

Chapter 2

Where are Nonstandard Schedules Located and Who Works in them? The Role of Occupational, Household and Institutional Factors

Abstract Despite the arguments that the 24-hour-economy is on a ubiquitous and universal rise, the location of nonstandard schedules in the labor market and households is likely highly targeted. This chapter asks where this work is located and who is working in those shifts and days. Using the NKPS data for the Netherlands and the NSFH data for the United States, the findings show that nonstandard schedules often remain concentrated in specific occupations, suggesting that it is in fact largely occupational aspects underlying the main reasons for working these schedules. From the perspective of the household, the partner's schedule and the presence and age of children also determine the prevalence of individuals who work nonstandard schedules in the household. The effect of household aspects is highly filtered by country-specific institutional context, a vital yet often ignored contextual factor that shapes the prevalence, location and practice of nonstandard schedules.

Keywords Nonstandard schedules • Nonstandard schedules in the household • Occupational aspects • Effect of household aspects

2.1 Introduction

Despite the arguments that the 24-hour-economy is on a ubiquitous and universal rise, the location of nonstandard schedules in the labor market and households is likely highly targeted. Previous research has shown that work in nonstandard schedules is often shaped by occupational characteristics such as type of occupation or level of job (Presser 1984; Hamermesh 1996); but also by individual characteristics such as gender and education (Breedveld 1998), or by household characteristics such as presence of young children who need care (Presser 1988). Although it is often acknowledged that work in nonstandard schedules is affected by the abovementioned characteristics, little is actually known about the interdependence with these factors. The aim of the current chapter is, therefore, to study

whether nonstandard schedules have universally penetrated all realms of society and the labor market by analyzing the characteristics and composition of nonstandard schedule work. Our central research aims are to determine *where these schedules are located, who is engaged in them and what the interplay is between the two*. As the engagement in nonstandard work is expected to be conditioned both by occupational and household characteristics (Presser 1983; Hamermesh 1996), a special focus here is the interplay between these two domains.

Next to occupational and household characteristics, country contextual matters such as work-time regulation and work-family policies also potentially shape the ‘selection’ of workers and families into these schedules. For example, in the U.S. the association between working nonstandard schedules and having children in the household could plausibly be due to limited access to public childcare (Gornick and Meyers 2003; Hook and Wolfe 2013). Thus, another research question in this chapter asks *whether the composition of nonstandard schedules is universal or largely country-specific*. In order to do so, the chapter takes a comparative perspective and introduces a comparison between The Netherlands and the United States. The Netherlands and the United States form two disparate situations: both of the countries show a relatively high prevalence of nonstandard schedule work, but represent quite different labor market and welfare regime types, namely in relation to work time regulation as well as work-family policies (Esping-Andersen 1990). The latter allows us to assess the role of country (institutional) context on prevalence and location of nonstandard schedules.

2.2 Location of Nonstandard Schedules

2.2.1 Labor Demand Perspective

The theoretical arguments regarding the prevalence and location of nonstandard schedules can be broadly organized from the two perspectives of labor demand and labor supply. The labor demand perspective focuses on firms and their time-dependent demand for work (Hamermesh 1999), where production sometimes needs to be carried out in nonstandard times. For example, medical services need to be available round-the-clock and therefore a respectively higher prevalence of nonstandard schedule work would be expected among nurses and doctors (Mills 2004). Thus, it can be expected that *one central characteristic in explaining who is working nonstandard schedules is the occupation of the employee*.

An important aspect of the labor demand approach is that it is based on the general assumption that the majority of the workers view work during nonstandard time as unattractive (Hamermesh 1996) and one needs to find ways to develop incentives to ‘attract’ the workers to engage in these schedules. This often requires a motivation or compensation mechanism, such as increased pay and partially answers why some workers may opt for these schedules. For example, for workers from lower level positions and lower earnings it might be a way to increase their

earnings by the wage-compensation mechanisms that working these schedules may provide. At the same time, these workers may end up working disproportionately more nonstandard schedules also due to less bargaining power to get out of these unattractive schedules. Conversely, workers that have a greater capacity to earn higher incomes can negotiate better working conditions or better compensation when working nonstandard schedules. Therefore, it can be expected that *nonstandard working schedules will be worked disproportionately more in lower level occupations*, at the same time *work in nonstandard days and hours is related to increased pay benefits*.

Another feature from the labor demand perspective relates to the number of hours worked (Presser 2003; Venn 2004). Working fewer hours when engaged in nonstandard schedules could work as a ‘buffer’ mechanism against the negative physical, psychological and social effects related to work in nonstandard schedules. Thus it would be a plausible expectation that nonstandard schedules and part-time work combine, in particular in case part-time work does not create any reduction of work-related benefits or if the losses would not exceed the gains of working fewer hours. However, many U.S. labor market analysts regard part-time work as marginal employment and an indicator of ‘bad jobs’ (Kalleberg et al. 2000). If so, the negative association between part-time work and work in nonstandard schedules can simply indicate the lower bargaining power of workers in these jobs. Regardless of the underlying mechanism, we can expect *a significant positive relationship between working nonstandard schedules and part-time working hours*.

2.2.2 Labor Supply Perspective

From the labor supply perspective, workers’ decisions about working times are derived from their (household) consumption needs and preferences. According to Becker (1965), household consumption is itself a production process involving inputs of purchased goods, services and household time, while time allocation is the outcome of this value maximization process. Winston (1982) extends this approach by adding a dynamic time perspective, maintaining that value maximization of household time is done at each point of the day and the household chooses to undertake the household production/work activity that has the highest value for them at that particular time. As a result, work takes place when the value of other activities is less than the value of the work.

The decision of individuals within a particular household to work nonstandard schedules is often shaped by household composition (Presser 1983). In general, *having a partner should reduce the incidence of employment in nonstandard schedules* since singles would be less impacted by the household situation. However, it may also increase the nonstandard schedule work. Namely, when one member of the couple is working nonstandard times, they may want increase joint couple time by synchronizing their schedules (Lesnard 2008; Mills and Täht 2010; Carriero et al. 2009), which could entail both moving to flexible nonstandard

schedule work. Therefore it is expected that *one partner working nonstandard times increases the incidence of the other partner being employed in nonstandard schedule work*.

The association with household composition may change when taking into account the presence and age of children in the household (Presser 1983). Again, from the household utility maximization perspective, working nonstandard times would create a time conflict between parents' and children's leisure time (time out of daycare/school and work) and therefore the *presence of children in the household should decrease parents' nonstandard schedule work*. However, the opposite effect is also plausible: nonstandard work schedules allow parents to organize childcare, especially when there are young children in the household (Wight et al. 2008) and no sufficient (public) child care facilities are available. In other words, while one of the parents is working (nonstandard schedules), the other parent takes care of the children (Perry-Jenkins et al. 2007; Täht and Mills 2012). Therefore we also introduce an alternative hypothesis which tests whether *the presence of young children in the household increases the incidence of nonstandard schedule work*.

2.2.3 Institutional Context: Cross-Country Comparison

Although nonstandard schedules appear to be shaped by either occupational requirements or household composition, the actual decision to become employed in nonstandard schedules is often made in equilibrium between these two domains (Venn 2004; Presser 2003; Hamermesh 1996). Depending on the institutional context, one of the domains can dominate the other. As Mills and Blossfeld (2003) have argued, institutions and national structures have a tendency to act as an intervening variable between macro level structures and the responses of individual actors on the micro level. In other words, country-specific institutions and historically grown social structures can determine the prevalence, location and self-selection of persons into nonstandard schedules both in the occupational and family sphere.

