school education or less. Further, when we compare the percentages giving the reasons shown in the category of all women aged 18 to 34 with children under age 14 with the percentages in the subcategory of those women in the same age group with children under age 14 and with a high school education or less, we see little difference in distribution by reason, suggesting that education is not a significant source of variation in why women work nonstandard hours.

Rank	Occupation	N	Percent in occupation	Nonstandard hours		Nonstandard days		Both nonstandard hours and nonstandard days
				Fixed, other than day	Rotate, irregular hours	Any weekend	Days vary	
	All women 18–34 with a high school education or less and with children under 14	2,862	100	15.1	9.1	16.6	18.3	15.8
1	Secretaries (no stenographers)	217	7.2	2.1	4.9	4.4	5.1	4.3
2	Cashiers	182	6.1	27.5	20.8	29.9	41.2	39.5
3	Nursing aides, orderlies, and attendants	127	4.5	34.5	10.8	21.5	52.2	41.4
4	Waitresses	110	3.8	37.3	20.0	42.7	37.6	49.2
5	Child care workers, except private household .	103	3.4	1.4	8.1	5.0	11.5	5.2
6	Bookkeepers and accounting and auditing clerks	98	3.2	2.8	4.4	4.9	7.9	.7
7	Cooks	66	2.2	11.7	14.2	24.9	42.1	20.7
8	Receptionists	59	2.1	5.7	.0	4.0	3.4	2.8
9	Textile sewing machine operators	55	2.1	1.8	.0	.5	2.3	.0
10	Supervisors and proprietors, sales occupations	55	2.1	10.3	15.8	36.9	33.7	24.9
11	Hairdressers and cosmetologists	56	2.1	8.9	19.6	61.3	14.9	18.6
12	Maids	58	2.0	9.4	10.6	24.0	39.5	13.1
13	Assemblers	45	1.9	28.1	.0	.3	3.0	.3
14	Janitors and cleaners	49	1.7	45.1	4.7	12.1	7.3	9.7
15	Packaging and filling machine operators	39	1.5	26.2	6.9	7.4	8.9	7.1

Table 2. Percent distribution[1] in common occupations of women aged 18–34 with a high school education or less and with children under 14, and percent in these occupations working nonstandard schedules, May 1991

Percent in occupation working—

[1] Percentages are weighted; N's are not weighted.

Table 3. Percent distribution[1] of self-reported main reason for working a fixed evening, night, rotating, or irregular shift, women aged 18–34 with children under 14, May 1991

Main reason for working nonstandard shift	All women aged 18–34 with children under 14	Women aged 18–34 with high school education or less and with children under 14				
		Total	Youngest child under age 5	Youngest child 5–13	Married	Not married
Total	100.0	100.0	100.0	100.0	100.0	100.0
Better child care arrangements	26.9	26.8	30.7	18.3	31.0	19.1
Better arrangements for care of other family member(s)	11.3	8.9	9.6	7.5	11.2	4.6
Allows time for school	3.2	2.8	3.3	1.8	1.7	5.0
Better pay	3.1	2.6	2.6	2.6	1.2	5.2
Could not get any other job	5.3	5.9	7.1	3.3	4.7	8.0
Requirement of the job	37.2	39.7	35.2	49.5	37.6	43.6
Other	6.9	6.9	5.2	10.4	6.7	7.3
No response	6.2	6.4	6.3	6.6	5.9	7.2
N	1,084	664	453	211	434	230

[1] Percentages are weighted; N's are not weighted.

Limiting the analysis to the low-educated mothers, however, and comparing those in this category whose youngest child is less than 5 years with those whose youngest child is between 5 and 13, inclusive, and those who are married with those who are not, we see substantially different distributions by age of youngest child and marital status. Far more women with children under age 5 (30.7 percent), as distinct from those whose youngest child is between 5 and 13 (18.3 percent), report "better child care arrangements" as their main reason for working nonstandard hours. Because formal child care is rarely available during those hours (or on a variable-hours basis), the implication is that informal care—including the sharing of child care with spouses or with one's own or a spouse's parents who are employed different hours—may be a motivating factor for a significant minority of women who work nonstandard hours, particularly when their children are of preschool age. The relevance of the availability of a spouse for such sharing of child care is evidenced by the fact that 31.0 percent of married mothers give "better child care" as their main reason for working nonstandard hours, compared with just 19.1 percent of nonmarried mothers. Also, married mothers report a higher percentage of working nonstandard hours because of better arrangements for the care of other family members—which may in large part be because they assume more responsibility than nonmarried mothers do for the care of other family members, including their husbands.