An appropriate approach to examine cross-national differences need to rely on a systematic consideration of national institutional settings and the interplay of different domestic institutions. Firstly, the working time regulations such as general regulations and enforcement of working times, presence of various compensation mechanisms for working nonstandard schedules, and availability of work-time flexibility such as part-time work can be shaping the prevalence and location of nonstandard schedules in society. Secondly, work-family policies such as availability and costs of (public) childcare, and quality of these care facilities can have a relevant impact on workers and families preference to carry all or some of their working time during nonstandard days and hours.

2.2.4 Working Time Regulation

In relation to working time regulations, The Netherlands and the United States represent markedly different cases (see also Table 2.1). The Dutch case represents an institutional context where nonstandard working time is rather restricted and where the protection and rights of workers who work these schedules are rather high.

Table 2.1 Summary of working time regulations and work-family policies shaping nonstandard work schedules in The Netherlands and the United States

	Netherlands	United States
Working time regulations		
<i>Primary mechanisms for working time regulation</i>	• European and national laws; • Collective agreements between employers, workers' councils, unions and employees	• National labor law with some supplementation by state laws.
<i>Compensation for nonstandard working time</i>	• By law no direct compensation in salary; • In practice time/salary compensation stated by collective agreements	• By law no direct compensation in salary; • In practice often premiums paid.
<i>Part-time employment</i>	• Rights and benefits equal to full-time workers; • Frequent practice: 35 % of workers (15 % of men, 60 % of women)	• No legal protection with regard to pay equity, benefits, job conditions • Moderate practice: 13 % of workers (8 % of men, 19 % of women)
Work-family policies		
<i>Institutional arrangements and costs for childcare</i>	• Childcare decentralized. Tripartite contribution: municipalities, parents, employers. • Recovery of child-care costs target of collective agreements; costs tested for household income and number of children in childcare.	• Federal and state early education programs. Mostly target children at economic or educational risk • High prevalence of private child-care facilities with high financial costs. • Some subsidies and tax policies.
<i>Quality of childcare facilities</i>	• High quality of public childcare facilities	• Poor quality of public child care facilities.
<i>Availability of care facilities</i>	• Childcare facilities provide full-day care opportunities; pre-school mostly part-day; no continuous school week for elementary level.	• Public programs often part-day and part-year; instructional school day shorter than parents' working day.

In the United States, we see the opposite case where the regulation of nonstandard work schedule is low and those who are engaged in them have relatively less legal protection.

In The Netherlands, working time is primarily regulated by European and national laws such as the Working Time Law, Shop Opening Law, and other related regulations. Despite the several legislative attempts to loosen the constraints of working times, the regulation has remained relatively strict. The Working Time Act (introduced in 1996) lifted many old restrictions on work during nonstandard hours, but also stipulated various new regulations, aimed at protecting employees against the so-called ‘unhealthy’ working times (Jacobs 2004). In addition, there are various collective agreements between employers, workers’ councils, unions and employees regarding actual working times and related benefits (Fouarge and Baaijens 2009). For example, although the Dutch Working Time Act refrains from prescribing compensation in time or salary for the performance of night work, in practice much of it has been regulated by collective agreements. Meanwhile, the coverage by collective agreements is high and the agreements are also often extended to those who are not covered.

In the United States, employment is regulated by the national labor law Fair Labor Standards Act. Working time is also regulated by state laws operating in conjunction with a fairly limited collective-bargaining system (Gornick and Meyers 2003). Both the restrictions on working time as well as collective bargaining power on working times are rather low. Also, U.S. labor law does not directly specify any compensation or benefits for workers in nonstandard shifts (Hamermesh 1996). Contrary to the Dutch case, the role of collective agreements and power of unions in relation to working times is comparatively marginal. Empirical studies show that in practice there is a slightly higher wage premium for shift work, but these characterize rather a few occupational groups only (Kostiuk 1990). Regarding these differences, in the U.S., nonstandard working schedules are expected to be relatively worse labor market positions than in The Netherlands. We therefore anticipate that *the concentration of nonstandard schedules in lower level positions will be more pronounced in the U.S. than in The Netherlands, at the same time the pay incentives related to nonstandard schedules are expected to be stronger in The Netherlands than in the U.S.*

Differences in the relationship of institutions could be expected also regarding the work-time flexibility. Over the last decades, Dutch labor market policy has contributed to the prevalence of part-time employment by improving the legal position of part-timers. As a result, in The Netherlands, part- and full-time employees enjoy similar employment conditions (Fouarge and Baaijens 2009), and part-time work is widespread (15 % of men, 60 % of women) and considered a right (OECD 2009a; Wielers and Raven 2013). In the U.S., by contrast, the law is silent on issues of compensation and benefits such as pay equity or job conditions for part-timers. In fact, American workers pay a high income- and benefit-penalty for reducing their hours (OECD 2002). In this respect, part-time employment is still often a form of marginal employment (Visser 2002), and less prominent (8 % of men, 19 % of women). Therefore, it is expected that *the positive association*

between part-time work and work in nonstandard schedules is stronger in The Netherlands than in the U.S.

2.2.5 Work-Family Policies and Reconciliation

In relation to work-family policies and reconciliation, in The Netherlands extensive childcare facilities are a fairly recent development. In the beginning of 1990s it was still a country offering relatively meager organized childcare of any kind, with only 2 % of Dutch children under the age of four cared for in childcare centers (Gustaffson and Stafford 1994). In order to meet the rising demand for childcare, the Dutch government started stimulating the expansion of these facilities. Employers were awarded several fiscal subsidies to sponsor centers for young children, and the recovery of child-care costs were often the target of collective agreements (Schaepe et al. 2002). Moreover, as of 2005, childcare costs were subsidized by the government and adjusted in relation to household income and number of children in childcare facilities (Immervoll and Barber 2006).

In the U.S., the development of childcare facilities has a longer history, but the role of government and unions in supporting parents' dual responsibilities of home and workplace is comparatively minimal. The government finances some care through federal and state early education programs, which operate, however, often on a part-day and part-year basis (Gornick and Meyers 2003). Moreover, most state pre-kindergarten programs in the U.S. are targeted at children in economic or educational risk groups and the subsidies are available only for very low income families. Therefore, most non-parental care arrangements in the U.S. are market-based both in provision and financing, imposing steep financial costs on families (Immervoll and Barber 2006).

Despite the increasing accessibility of formal childcare facilities, the actual use of public childcare facilities in The Netherlands has remained modest. Dutch children also spend considerably less time in the day-care centers. In 2006, the average weekly hours in childcare among children under 3 years of age was 17 h in The Netherlands and more than 30 h in the U.S. (OECD 2009b). At the same time, the Dutch government has aimed to ensure childcare of a guaranteed high quality and reliability, which is not the case for the U.S. (Gornick and Meyers 2003; Helburn and Bergmann 2002). Thus, the low childcare use in The Netherlands cannot be explained by quality, but the reasons appear to be, however, cultural. Parents are expected to raise their children, with negative connotations for mothers who combine having children and (full-time) work (Portegijs et al. 2006). Mills et al. (2013) recently found a clear association between higher levels of disapproval of women working full-time with lower levels of childcare enrolment and employment across Europe. Also, while day-care facilities for pre-school aged children in The Netherlands operate during standard working hours and provide full-day care (Immervoll and Barber 2006), at the elementary school level, there is often no continuous school week and parents have to find additional childcare options.