The reasons "allows time for school" and "better pay" are more frequently reported by nonmarried than married mothers, but for both are not nearly as commonly reported as family-related reasons. Taking these three categories of reasons together, we see that for two-fifths of low-educated women, working nonstandard schedules is a preference that accommodates other demands in their lives.

The most frequent reason reported, however, relates to "re-

quirement of the job." This is by far the most common response for women with school-aged children and for unmarried mothers; more than one-half of the women in each of these categories gave it or "could not get another job" as the reason they worked nonstandard times. For all low-educated mothers, 46 percent gave one or the other of the two reasons. Thus, it appears that many low-educated mothers, regardless of their specific family characteristics, view their employment during nonstandard hours primarily as an accommodation to labor market needs, and not as a personal preference.

Multivariate analysis

Recognizing that, for some mothers, working nonstandard schedules fits their personal needs while for others it does not, we turn to the issue of how influential their personal characteristics are as determinants of their work schedule behavior, after controlling for differences in job characteristics. Table 4 presents a multivariate analysis of this issue, distinguishing the determinants of working nonstandard hours, working nonstandard days, and working both nonstandard hours and nonstandard days—the most complex of all work schedules. The figures in the table are odds ratios derived from logistic regressions; a ratio of unity means equal likelihood relative to the omitted category, less than this means a lower likelihood, and more indicates a greater likelihood. (For operational definitions of the variables used in the regressions, see exhibit 1.)

We see in table 4 that, net of job characteristics, marriage for low-educated mothers significantly decreases the likelihood of working nonstandard hours, nonstandard days, and both: married mothers are, respectively, 32 percent, 21 percent, and 39 percent less likely to do so than nonmarried mothers. However, having more than one child and having a child under age 5 increase the likelihood of working nonstandard schedules

Exhibit 1.	Operational definitions and ranges of variables used in regression
Variable	**Definition and range**
Dependent variables	
Nonstandard hours	Whether respondent works an evening, nighttime, rotating, or irregular shift, compared with working a fixed daytime shift, 0–1
Nonstandard days	Whether respondent works at least some days on the weekend or has workdays that vary, compared with working a fixed schedule during Monday through Friday, 0–1
Nonstandard hours and days	Whether respondent works nonstandard hours and nonstandard days, compared with working a fixed daytime shift or a fixed Monday-through-Friday schedule, 0–1
Independent variables	
Marital status	Married spouse present, compared with never married or formerly married (separated, divorced, or widowed) , 0–1
Age	Age in years, 18–34
Age squared	Square of age in years, 324–1,156
Years of school	Years of school completed, 0–12
Race-ethnicity	Four categories: non-Hispanic white, non-Hispanic black, Hispanic, and non-Hispanic other race or ethnicity; non-Hispanic whites are comparison group, 0–1
Number of children	Number of own children under 14 living in household, 1–7
Youngest child under 5	Whether own youngest child is less than 5 years old, 0–1
Full time	Whether the number of hours worked at all jobs totals 35 or more per week, 0–1
Has more than one paid job	Whether employed in more than one job last week (all data refer to job in which respondent worked most hours), 0–1
Private sector/self-employed	Whether respondent works in the private sector or is self-employed, compared with working for the government, 0–1
Industry	Six groups: extractive, transformative, distributive services, producer services, social services, and personal services; distributive services are comparison group, 0–1
Occupation	Twenty categories: 14 detailed occupations and 6 grouped categories; secretaries are comparison group, 0–1

for the sample of mothers. An additional child significantly increases the odds of working nonstandard days by 17 percent and is also associated (although not with any statistical significance) with higher odds of working nonstandard hours and of working both nonstandard hours and nonstandard days. Having a child under age 5 significantly increases the odds of working nonstandard hours by 69 percent and of working both nonstandard hours and nonstandard days by 35 percent. (It is not a significant determinant of working nonstandard days.)

Whereas some family characteristics are statistically significant determinants of working nonstandard schedules, most of the other demographic determinants—age, years of school

completed, and race or ethnicity—are not. Exceptions are that, compared with whites, blacks are 27 percent less likely and Hispanics are 35 percent less likely to work weekends, and Hispanics are 42 percent less likely to work both nonstandard hours and nonstandard days.[19]

Table 4 also shows that job characteristics other than occupation are significant determinants of work schedule behavior for these low-educated mothers: those who work part time (less than 35 hours a week) are roughly 2 to 3 times as likely to work a nonstandard schedule (hours, days, or both) as those who work full time. With regard to industrial sector, employment in a personal service industry significantly in-

Selected characteristics	Nonfixed hours other than day	Some or all of weekend	Nonstandard hours and nonstandard days
Demographic characteristics			
Married	[1]0.68	[3]0.79	[1]0.61
Age	.82	.78	.81
Age squared	1.00	1.01	1.00
Years of school completed	1.01	1.00	.98
Race and ethnicity:			
White	1.00	1.00	1.00
Black	.80	[3].73	.71
Hispanic	.79	[3].65	[3].58
Other	.71	.92	.66
Number of children	1.13	[3]1.17	1.14
Youngest child under 5	[1]1.69	1.01	[3]1.35
Job characteristics			
Part time	[1]2.70	[1]1.95	[1]2.11
Has more than one paid job	.86	.78	.60
Private sector or self-employed	1.07	1.26	1.02
Industry:			
Distributive	1.00	1.00	1.00
Extractive	.60	[3].12	[3].45
Transformative	1.12	[1].37	[3].52
Producer	.68	[1].49	[2].47
Social	.73	[3].70	.62
Personal	[2]1.70	[1]1.97	[1]2.42
Occupation:			
Secretaries	1.00	1.00	1.00
Management and professional specialty occupations	[1]3.20	[1]3.68	[3]2.86
Supervisors and proprietors, sales	[1]4.85	[1]16.77	[1]5.81
Cashiers	[1]7.89	[1]11.24	[1]6.93
Other technical and sales support occupations	[1]5.20	[1]7.80	[1]6.12
Receptionists	.78	.59	.55
Bookkeepers and accounting and auditing clerks	.95	1.18	.14
Other administrative support occupations	[3]2.30	[3]1.91	1.72
Waitresses	[1]8.13	[1]10.59	[1]5.56
Cooks	[3]2.43	[1]8.51	1.86
Nursing aides, orderlies, and attendants	[1]12.30	[1]24.20	[1]16.39
Maids	1.39	[1]8.21	1.15
Janitors	[1]13.82	2.06	2.37
Hairdressers and cosmetologists	2.33	[1]9.01	1.35
Child care providers, except private	.83	.74	.46
Other service occupations	[1]3.28	[1]4.05	[3]2.54
Precision production, craft, and repair occupations	[1]5.04	[3]2.55	1.98
Textile sewing machine operators	.22	.50	([4])
Assemblers	[2]4.19	.53	.10
Other operators, fabricators, and laborers	[1]4.93	[1]3.01	[3,5]2.43
Intercept (log odds)	−.33	1.40	.35
N	2,671	2,671	2,671

[1] $p < 0.001$.
[2] $p < 0.01$.
[3] $p < 0.05$.
[4] Included with other operators, fabricators, and laborers.
[5] Includes textile sewing-machine operators.

NOTE: Omitted category is women who are white; are not married; work part time; are employed in a distributive industry, in a private company or as a self-employed worker; work part time; and are secretaries.

creases the odds of working at nonstandard times, compared to employment in one of the distributive services. However, employment in one of the other four industrial groupings (extractive, transformative, producer services, and social services) significantly lowers the likelihood of working weekends, rela-

tive to working in a distributive service.[20] Working in the transformative sector or in producer services lowers the odds of working both nonstandard hours and nonstandard days as well. This suggests that industrial context is an important determinant of working nonstandard schedules for the sample of

women and that personal services need to be differentiated from other dimensions of the service sector in assessing their influence.