Moreover, in The Netherlands, the one-and-half earner model is still one in which couples are able to sustain, whereas in the U.S. dual-earners are often essential to maintain the household. Thus, in The Netherlands, the necessity to use nonstandard schedules in order to arrange childcare can be considered as modest, while in the U.S. parents may be more in need to switch to (*desynchronized*) nonstandard schedules in order to arrange childcare. Therefore it is expected that the *predicted effect of the presence and age of children on the incidence of nonstandard schedule work is more pronounced in the U.S.*

Regarding the interplay between household and occupational aspects in working nonstandard schedules, the Dutch institutional context provides more opportunities for these schedules to be an individual or household choice as opposed to a forced need. On the contrary, in the U.S. the low regulation and lack of protection when working these schedules makes them more likely to be a forced need for more vulnerable labor market groups, while restrictions in the access to child-care facilities may make the families more likely to opt for working these schedules. Therefore, *although it is expected that in general working nonstandard schedules are driven by occupational rather than household characteristics, due to the institutional circumstances in the U.S. the role of household characteristics in working nonstandard schedules will be more pronounced.*

2.3 Data and Method

2.3.1 Data

The Dutch data uses the first wave of the NKPS (Netherlands Kinship Family Study) (Dykstra et al. 2004), and the American data the first wave of NSFH (National Survey of Families and Households) (Sweet et al. 1988). The sub-sample for the current study is the working age (18–64 years old) population active in the labor market (working at least 12 h a week). In the Dutch case, this leaves us with 4,344 individuals (out of the original sample of $N = 8,161$) and in the United States case with 7,801 individuals (out of the original sample of $N = 13,007$). The detailed information on working days and hours, which forms the origin of the working schedule variable, is the biggest source of missing cases in both countries. In the Dutch case, the data loss is 5 % (the working schedule information is available for 4,133 individuals); in the American data, the data loss is 6 % (the working schedule information is available in 7,344). Including co-residential partner's information reduces valid cases for the couple-analysis even more: there are 3,734 cases left in the Dutch data and 6,594 cases remain in the U.S. data. For more details on the data see Table 2.7, Appendix.

2.3.2 Measures

The two dependent variables in the analysis are the *nonstandard schedule* (for details see Chap. 1) and respondent's *monthly earnings* transformed to a natural logarithm. The variable of monthly earnings also includes self-employed persons; however the effect of self-employment is controlled in all models.

For independent variables (see Appendix, Table 2.7), respondents' *occupation* is measured by using ISCO-88 coding scheme. ISCO-88 coding scheme for the U.S. data was derived from CPS codes, which are not fully compatible. In particular, instead of differentiating various types of managerial jobs (in ISCO-88 groups 1200 and 1300), in the CPS, manager's occupation is coded without a reference to the area where the position is worked. However, as among the managers of wholesale, retail trade, restaurants and hotels, the prevalence of nonstandard schedules is generally very high and relevant for current study, for the U.S. data, this group has been 'filtered' out by using additional information from the industry. This allows us to make the two country divisions more comparable in terms of the content, even though the derived distribution under-represents the share of managerial occupations in the U.S. The *number of working hours* is measured by weekly hours, where the value zero refers to not working or working less than 12 h a week. The highest achieved *education* of the respondent is measured by years spent in education. The respondent's *socio-economic status* is measured using the International Socio-Economic Index (ISEI) (Ganzeboom et al. 1992) and *age* is measured in full years. The household characteristics of *partnership status* refer to the presence of a co-residential partner, regardless of whether it is a married or cohabiting union, against being single/separated/divorced/widowed. The presence and age of children refers to the age of the youngest child in the household and the mean *household income* variable refers to the mean of respondent's and co-residential partner's income from earnings and other sources.

2.3.3 Analytical Techniques

For grouping the occupations, the most detailed ISCO-88 categories were used. At the original 4-digit level division, occupations small in size and similar in content and share of nonstandard schedules were aggregated step by step. The general criterion for final group size was a minimum of 50 cases. In the final grouping there are occupational groups that range from being the lowest at 3-digit level precision (for example nursing and midwifery associate professionals) to the highest of a 2-digit level precision (for example teaching professionals).

The analysis of the relationship between occupational characteristics and schedules on earnings uses OLS regression. For estimating the effect of occupational and household characteristics on working different types of nonstandard schedules, logistic regression models are used. Due to the small number of cases,

evening, night and varying hour shifts are collapsed into one category in most of the inferential analyses. Country differences are estimated by interacting the main effects with the country variable. Sheaf coefficients are used to estimate the joint effect of several occupational or household characteristics on working nonstandard schedules (Heise 1972). A sheaf coefficient assumes that a block of variables influence the dependent variable through a latent variable. A sheaf coefficient displays the effect of the latent variable and the effect of the observed variables on the latent variable. The assumption that the effect of a block of variables occurs through a latent variable is not a testable constraint, rather it is a different way of presenting the results from the original model (here a logistic regression model). Since the effects of the latent variables are presented in a standardized way (standard deviation = 1), the effects are easier to compare between each other (for more information on Stata program ‘sheafcoef’ see Buis 2009).

2.4 Results

2.4.1 *Characteristics of Nonstandard Schedules*

Using the NKPS data (Table 2.2), in The Netherlands about every fourth (26.9 %) labor market participant is regularly engaged in nonstandard working schedules. According to the NSFH data, in the U.S. about two out of five workers (39.6 %) are working in nonstandard times, which corresponds to previous findings (Presser 2003). These descriptive findings also confirm that in the U.S., the prevalence of nonstandard schedules in 1990 was already higher than in The Netherlands more than a decade later. In both countries, nonstandard schedules are more widespread among the male working population. In The Netherlands, the difference between genders is relatively small (27.1 % of work in nonstandard schedules for men and 26.7 % for women), respectively while in the U.S., the gender difference is more pronounced (43.7 % for men and 35.7 % for women). Turning to schedule types, weekend work tends to be more predominant than shift work with 63 % of non-standard schedules in The Netherlands and 60.6 % in the U.S. consisting of weekend work.

As hypothesized, nonstandard schedules are often worked in part-time positions. However, the effect is not consistent across all schedule types, but characterizes mostly evening and sometimes night shifts. In The Netherlands, evening shift employees work 5.8 h less a week and night shifts workers 2.9 h less a week than standard schedule workers. In the U.S., employees who work in the evenings work 1.6 h less a week than standard schedule workers. Thus, in support of the country hypothesis, hour reduction is stronger in the Dutch case, holding for both men and women. Moreover, in the U.S., working in shifts with varying hours even significantly increases the number of average weekly working hours. These workers are employed around 20 h more a week than standard schedule workers. Varying

Table 2.2 Working schedules and number of weekly working hours by schedule type in The Netherlands and the United States; % and OLS regression coefficients