The strong relevance of occupational status, even net of the other variables in the model, is evident in the table. We consider the more common detailed occupations (those with at least 49 cases in this select subsample of mothers) and group the others.[21] Relative to secretaries, the odds of working nonstandard hours are from 8 to 14 times as high for cashiers, waitresses, nurse's aides, and janitors—after taking into account demographic and other job characteristics. Also relative to secretaries, the odds of working nonstandard days are from 8 to 24 times as high for supervisors and proprietors in sales, cashiers, waitresses, cooks, nurse's aides (including orderlies and attendants), maids, and hairdressers and cosmetologists. Again relative to secretaries, the odds of working both nonstandard hours and nonstandard days are from nearly 6 to 16 times as high for supervisors and proprietors in sales, cashiers, waitresses, and nurse's aides (including orderlies and attendants).[22] Finally, the strong influence of occupation becomes clear when we compare models with and without the occupation measures (not shown in the table).[23] The addition of the occupation variables significantly improves the explanatory power of the model with regard to all three employment schedules considered. (See exhibit 2.)

Implications for welfare reform

The results of the study presented in this article show that both family and job characteristics are important predictors of nonstandard employment schedules for low-educated mothers under 35. The findings have important implications for welfare reform from two perspectives: (1) low-educated mothers are concentrated in some of the jobs that are highly likely to grow in the near future, but many of which are during nonstandard hours and/or days; (2) such jobs generate a growing demand for child care during nonstandard hours and/or days that will need to be addressed if mothers with young children are to move permanently from welfare to paid employment.

With regard to the first issue, table 5 lists the top 10 occupations projected by the Bureau of Labor Statistics to have the largest absolute growth for the period 1994–2005.[24] These occupations constitute 26.8 percent of all job growth projected for this period. With the exception of systems analysts, we see from the 1991 CPS data that they are also occupations with very high percentages working nonstandard hours and/or days—ranging from 41.4 percent (general managers and top executives) to 91.0 percent (waiters and waitresses).[25]

About one-fourth (24.7 percent) of low-educated employed women with young children hold these top 10 occupations, as shown by the cumulative percentage in the last column of table 5. Indeed, about one-tenth of such women are either cashiers or cleaners.[26] The projections on overall job growth suggest that these proportions will become even higher in the future, implying that low-educated young mothers will increasingly be working nonstandard schedules. Correspondingly, many of the jobs available for mothers moving from welfare to paid work will be from this list of occupations and will entail working nonstandard schedules.[27]

With job availability shifting thus toward nonstandard schedules (as well as to low-paid service sector employment for those without education beyond high school),[28] what does this imply for the care of children if mothers receiving welfare are offered such jobs? To the extent that mothers will choose to work at these times, it suggests that they will make their decisions about child care in such manner that the benefits outweigh the costs. For example, mothers who prefer that their husbands or mothers, rather than a nonrelative, take care of their children are more likely to realize this preference by working at nonstandard times.[29] In addition, women who have a paid job and also a strong desire to be at home with their children during the daytime, when the children are awake, and after school, can do both, at least to some extent, by working evenings and nights.[30]

To the extent that mothers who receive AFDC do not wish to

Exhibit 2.	Chi-square results estimating fit of logistic regression models		
Model	**Model without occupation variable[1]**	**Full model**	**Difference**
Estimating odds of nonstandard hours	$\chi^2 = 268.65$, $df = 17$	$\chi^2 = 486.74$, $df = 36$	$\chi^2 = 218.09$, $df = 9$
Estimating odds of nonstandard days	$\chi^2 = 532.07$, $df = 17$	$\chi^2 = 899.74$, $df = 36$	$\chi^2 = 367.67$, $df = 9$
Estimating odds of both nonstandard hours and nonstandard days	$\chi^2 = 282.31$, $df = 17$	$\chi^2 = 476.29$, $df = 35$	$\chi^2 = 193.98$, $df = 8$

[1] Results not shown.
NOTE: All values for χ^2 significant to $p < 0.001$.

Rank	Occupation	Employment (thousands)[2]			May 1991 Current Population Survey[3]		
		1994 actual	2005 projected	Growth, 1994–2005 (moderate estimate)	Percent of employed adults with nonstandard schedules	Percent of distribution of young mothers in occupation[4]	Cumulative percent of young mothers in occupation
	Total	127,014	144,708	17,694	42.1	100.0	100.0
1	Cashiers	3,005	3,567	562	81.7	6.1	6.1
2	Janitors and cleaners, including maids and housekeeping cleaners	3,043	3,602	559	58.5	3.7	9.8
3	Salespersons, retail	3,842	4,374	532	76.1	2.5	12.3
4	Waiters and waitresses	1,847	2,326	479	91.0	3.8	16.1
5	Registered nurses	1,906	2,379	473	69.5	.4	16.5
6	General managers and top executives[5]	3,046	3,512	466	41.4	3.5	20.0
7	Systems analysts	483	928	445	18.3	.1	20.1
8	Home health aides	420	848	428	88.0	4.5	24.5
9	Guards	867	1,282	415	79.5	.1	24.7
10	Nursing aides, orderlies, and attendants	1,265	1,652	387	(6)	(6)	24.7
	All other occupations	—	—	—	37.8	[7]75.3	[7]75.3

[1] Occupations used by the Bureau of Labor Statistics for projections are sometimes more detailed than those provided by the 1991 CPS. For example, in row 6, the BLS projection refers to general managers and top executives, whereas the last three columns refer to all managers and administrators, not elsewhere classified.

[2] Occupational projections, including employment in 1994, derived by Bureau of Labor Statistics. (See George T. Silvestri, "Occupational Employment to 2005," *Monthly Labor Review*, November 1995, pp. 60–84, table 4.)

[3] Percentages are weighted.

[4] Employed women aged 18–34 with a high school education or less and children under 14 at home.

[5] Jointly listed as one occupation in BLS projections.

[6] Included with home health aides.

[7] Underestimate. (See footnote 1.)

NOTE: Dash indicates data not examined and no projection made.

work during nonstandard times, but find that it is their only job opportunity, many will have to find child care arrangements that are complex and far from optimal. Nonmarried mothers, for instance, generally cannot rely on the child's father for child care while they are employed. Reliance on grandmothers and other family members may be an option, but these relatives are often themselves employed, leading to complex split-shift arrangements that may be stressful or temporary only.[31] Moreover, mothers who rely primarily on a relative for child care are those who most want to—and do—change their arrangements.[32] For mothers who have school-aged children and who work nonstandard schedules, the fact that their children are at school during standard hours and on weekdays means that school cannot function as an alternative to child care. Furthermore, the little we know about the availability of formal child care during nonstandard times[33] suggests that it is a rare option. Moreover, formal child care during nonstandard times is likely to be more expensive than during standard times, especially if there is a pay differential for child care providers to encourage them to work late hours and weekends. In sum, for mothers who do not wish to work during nonstandard times, but who have no alternative job opportunities, the child care issue is clearly problematic.

THE RESULTS OF THE STUDY described in this article show that low-educated mothers are disproportionately represented in occupations with high rates of nonstandard schedules, that many of these women who work nonstandard hours do so primarily for labor market rather than personal reasons, and that job characteristics are stronger determinants of employment during nonstandard times than are family characteristics. To a substantial extent, then, low-educated mothers appear drawn into working nonstandard hours by a lack of options. Finally, the study shows that these trends are likely to increase given current occupational projections, thereby increasing the demand for child care during evenings, nights, and weekends. Accordingly, to achieve the primary objective of welfare reform—moving mothers permanently from welfare to employment—child care will need to be expanded markedly during nonstandard times, including evenings and weekends. Generating new jobs and expanding child care will go a long way toward meeting that objective if the scheduling of both can be better synchronized. □

Footnotes

[1] See Harriet B. Presser, "Can We Make Time for Children? The Economy, Work Schedules, and Child Care," *Demography*, November 1989, pp. 523–43; and "Job, Family, and Gender: Determinants of Nonstandard Work Schedules among Employed Americans in 1991," *Demog-*

raphy, vol. 32, no. 4, 1995, pp. 577–98.