	Netherlands		United States	
	All	Men	Women	All
Schedule type (%)	100.0	100.0	100.0	100.0
<i>Standard schedule</i>				
Day shift, weekdays	73.1	72.9	73.3	60.4
Nonstandard shifts				
Fixed evening shift	4.9	4.2	5.5	9.0
Fixed night shift	1.3	0.9	1.7	3.9
Hours vary shift	3.0	2.1	3.9	2.2
Nonstandard days				
Weekend day	17.7	20.0	15.5	24.5
<i>Mean nr of working hours by schedule type (hrs)</i>				
Standard schedule				
Day shift, weekdays (Ref)	35.5	41.3	30.1	41.3
<i>Nonstandard shifts</i>				
Fixed evening shift	-5.8**	-4.8**	-5.2**	-1.6**
Fixed night shift	-2.9+	-6.3**	+1.4	+0.2
Hours vary shift	+0.8	+4.0*	+1.8	+20.0**
Nonstandard days				
Weekend day	+8.6**	+9.6**	+5.8**	+8.9**
Total (N)	4,133	1,983	2,150	7,344

Data Netherlands—NKPS, 1st wave, 2002–2004; United States—NSFH, 1st wave, 1987–1988; Author’s calculations

Notes Sample—18–64 years old population, works at least 12 h a week; NL: N = 4,344; U.S. N = 7,801

Sig ** p < .01; * p < .05; + p < .10

hours' shifts are disproportionally more often worked among drivers, construction workers, some office clerks, and restaurant and shop managers. Thus, particularly in the U.S., working in (varying hours) shifts might be attributed to relatively lower level jobs with potentially lower wages, prompting these workers to engage in more hours of work to earn a decent income.

Weekend workers likewise have a higher number of weekly working hours than those employed in standard schedules, observed in both countries (8.6 in The Netherlands and 8.9 h more in the U.S. compared to those in standard schedules). The occupational groups who stand out in this category are general managers of shops and restaurants, various professionals (architects, engineers) and associate professionals (technicians, finances and sales, business service agents), farmers, and drivers. Thus, working in the weekends seems to be more of a white-collar and higher level occupation and male phenomenon than shift work, with a higher number of hours often related to overwork.

The analysis on the association between schedules and earnings (Table 2.3) tests the idea of differences between schedule types from a different angle. The underlying hypothesis here was that nonstandard schedules are related to compensation mechanisms such as higher pay, which are also likely to vary across countries. The main effect of schedule type on wage earnings (Model 1 of Table 2.3) shows that working nonstandard schedules—more precisely evenings and varying hours' shift, (and in the U.S. also weekend days) is negatively related to wages, meaning that these workers earn significantly less than standard day workers. The effect becomes somewhat weaker or disappears when controlling for age, education and socioeconomic status (Model 2 of Table 2.3).

The crucial explanatory aspect to interpret the pay difference is, however, the number of working hours (Model 3). Once controlling for the number of hours, working night shifts means a significant salary bonus of around 34 % in The Netherlands and 14 % in the U.S. It can be that as due to the data limitations (the data does not allow us to control whether one works in rotating shifts), the (positive) effect of nonstandard shifts on wages is somewhat underestimated. In relation to earnings in nonstandard schedules, it is not an entirely homogenous phenomenon. For those employed in schedules other than night shifts, there is either no difference compared to those who work in standard schedules or the gap is even negative. For The Netherlands, those who work evening shifts earn about 13 % less than those working standard day schedules. In the U.S. the contrast is even bigger with all nonstandard schedule workers (with the exception of night workers) earning significantly less than standard schedule workers. Thus, the findings support the country difference hypothesis, which predicted a stronger positive association with wage earnings in The Netherlands than in the U.S.

Table 2.3 Earnings^{a,b} across working schedules in The Netherlands and the United States, OLS regression coefficients

	Model 1			Model 2			Model 3		
	Netherlands	United States	Dif	Netherlands	United States	Dif	Netherlands	United States	Dif
Schedule type (Ref—standard day)									
<i>Fixed evening shift</i>	-0.52 ^{***}	-0.34 ^{***}	*	-0.31 ^{***}	-0.14 ^{***}	*	-0.12 [*]	-0.11 ^{***}	
<i>Fixed night shift</i>	-0.15	-0.07		0.12	0.14 [*]		0.29 ^{***}	0.13 ^{***}	
<i>Hours vary shift</i>	-0.19 [*]	-0.30 ^{***}		-0.03	-0.19 [*]		0.06	-0.49 ^{***}	***
<i>Weekend day</i>	0.04	-0.07 ^{***}	*	0.08 [*]	0.02		-0.02	-0.18 ^{***}	***
Individual characteristics									
<i>Age</i>				0.01 ^{***}	0.02 ^{***}	***	0.01 ^{***}	0.02 ^{***}	***
<i>Education</i>				0.05 ^{***}	0.09 ^{***}	***	0.04 ^{***}	0.09 ^{***}	***
<i>Socioeconomic status</i>				0.01 ^{***}	0.01 ^{***}		0.01 ^{***}	0.01 ^{***}	
Occupational characteristics									
<i>Number of hours</i>							0.03 ^{***}	0.02 ^{***}	***
<i>Self-employment</i>							-0.10 [*]	-0.00	+
Constant	7.23 ^{***}	7.17 ^{***}		5.61 ^{***}	4.98 ^{***}		4.72 ^{***}	4.02 ^{***}	
R2	0.02	0.01		0.12	0.16		0.23	0.25	
Total (N)	3,851	6,301		3,851	6,301		3,851	6,301	

Data Netherlands—NKPS, 1st wave, 2002–2004; US—NSFH, 1st wave, 1987–1988; Authors’ calculations
Notes *Sample* 18–64 years old population, working at least 12 h a week (*NL* N = 4,344; *US* N = 7,801). ^aNatural logarithm from monthly labor income, including self-employment. Dif—Difference; refers to statistical significance test for country interactions
Sig *** p < .01; * p < .05; + p < .10

2.4.2 *Where Are Nonstandard Schedules Located?*

Nonstandard work schedules seems to be systematically related to a somewhat lower occupational status, which supports our previous expectations. A descriptive analysis of the mean socio-economic status of occupations across dominantly worked schedule types shows that the status is the highest among fixed day workers (46 in the U.S. and 53 in The Netherlands on the ISEI scale), followed closely by weekend day workers (mean ISEI of 43 for the U.S. and 50 for The Netherlands). Those working nonstandard shifts (evening, night, varying hours) seem to be, in turn, in lower positions compared to those engaged in weekend day work only. Here the socioeconomic status is the highest for those in varying hours (mean of 41 for U.S. and 42 for The Netherlands on the ISEI scale), followed by evening shifts (mean ISEI of 38 for the U.S. and 42 for The Netherlands) and the lowest for night shift workers (mean ISEI of 36 for the U.S. and 37 for The Netherlands).

A more detailed examination of specific occupations shows that most nonstandard schedules seem to be concentrated in specific occupations and sectors which in turn form a rather uniform ‘occupational structure’ of nonstandard schedule work. As shown in Table 2.4, in both country cases, nonstandard schedules tend to be strongly overrepresented in housekeeping and restaurant service workers such as cooks, waiters, bartenders (44.7 % of shift work in Dutch case and 38.3 % in U.S. case); personal and protective service workers (31.0 % of shift work in Dutch case and 16.7 % in U.S. case); and, among customer service clerks such as cashiers, receptionists (18.7 % of shift work and 21.3 % weekend work in Dutch case; 27.2 % of shift work and 26.4 % of weekend work in U.S. case). Also among nursing and midwifery professionals, the prevalence of nonstandard schedules is high in both countries (37.5 % of shift work and 22.5 % of weekend work for the Dutch case; 37.8 % of shift work and 27.9 % of weekend work for the U.S. case). A higher concentration of nonstandard schedules can also be observed among stationary plant and machine operators (22.0 % of shift work in The Netherlands and 22.7 % in the U.S.), drivers and mobile plant operators (25.6 % of weekend work in The Netherlands and 26.5 % in the U.S.). Once again a distinct difference between nonstandard shifts and days emerges. For example, managers of small enterprises (in wholesale and restaurants/hotels) show a high prevalence of weekend work (33.1 % in The Netherlands and 52.2 % in the U.S.), but a small share in nonstandard shifts. Also models, salespersons and demonstrators show a high prevalence of weekend work, but little shift work. The same is the case for agricultural workers.