[2] Presser, "Job, Family, and Gender."

[3] Harriet B. Presser, "Shift Work and Child Care among Young Dual-Earner American Parents," *Journal of Marriage and the Family*, February 1988, pp. 133–48.

[4] See Harriet B. Presser, "Some Economic Complexities of Child Care Provided by Grandmothers," *Journal of Marriage and the Family*, August 1989, pp. 581–91.

[5] Presser, "Job, Family, and Gender."

[6] See Harriet B. Presser, "Shift Work among American Women and Child Care," *Journal of Marriage and the Family*, August 1986, pp. 551–64; and "Shift Work and Child Care."

[7] See Harriet B. Presser and Wendy Baldwin, "Child Care as a Constraint on Employment: Prevalence, Correlates, and Bearing on the Work and Fertility Nexus," *American Journal of Sociology*, March 1980, pp. 1202–13; and Cheryl D. Hayes, John L. Palmer, and Martha J. Zaslow, eds., *Who Cares for America's Children?* (Washington, National Academy Press, 1990).

[8] See Arleen Leibowitz and Linda J. Waite, *The Consequences for Women of the Availability and Affordability of Child Care*, background paper prepared for the Panel on Child Care, National Research Council, WD no. 4927–NICHD (Santa Monica, CA, The RAND Corporation, July 1988); and Hayes, Palmer, and Zaslow, *America's Children*.

[9] M. O'Connell and C. C. Rogers, *Child Care Arrangements of Working Mothers: June 1982*, Current Population Reports, series P–23, no. 129 (U.S. Bureau of the Census, 1983).

[10] *Welfare: Income and Relative Poverty Status of AFDC Families*, Report GAO/HRD 88–0 (U.S. General Accounting Office, 1987).

[11] See G. L. Bowen and P. A. Neenan, "Child Care as an Economic Incentive for the Working Poor," *Families in Society: The Journal of Contemporary Human Services*, vol. 73, no. 5, 1992, pp. 295–303; and "Child Day Care and the Employment of AFDC Recipients with Preschool Children," *Journal of Family and Economic Issues*, vol. 14, no. 1, 1993, pp. 49–68. See also J. M. Joesch, "The Effect of the Price of Child Care on AFDC Mothers' Paid Work Behavior," *Family Relations*, vol. 40, April 1991, pp. 161–66.

[12] Julie E. Press, *Child Care as Poverty Policy: The Effect of Child Care on Work and Family Poverty*, Occasional Working Paper Series, vol. 6, no. 1 (Los Angeles, UCLA Center for the Study of Urban Poverty, 1996).

[13] We define "low educated" as "having completed at most 12 years of school" in order to examine the implications of our study for welfare reform. Among women receiving AFDC for whom the Government has data on their education, 86 percent have a high school education or less. (See *Overview of Entitlement Programs—1994 Green Book: Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means* (U.S. House of Representatives, Committee on Ways and Means), 1994, table 10–27.) We include women of all marital statuses, since eligibility rules vary by program and State. However, we do differentiate between married and nonmarried women, defining "nonmarried" women as those who are separated, divorced, or widowed, or who never married, and "married" women as those currently married and with a spouse present.

[14] This definition is a modification of one used by the Bureau of Labor Statisics for full-time workers. (See Janice Neipert Hedges and Edward S. Sekscenski, "Workers on late shifts in a changing economy," *Monthly Labor Review*, September 1979, pp. 14–22.) For those with fixed regular shifts, both definitions are based on reported hours for beginning and ending work. Our specification of rotating and irregular schedules (not available for the 1973–78 CPS data in the BLS study) is based on self-definition. Moreover, our definition differs from that used by the Bureau in reporting the 1991 CPS data (see "Workers on Flexible and Shift Schedules," *News*, USDL 92–491 (U.S. Department of Labor, Aug. 14, 1992); the BLS report is based on self-definitions of all shifts, including fixed regular shifts. A further difference is that we do not specify "split shifts," a self-defined response category. Of the 2,671 women in our sample, 35 designated themselves as working a split shift. Most of these women (27) work during the daytime, with the remainder working during the evening. Because of the small number of these women and the fact that they work predominantly during day shifts, we categorize their schedules as day and evening shift accordingly.