The next analysis (see Table 2.5) shows that the concentration of schedules into specific jobs only is clearer for the nonstandard shift occupations, whereas weekend work is more diffuse. Originally most major groups show a significant difference from associate professionals (a group with the most stable share of nonstandard schedules) in terms of prevalence of nonstandard schedules (main model with main occupational groups not shown here, but available upon request). After controlling for the effect of the five most prominent nonstandard shift occupations (chosen

Table 2.4 Share of nonstandard schedules across various occupational groups^a in The Netherlands and the United States

ISCO88 code	Sub-major or minor occupation group	Netherlands			United States			Remarks ^e
		Occupational group ^b	Nonstandard schedules in group (%)		Occupational group ^b	Nonstandard schedules in group (%)		
			N (%)	Shift ^c		Day ^d	N (%)	
1100–1239	Legislators & senior officials; corporate managers	286 (7.0)	3.8	25.9	255 (3.5)	3.5	18.0	Restaurant, hotel managers
1300–1319 (ex.1221)	Managers of small enterprises (excl. managers in agriculture, fishing	154 (3.8)	6.5	33.1	205 (2.8)	8.3	52.2	Restaurant, hotel, shop managers
2100–2149	Physical, mathematical and engineering science professionals	303 (7.4)	2.0	12.5	225 (3.1)	2.7	13.3	Physicists, chemists; Architects, engineers
2200–2230	Life science and health professionals	92 (2.2)	17.4	21.7	181 (2.5)	36.5	26.5	Doctors
2300–2359	Teaching professionals	308 (7.5)	2.9	16.6	315 (4.3)	3.2	13.7	Teachers in higher education
2400–2470	Other professionals	487 (11.9)	4.5	14.6	351 (4.8)	7.1	22.8	Artists; Religious professionals
3100–3152	Physical and engineering science associate professionals	175 (4.3)	5.1	12.6	196 (2.7)	17.9	19.4	Photographers; Pilots
3200–3334	Life science and health assoc. professionals (exc. Nurses); Teaching assoc. professionals	139 (3.4)	4.3	10.1	147 (2.0)	11.6	22.4	Health professionals
3230–3232	Nursing and midwifery associate professionals	240 (5.8)	37.5	22.5	172 (2.4)	37.8	27.9	Nurses, midwives
3400–3480	Other associate professionals	406 (9.9)	5.2	8.9	432 (5.9)	4.6	25.2	Musicians; Athletes; Decorators/designers
4100–4190	Office clerks	379 (9.2)	1.8	7.4	878 (12.1)	6.8	12.1	Mail carriers and sorting clerks
4200–4223	Customer services clerks	75 (1.8)	18.7	21.3	235 (3.2)	27.2	26.4	Cashiers; Receptionists

(continued)

Table 2.4 (continued)

ISCO88 code	Sub-major or minor occupation group	Netherlands		United States			Remarks ^e	
		Occupational group ^b	Nonstandard schedules in group (%)	Occupational group ^b	Nonstandard schedules in group (%)			
		N (%)	Shift ^c	Day ^d	N (%)	Shift ^c		Day ^d
5100–5169 (ex.5120-30)	Personal and protective services workers (ex. House-keeping & restaurant; Personal care)	58 (1.4)	31.0	32.8	684 (9.4)	16.7	34.9	Stewards; Police; Hairdressers; Guards
5120–5123	Housekeeping & restaurant services workers	76 (1.9)	44.7	19.7	243 (3.3)	38.3	32.9	Cooks; Waiters & bartenders;
5130–5139	Personal care and related worker	118 (2.9)	13.6	17.8	119 (1.6)	19.3	20.2	Institution-based care workers
5200–5220	Models, salespersons and demonstrators	155 (3.8)	6.5	42.6	210 (2.9)	17.1	44.8	Salespersons
6100–6154	Skilled agric./fishery workers (in. 1221, 1311 Managers of small enterprises in agric., fishing)	77 (1.9)	3.9	58.4	49 (0.7)	8.2	73.5	Dairy & live-stock producers
7100–7143	Extraction & building trades workers	105 (2.6)	0.0	10.5	226 (3.1)	3.1	29.2	Builders
7200–7442	Metal, machinery etc. workers; Precision, handicraft, printing, etc. & other workers;	142 (3.5)	8.5	17.6	624 (8.6)	15.1	24.2	Bakers; Butchers, fishmongers
8100–8290	Stationary plant and related operators; Machine operators and assemblers	109 (2.7)	22.0	11.0	551 (7.6)	22.7	16.7	
8300–8340	Drivers and mobile-plant operators	90 (2.2)	15.6	25.6	264 (3.6)	18.2	26.5	Bus & tram drivers; Car, taxi, van drivers
9100–9330 (ex. 9130)	Sales/services elem. occ-s (ex. dom-c cleaners); Agriculture; Mining, construction, transport	81 (2.0)	19.8	6.2	535 (7.3)	24.1	24.7	Assembling laborers; Transport laborers;
(continued)								

(continued)

Table 2.4 (continued)

ISCO88 code	Sub-major or minor occupation group	Netherlands				United States			Remarks ^e
		Occupational group ^b		Nonstandard schedules in group (%)		Occupational group ^b		Nonstandard schedules in group (%)	
		N (%)		Shift ^c	Day ^d	N (%)		Shift ^c	
9130-9133	Domestic etc. helpers cleaners & launderers	49 (1.2)		26.5	16.3	186 (2.6)	19.9	30.1	Helpers & cleaners in establishment
Total	(N)	4,104		381	725	7,283	1,104	1,790	
	(%)	(100.0)		9.3	17.7	(100.0)	15.2	24.6	

Data Netherlands—NKPS, 1st wave, 2002–2004; US—NSFH, 1st wave, 1987–1988. Authors’ calculations

Notes Sample 18–64 years old population, works at least 12 h a week (NL N = 4,344; US N = 7,801). ^aMeasured via aggregated ISCO-88 occupational groups. The main categories are the sub-major groups of ISCO-88. Where the share of nonstandard schedules in a minor group differs from the respective sub-major group, and the size of minor group over 50 cases, the minor groups is treated as separate category. ^bOccupational distribution; ^cIncl. ‘Fixed evening’, ‘Fixed night’ or ‘Hours vary’ shifts. ^dIncl. ‘Fixed day’, weekend work. ^eDescription of some minor occupation groups within sub-major groups that are represented in the category and where the share of nonstandard schedule workers is higher than in the group average

Table 2.5 Nonstandard schedule work explained by occupational, household and individual characteristics in The Netherlands and the U.S., logistic regression coefficients, odds ratios and sheaf coefficients

	Nonstandard shifts ^a				Nonstandard days ^b							
	Model 1		Model 2		Model 3		Model 4					
	Netherlands	United States	Dif	Netherlands	United States	Dif	Netherlands	United States	Dif			
Main occupational category (Ref—Professionals)												
Managers	0.09	-0.73 ^{**}	*	-0.00	-0.76 ^{**}	+	0.59 ^{**}	0.02	*	0.74 ^{**}	0.07	*
Associated professionals	0.06	-0.22		-0.02	-0.16		-0.48 ^{**}	0.16	**	-0.37 ^{**}	0.16	*
Clerks	-0.98 [*]	-0.55 ^{**}		-1.10 [*]	-0.56 ^{**}		-0.49 [*]	-0.33 ^{**}		-0.52 ^{**}	-0.30 ^{**}	
Service and sales workers	1.10 ^{**}	0.46 ^{**}	*	0.90 ^{**}	0.45 ^{**}		0.48 ^{**}	0.61 ^{**}		0.55 ^{**}	0.61 ^{**}	
Agriculture	-0.13	-0.52		-0.11	-0.66		1.92 ^{**}	2.20 ^{**}		1.89 ^{**}	2.24 ^{**}	
Craft trades workers	0.08	-0.12		-0.10	-0.18		-0.24	0.08		-0.14	0.08	
Plant & machine operators	1.36 ^{**}	.39 ⁺	*	1.04 ^{**}	0.42 ⁺		-0.51	-0.36 ^{**}		-0.87 ⁺	-0.38 ^{**}	
Elementary occupations	1.59 ^{**}	0.72	*	1.28 ^{**}	0.63 ^{**}		-1.14 [*]	0.05	*	-1.17 [*]	-0.01	*
Nonstandard shift jobs												
3230 –32 Nurses, midwives	2.37 ^{**}	1.81 ^{**}	+	2.32 ^{**}	1.88							
4200 –23 Customer clerks	2.48 ^{**}	1.60 ^{**}	+	2.31 ^{**}	1.62							
5120 –23 Restaurant workers	1.64 ^{**}	1.04 ^{**}	+	1.64 ^{**}	1.09							
8100 –90 Stat. plant operators	0.40	0.33 ⁺		0.51	0.35							
9130 –33 Cleaners, laundriers	0.36	-0.15		0.34	0.10							
Nonstandard day jobs												
1300 –19 Managers (small ent.)							0.35	1.37 ^{**}	**	0.29	1.30 ^{**}	**
3230 –32 Nurses, midwives							1.07 ^{**}	0.31	**	1.02 ^{**}	0.27	*
5200 –20 Salespersons							0.96 ^{**}	0.49 ^{**}	+	1.04 ^{**}	0.53 ^{**}	+
8300 –40 Drivers							0.96 ^{**}	0.49 ^{**}		1.64 ^{**}	0.50 ^{**}	*
9130 –33 Cleaners, laundriers							1.25 ^{**}	0.44 ^{**}		1.61 ^{**}	0.38 ⁺	+

(continued)

Table 2.5 (continued)

	Nonstandard shifts ^a				Nonstandard days ^b			
	Model 1		Model 2		Model 3		Model 4	
	Netherlands	United States	Dif	Netherlands	United States	Dif	Netherlands	United States
Partner (Ref—Co-resident; full-time standard schedule work)								
No partner				0.44 [*]	0.37 ^{**}		0.10	0.27 ^{**}
Not working				0.06	−0.13		0.01	0.19 ⁺
Part-time work				−0.44 ⁺	−0.16		0.01	0.37 [*]
Nonstandard shifts ^a				0.62 [*]	0.67 ^{**}		−0.05	0.02
Nonstandard days ^b				0.11	0.19		0.75 ^{**}	0.40 ^{**}
Age of children (Ref—No children)								
Youngest child 0–3 years				0.37	0.07		−0.41 ^{**}	0.09 [*]
Youngest child 4–12 years				0.43 [*]	−0.03	[*]	−0.29 ^a	0.02 ⁺
Youngest child 13+ years				0.34	−0.21	[*]	0.12	0.20 [*]
Mean household income				−0.90 ^{**}	−0.10	[*]	0.41	−0.07 [*]
Constant	−3.09 ^{**}	−1.94 ^{**}		−3.31 ^{**}	−2.07 ^{**}		−1.54 ^{**}	−1.45 ^{**}
Nagelkerke R2	0.19	0.10		0.21	0.12		0.10	0.08
N	4,104	7,276		3,426	5,807		4,104	7,276

Data Netherlands—NKPS, 1st wave, 2002–2004; US—NSFH, 1st wave, 1987–1988. Authors' calculations

Notes Sample 18–64 years old population, works at least 12 h a week (NL N = 4,344; US N = 7,801). Model controls for individual characteristics such as gender, respondent's education, and respondent's age (omitted from the table). Nonstandard shifts include the categories 'Fixed evening shift', 'Fixed night shift' and 'Hours vary shift'. Nonstandard days include the category 'Fixed day, weekend work'. Dif—Difference; refers to statistical significance test for country interactions

Sig ** p < .01; * p < .05; + p < .10

based on findings in Table 2.4), nonstandard shifts are overrepresented only in sales and service, plant and machinery operator, and elementary occupations (Table 2.5, Models 1 and 3). There are, however, significant country differences, showing that nonstandard shifts concentrated in certain occupational fields are stronger in The Netherlands. When looking at nonstandard day work, after controlling for five predominantly nonstandard day occupations, nonstandard days are still overrepresented in service and sales and agriculture occupations in both countries. Country differences are smaller here. Only Dutch managers have a high prevalence, which differs significantly from the U.S. case. Thus, for country differences, there is no clear evidence that nonstandard schedules concentrated in lower level occupations is stronger in the U.S. While the ‘occupational structure’ of nonstandard schedule work in both countries looks rather similar, the general occupational structures still have many differences.

2.4.3 Who is Working in Nonstandard Schedules?

Models 2 and 4 in Table 2.5 include in the analysis next to occupational variables household characteristics as well. In support of the hypothesis, those who are in a relationship are less likely to work nonstandard schedules (in shifts in case of both countries, in weekends in the U.S.). There is also support for the hypothesis that partners tend to synchronize their schedules. Nonstandard shift work is related to a respondents’ nonstandard shift work and partner’s weekend is related to a higher tendency for the partner to engage in weekend work in both countries. Note that the relationship refers to the situation where the presence and age of children (more precisely, not having children) is controlled for. Once children are present in the household, desynchronization of scheduling becomes somewhat stronger. Moreover, it appears that when children are present in the household, there tends to be a stronger correlation of entering into nonstandard schedules in The Netherlands, which differs significantly from the U.S. Regarding the effect of presence and age of children in general, in The Netherlands there is a significant increase in shift work when children are school age (4–7 years) in the household, supporting the respective hypothesis. (Readers should note that school begins at age 4 in The Netherlands). In support of the alternative hypothesis, the incidence of weekend work is significantly reduced in the presence of young children. For the U.S., there is no significant relationship of having young children on working nonstandard shifts and days. These country differences also contradict the hypothesis which predicted a stronger relationship with having children for the U.S.