[15] Included with those on a rotating schedule are a few women who report that they work 24 hours a day. Among those in this category are live-in domestic workers, as well as "on-call" workers such as firefighters.

[16] "Irregular days as determined by employer" is a structured response category in the CPS that we differentiate further, when possible, as "irregular day or irregular nonday" in our definitions of the various shifts.

[17] Barbara R. Bergmann, *The Economic Emergence of Women* (New York: Basic Books, Inc., 1986).

[18] By comparison, among all employed women, 40.2 percent fall into the 15 occupations listed in the table, and 23.0 percent are in the top 5 occupations.

[19] Age squared is included along with age to test for a curvilinear relationship.

[20] These industrial groupings were created by J. Singlemann and M. Tienda, "The Process of Occupational Change in a Service Society: The Case of the United States, 1960–80," in B. Roberts, R. Finnegan, and D. Gallie, *New Approaches to Economic Life* (Manchester, UK, Manchester University Press, 1985), pp. 48–67. A classification of Census Bureau industries into these groupings was provided by Singlemann (personal communication, June 16, 1994).

[21] After considering the distribution of these women by occupation, we noted a break between 49 and 39, the next smaller number of respondents falling into one of the detailed occupations. We thus limited the number of cases to at least 49, leaving us with 14 detailed occupations in the regressions.

[22] For those in a production occupation, textile sewing machine operators have lower-than-expected odds of working nonstandard schedules, relative to secretaries, probably because there is less need for shifts around the clock. This in turn is likely due to the high rate of decline of the occupation in the United States. (See *Occupational Outlook Handbook: 1996–97 Edition*, Bulletin 2470 (U.S. Department of Labor, 1996), chart 7.)

[23] The reduced model includes all variables except the occupation measures. Results of the comparison of the two models are available from the authors.

[24] George T. Silvestri, "Occupational Employment to 2005," *Monthly Labor Review*, November 1995, pp. 60–84.

[25] Earlier references to this fact appeared in Presser, "Can We Make Time for Children?" relating to projections for the period 1992–2005, and in *Care Around the Clock: Developing Child Care Resources Before 9 and After 5* (Women's Bureau, 1995). Referring to the 1994–2005 period, Presser ("Job, Family, and Gender") also showed that these occupations had, and likely would have, a disproportionate share of women.

[26] The BLS projections group cleaners into a single occupation, while the CPS data file specifies them as two occupations. Thus, in table 5, 3.7 percent of young mothers are "janitors and cleaners, including maids and housekeeping cleaners," while in table 2, 2.0 percent are "maids," and the remaining 1.7 percent are "janitors and cleaners."

[27] Some of the detailed occupations in table 5 have a high proportion of young, low-educated mothers. Whereas these women make up 4.9 percent of adults in all occupations, they constitute 17.6 percent of waiters and waitresses, 17.0 percent of nursing aides, orderlies, and attendants (including home health aides), and 15.5 percent of cashiers.

[28] See *Occupational Outlook Handbook: 1996–97 Edition*.

[29] Presser, "Shift Work and Child Care."

[30] See Anita Ilta Garey, "Constructing Motherhood on the Night Shift: 'Working Mothers' as 'Stay-at-Home Moms,'" paper presented at annual meeting of the American Sociological Association, Miami, FL, August 1993; and International Labour Office of the United Nations, "New Zealand: Why Women Work at Night," *Social and Labour Bulletin*, June 1982, pp. 213–14.

[31] Presser, "Child Care Provided by Grandmothers."

[32] See A. A. Brayfield, S. G. Deich, and S. L. Hofferth, *Caring for Children in Low-Income Families: A Substudy of the National Child Care Survey, 1990*, Urban Institute Report 93–2 (Washington, The Urban Institute Press, 1993); and L. Floge, "The Dynamics of Child Care Use and Some Implications for Women's Employment," *Journal of Marriage and the Family*, February 1985, pp. 143–54.

[33] Women's Bureau, *Care Around the Clock*, offers some interesting examples of scattered efforts to provide child care during nonstandard times, either by single employers, through employer consortiums, or through community partnerships.