Regarding the interplay between occupational and household characteristics, the data supports the hypothesis that the main predictor for working nonstandard schedules is occupational factors. Firstly, as shown in the logistic regression analysis (Models 1, 2, 3, and 4 in Table 2.5), adding the effect of household characteristics to occupational aspects increased the explanatory power of the

Table 2.6 Sheaf coefficients for occupational, household and individual characteristics in predicting nonstandard schedule work, odds

Groups of characteristics	Nonstandard shifts ^a			Nonstandard days ^b		
	Netherlands	United States	Dif	Netherlands	United States	Dif
Sets of characteristics						
<i>Occupational characteristics^c</i>	2.31	1.82	**	1.93	1.55	**
<i>Household characteristics^d</i>	1.45	1.27		1.35	1.17	*
<i>Individual characteristics^e</i>	1.17	1.28		1.21	1.28	
Within country differences (Chi-sq)						
<i>Occupational versus household characteristics</i>	16.49**	31.16**	n.a.	22.71**	34.38**	n.a.
<i>Household versus individual characteristics</i>	3.21 ⁺	0	n.a.	2.64	3.23 ⁺	n.a.
<i>Occupational versus individual characteristics</i>	29.26**	27.75**	n.a.	35.19**	13.74**	n.a.

Data Netherlands—NKPS, 1st wave, 2002–2004; US—NSFH, 1st wave, 1987–1988. Author's calculations

Notes Sample 18–64 years old population, works at least 12 h a week (NL N = 4,344; US N = 7,801)

^aInclude the categories 'Fixed evening shifts', 'Fixed night shifts' or 'Varying hours shifts'. ^bInclude the category 'Fixed day, weekend work'. ^cRespondent's occupation measured on the ISCO-88 scale; ^dPresence of partner, partner's employment, partner's working schedule, presence of children, age of youngest child, mean household income; ^eGender, education (in years), age (measured in years). Dif—Difference; refers to statistical significance test for country interactions

Sig ** p < .01; * p < .05; + p < .10

model only slightly. Also, controlling for the effect of the family situation did not remarkably change the occupation effects.

Secondly, the sheaf coefficients (Table 2.6) show that the occupational-related factors increase the chance to work in nonstandard shifts by 2.4 in the Dutch case and 1.81 times in the U.S. context. For nonstandard day work, the coefficient is respectively 1.86 for the Netherlands and 1.55 for the U.S. In both countries and schedule types, the impact of occupational characteristics in predicting nonstandard work schedules differs significantly from both the relationship with household and individual characteristics. The effect of occupational characteristics on nonstandard shifts and nonstandard days is significantly stronger in The Netherlands compared to the U.S. The effect of household characteristics is also significantly stronger in the case of The Netherlands for predicting nonstandard day work.

2.5 Discussion

Despite the argument of an ever emerging 24-hour-economy, nonstandard schedules appear to have not penetrated all parts of society even in countries where the prevalence of these schedules is very high (such as in the United States or The Netherlands), but are very much shaped by various individual, occupational, and household characteristics. Moreover, the impact of these various characteristics is shaped by a more general country-specific context, such as regulation of working time and work-family policies.

Regarding occupational aspects, nonstandard schedules tend to be strongly concentrated in certain occupations, namely those with a lower mean socio-economic position, which is often compensated with extra pay (e.g., when working night shifts); in part-time arrangements (evening shifts) or long hours (weekend work). Turning to country-specific features, in The Netherlands where working time restrictions are more stringent, the concentration of schedules in specific types of jobs is stronger; association between part-time work and nonstandard schedule work is stronger (except for weekend days); and the wage compensation mechanisms that exist are stronger compared to the U.S. Thus, working time regulation can shape the general position and meaning of nonstandard schedule work in a society (Hook and Wolfe 2013). Lack of regulation and employment protection of nonstandard schedule work may lead to a marginalization of these schedules and to a concentration into already disadvantaged labor market segments. Conversely, a stronger regulation and implementation of various ‘buffer-mechanisms’, likely protects workers against the ‘unhealthy’ effect of the schedules and means that they are not necessarily bad jobs.

Although to a lesser extent, next to occupational aspects, household characteristics also shape the prevalence and location of these schedules. Similarly to occupational aspects, there were universal and several country-specific features. There is a positive association between partners’ nonstandard schedule work—so-called schedule synchronization—while one partner works nonstandard

schedules. Moreover, having young children in the household who need care, is related to a higher prevalence of nonstandard work schedules. It is not only individuals, but households who may get ‘out of sync’ with the rest of society, creating various new challenges and needs for managing their time and activities in a society which normally runs according to ‘standard’ schedule. The institutional context and work-family policies may also make a difference both in which households these schedules are concentrated and the impact of these schedules on the households. As could be seen, in The Netherlands engaging in these schedules due to household reasons seems more likely a matter of preference and not so much a forced need as in the U.S. In other words, where nonstandard schedules lack a negative connotation, families may decide to use nonstandard schedules as a way to spend more time with children or arrange child-care between the partners. However, when working these schedules represents a rather marginal employment situation, working nonstandard schedules as a way to arrange childcare may be much more of a forced choice within specific types of households who cannot afford or have no access to (public) childcare facilities.

In the backdrop of an already high prevalence and in some cases a continuous increase of nonstandard schedule work in Western societies, it is important to realize that work in nonstandard schedules is not only an occupational, but also a household characteristic. As determined from previous studies, work in nonstandard times relates to various negative individual consequences such as increased levels of stress or burn-out (Fenwick and Tausig 2001; Jamal 2004; Wang et al. 2012). There is also a high risk for these impacts to accumulate when no protective or buffer-mechanisms are available for workers and their families. In this situation, work in nonstandard schedules has a high risk to become another source of inequality not only for individuals but also households. The negative impacts can be carried over to household relations and interactions, which augment the negative consequences. As the current finding suggests, institutional differences such as work time regulation or work-family policies can shape both the prevalence and location, but most likely also the consequence that these schedules may have on individuals and families. The latter association, but also the exact mechanisms on how and when and for how long are nonstandard schedules entered due to household reasons are out of the scope of the current study, whereas both would deserve further investigation for understanding even better where are nonstandard schedules located and who works them. Now that we have established where these jobs are located and who is more likely to be employed in them, we now turn to an examination of the consequences of working in these schedules for family cohesion.

Appendix

(See Table 2.7).

Table 2.7 Description of the data

	Netherlands		United States	
	Mean	N	Mean	N
Respondent				
<i>Female</i>	0.52	4,344	0.51	7,801
<i>Education in years</i>	12.60	4,344	13.18	7,801
<i>Age in years</i>	40.49	4,344	36.34	7,801
<i>Having a co-residential partner</i>	0.68	4,344	0.61	7,801
<i>Having children</i>	0.62	4,344	0.54	7,801
<i>Household income^a</i>	3.37	4,136	3.28	7,266
<i>ISEI</i>	51.19	4,344	44.13	7,801
<i>Nr of working hours</i>	36.70	4,133	43.76	7,344
<i>Working nonstandard schedule</i>	0.26	4,133	0.39	7,344
Partner				
<i>Not working</i>	0.22	3,734	0.26	6,594
<i>Working nonstandard shift^b</i>	0.08	3,734	0.13	6,594
<i>Working nonstandard day^b</i>	0.17	3,734	0.28	6,594
<i>Number of working hours^b</i>	38.16	3,734	46.61	6,594

Data Netherlands—NKPS, 1st wave, 2002–2004; US—NSFH, 1st wave, 1987–1988. Author’s calculations

Notes *Sample* 18–64 years old population, working at least 12 h a week. (*NL* N = 4,344; *US* N = 7,801). ^aHousehold income is presented for The Netherlands in unit of 1,000 EUR and for the U.S. 1,000 USD per month; ^bThe mean for partner’s nonstandard shift and day work, and the number of working hours refers to working partners only

References

- Becker, G. (1965). A theory of the allocation of time. *The Economic Journal*, 75(299), 493–517.
- Breedveld, K. (1998). The double myth of flexibilisation: Trends in scattered work hours, and differences in time-sovereignty. *Time & Society*, 7(1), 129–143.
- Buis, M. L. (2009). Sheafcoef: Stata module to compute sheaf coefficients. STATA [Computer software].
- Carriero, R., Ghysels, J., & van Klaveren, C. (2009). Do parents coordinate their work schedules? A comparison of Dutch, Flemish, and Italian dual-earner households. *European Sociological Review*, 25(5), 603–617.
- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C., & Mulder, C. H. (2004). *Codebook of the Netherlands Kinship Panel Study, a multi-actor, multi-method panel study on solidarity in family relationships, Wave 1. Working Papers*. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Cambridge: Polity Press.
- Fenwick, R., & Tausig, M. (2001). Scheduling stress: Family and health outcomes of and schedule control. *American Behavioral Scientist*, 44(7), 1179–1198.
- Fouarge, D., & Baaijens, C. (2009). *Job mobility and hours of work: The effect of Dutch legislation. ROA Research Memorandum Series*. Maastricht: Faculty of Economics and Business Administration, Maastricht University.
- Ganzeboom, H. B. G., de Graaf, P. M., & Treiman, D. (1992). A standard international socio-economic index of occupational status. *Social Science Research*, 21, 1–56.
- Gornick, J. C., & Meyers, M. K. (2003). *Families that work: Policies for reconciling parenthood and employment*. New York: Russell Sage Foundation.
- Gustaffson, S., & Stafford, F. (1994). Three regimes of child care: The United States, The Netherlands and Sweden. In R. Blank (Ed.), *Social protection versus economic flexibility: Is there a trade-off?* (pp. 333–361). Chicago and London: University of Chicago Press.
- Hamermesh, D. S. (1996). The timing of work time: Evidence from the U.S. and Germany. *Konjunkturpolitik*, 42(1), 1–22.
- Hamermesh, D. S. (1999, January). The timing of work over time. *The Economic Journal*, 109, 37–66.
- Heise, D. R. (1972). Employing nominal variables, induced variables, and block variables in path analyses. *Sociological Methods & Research*, 1(2), 147–173.
- Helburn, S., & Bergmann, B. (2002). *America's problem*. New York: St. Martin's Press.
- Hook, J. L., & Wolfe, C. M. (2013). Parental involvement and work schedules: Time with children in the United States, Germany, Norway and the United Kingdom. *European Sociological Review*, 29(3), 411–425.
- Immervoll, H., & Barber, D. (2006). *Can parents afford to work? Childcare costs, tax-benefit policies and work incentives. Discussion paper series*. IZA: Bonn.
- Jacobs, A. T. J. M. (2004). *Labour Law in the Netherlands*. New York: Kluwer Law International.
- Jamal, M. (2004). Burnout, stress and health of employees on non-standard work schedules: A study of Canadian workers. *Stress and Health*, 20, 113–119.
- Kalleberg, A. L., Reskin, B. F., & Hudson, K. (2000, April). Bad jobs in America: Standard and nonstandard employment relations and job quality in the United States. *American Sociological Review*, 65, 256–278.
- Kostiuk, P. F. (1990, October). Compensating differentials for . *Journal of Political Economy*, 98 (5), 1054–1075.
- Lesnard, L. (2008). Off-scheduling within dual-earner couples: An unequal and negative externality for. *American Journal of Sociology*, 114(2), 447–490.
- Mills, M. (2004). Demand for flexibility or generation of insecurity? The individualisation of risk, irregular work shifts and Canadian youth. *Journal of Youth Studies*, 7(2), 115–139.
- Mills, M., & Blossfeld, H.-P. (2003). Globalization, uncertainty and changes in early life course. *Zeitschrift für Erziehungswissenschaft*, 6, 188–218.

- Mills, M., Präg, P., Tsang, F., Begall, K., Derbyshire, J., Kohle, L., et al. (2013). *Uses of childcare services in the EU Member States and progress towards the Barcelona target. Statistical report 1*. Brussels: European Commission Directorate General of Justice and Fundamental Rights.
- Mills, M., & Täht, K. (2010, August). Nonstandard work schedules and partnership quality: Quantitative and qualitative findings. *Journal of Marriage and Family*, 72, 860–875.
- OECD. (2002). *Babies and bosses: Reconciling work and family life*. Vol 1 Australia, Denmark and the Netherlands. Paris: OECD.
- OECD Stat Extracts. (2009a). OECD. Retrieved January, 2010.
- OECD. (2009b). PF11: Enrolment in day-care and pre-schools. Retrieved November 05, 2009.
- Perry-Jenkins, M., Goldberg, A. E., Pierce, C. P., & Sayer, A. G. (2007, February). Shift work, role overload, and the transition to parenthood. *Journal of Marriage and Family*, 69, 123–138.
- Portegijs, W., Cloin, M., Ooms, I., & Eggink, E. (2006). *Hoe het werkt met kinderen. Moeders over kinderopvang en arbeidsparticipatie* [How it works with children. Mothers talking about daycare and labor market participation]. The Hague: SCP.
- Presser, H. B. (1983, February). Shift work among dual-earner couples with children. *Science*, 219, 876–878.
- Presser, H. B. (1984). Job characteristics of spouses and their work shifts. *Demography*, 21(4), 575–589.
- Presser, H. B. (1988). Shift work and child care among young dual-earner American parents. *Journal of Marriage and the Family*, 50, 133–148.
- Presser, H. B. (2003). *Working in a 24/7 economy: Challenges for American families*. New York: Russell Sage Foundation.
- Schaeps, M., Feenstra, P., & Klaassen, C. (2002). *Arbeid en zorg in CAO's 2000*. Den Haag: Arbeidsinspectie/Centraal Kantoor Monitoring en Beleidsinformatie.
- Sweet, J., Bumpass, L., & Call, V. (1988). *The design and content of the National Survey of Families and Households. Working Papers no 1*. Madison: Center for Demography and Ecology, University of Wisconsin-Madison.
- Täht, K., & Mills, M. (2012). Non-standard work schedules, couple desynchronization and parent-child interaction: A mixed-method analysis. *Journal of Family Issues*, 33(8), 1054–1087.
- Venn, D. (2004). *Work timing arrangements in Australia in the 1990s: Evidence from the Australian Time Use Survey*. Melbourne: University of Melbourne.
- Visser, J. (2002). The first part-time economy in the world: A model to be followed? *Journal of European Social Policy*, 12, 23–42.
- Wang, X. S., Travis, R. C., Reeves, G., Green, J., Allen, N. E., Key, T. J., et al. (2012). Characteristics of the million women study participants who have and have not worked at night. *Scandinavian Journal of Work and Environmental Health*, 38(6), 590–599.
- Wielers, R., & Raven, D. (2013). Part-time work and work norms in the Netherlands. *European Sociological Review*, 29(1), 105–113.
- Wight, V. R., Raley, S. B., & Bianchi, S. M. (2008). Time for children, one's spouse and oneself among parents who work nonstandard hours. *Social Forces*, 87(1), 243–271.
- Winston, G. C. (1982). *The timing of economic activities. Firms, households, and markets in time-specific analysis*. Cambridge: Cambridge University Press.

Out of Time

The Consequences of Non-standard Employment
Schedules for Family Cohesion

Täht, K.; Mills, M.

2016, XX, 126 p. 5 illus., Softcover

ISBN: 978-94-017-7400-0