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Taht, K.

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Chapter 2

Who works nonstandard schedules? The role of occupational, household and institutional factors

Work in nonstandard times (evenings, nights, weekends) is neither a new nor rare phenomenon. Despite the arguments that the 24-hour-economy is globally on the rise, the location of nonstandard schedules in the labor market and households is likely highly targeted. This paper asks who is working those shifts and days. Work in these schedules are compared across two national contexts using the Netherlands Kinship Panel Study (N=4,344) and the U.S. National Survey of Families and Households (N=7,801). Results show that nonstandard schedules remain often concentrated in specific occupations, suggesting that it is in fact occupational aspects underlying the main reason for working these schedules. From the perspective of the household, the partner's schedule and the presence and age of children are central determinants. However, the effect of household aspects is highly determined by country-specific institutional context, a vital yet often ignored contextual factor that shapes the prevalence, location and practice of nonstandard schedules.

2.1 Introduction

Work in nonstandard times such as in evenings, nights or weekends characterize a growing number of workers and families. According to Presser (2003), two fifths of Americans work in nonstandard shifts or days. Studies focusing on the European context report a remarkable share of paid work carried out in nonstandard times, reaching up to 26% in Finland, 27% in The Netherlands or 29% in the United Kingdom (Presser et al., 2008: 87). Despite the arguments that the 24-hour-economy is globally on the 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 (Hamermesh, 1996; Presser, 1984); 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). Even when it is often acknowledged that work in nonstandard schedules is affected by various types of characteristics, still little is known about the interdependence with one another of these factors. Moreover, the majority of research until this point has been carried out primarily in the United States (Hamermesh, 1996; Presser, 2003), which raises the questions whether the known characteristics are more universal or constitute a specific anomaly of the American context. The aim of current paper is, therefore, to study whether nonstandard schedules have universally penetrated all realms of society and labor market by analyzing the characteristics of nonstandard schedule work. The main research questions are respectively: where are these schedules located; who is engaged in them; and whether any universal features can be pointed out regarding nonstandard schedule work? As the engagement in nonstandard work is expected to be conditioned both by occupational and household characteristic (Hamermesh, 1996; Presser, 1983), a special focus of the paper is also the interplay between these two domains.

Next to occupational and household characteristics, also contextual matters such as work-time regulation and work-family policies may be shaping 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 & Meyers, 2003). In order to compare contexts, the paper takes a comparative perspective and focuses on the two disparate situations of The Netherlands and the United States. Both of the countries show a relatively high prevalence of nonstandard schedule work, but represent quite different welfare types both in relation to work time regulation as well as work-family policies (Esping-Andersen, 1990). The latter allows assessing 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* (H1).

An important aspect of the labor demand approach is that it is based on the general assumption that majority of the workers view work during nonstandard time as unattractive (Hamermesh, 1996) and one needs to find ways to 'attract' the workers to engage in these schedules. This often requires a motivation or compensation mechanism, such as increased pay. 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* (H2), at the same time work in *nonstandard days and hours is related to increased pay benefits* (H3).

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 effect 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 a marginal employment and an indicator of 'bad jobs' (Kalleberg, Reskin, & Hudson, 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. In one way or another, we can expect *a significant positive relationship between working nonstandard schedules and part-time working hours* (H4).

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 is value maximization process. Winston (1982) extends this approach by adding a dynamic time perspective, saying 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.

Household's decision on working nonstandard schedules is often shaped by household composition (Presser, 1983). In general, *having a partner should reduce the incidence of employment in nonstandard schedules* (H5) since this allows the partners to spend more time together. However, it may also increase the nonstandard schedule work. Namely, when one of the couple is working nonstandard times, they may want increase the couple time by synchronizing the schedules (Carriero et al., 2009; Lesnard, 2008; Mills & Täht, 2010) and both moving to nonstandard schedule work. Therefore it is expected that *one partner working nonstandard times increases the incidence of other partner's nonstandard schedule work* (H6).

The impact of 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 parent's nonstandard schedule work* (H7.1). However, the opposite effect is also plausible: nonstandard schedule work allows parents to organize childcare, especially when there are young children in the household who need it (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 (Mills & Täht, 2010; Perry-Jenkins et al., 2007). Summarized in an alternative hypothesis, *the presence of young children in the household increases the incidence of nonstandard schedule work* (H7.2).

2.2.3 Institutional context: cross-country comparison

Although nonstandard schedules appear to be shaped by either occupational or household factors, the actual decision for nonstandard schedules is often created in an equilibrium between these two domains (Hamermesh, 1996; Presser, 2003; Venn, 2004). 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 has 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 clearly 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. In the U.S., we see an opposite case where the regulation of nonstandard schedule work 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 laws. Despite the several legislative attempts to loosen the constraints of working times, the regulation has remained rather 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 & 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 often also extend to those 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 & Meyers, 2003). Both the restrictions on working time as well as collective bargaining power on working times are rather low. Also the 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 this matter is rather marginal. Empirical studies show, that in practice there exists a slight positive 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 related to worse labor market positions than in The Netherlands. Thus, *concentration*

of nonstandard schedules in lower level positions is expected to be more evident in the U.S. than in The Netherlands (country-hypothesis of H2); at the same time the pay benefits related to nonstandard schedules are expected to be stronger in The Netherlands than in the U.S. (country-hypothesis of H3).

Differences in the effect 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 conditions of employment (Fouarge & Baaijens, 2009), and part-time work is widely practiced (15% of men, 60 % of women) (OECD, 2009a). 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 not so widely practiced (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. (country-hypothesis of H4)*

2.2.5 Work-family policies

In relation to work-family policies, 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 age four cared for in childcare centers (Gustaffson & Stafford, 1994). In order to meet the rising demand for childcare, the Dutch government started stimulating the expansion of these facilities. The employers were awarded several fiscal subsidies to make them sponsor centers for young children, and the recovery of childcare costs are often the target of collective agreements (Schaeps, Feenstra, & Klaassen, 2002). Moreover, as of 2005, childcare costs are subsidized by the government and adjusted in relation to household income and number of children in childcare facilities (Immervoll & Barber, 2006).

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

	Netherlands	United States
Work time regulation		
<i>Primary mechanisms for working time regulation</i>	<ul style="list-style-type: none"> • European and national laws; • Collective agreements between employers, workers' councils, unions and employees 	<ul style="list-style-type: none"> • National labor law with some supplementation by state laws.
<i>Compensation for nonstandard working time</i>	<ul style="list-style-type: none"> • By law no direct compensation in salary; • In practice time/salary compensation stated by collective agreements 	<ul style="list-style-type: none"> • By law no direct compensation in salary; • In practice often premiums paid.
<i>Part-time employment</i>	<ul style="list-style-type: none"> • Rights and benefits equal to full-time workers; • Frequent practice: 35% of workers (15 % of men, 60% of women) 	<ul style="list-style-type: none"> • 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>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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>	<ul style="list-style-type: none"> • Quality of public childcare facilities good. 	<ul style="list-style-type: none"> • Quality of public child care facilities poor.
<i>Availability of care facilities</i>	<ul style="list-style-type: none"> • Childcare facilities provide full-day care opportunities; pre-school mostly part-day; no continuous school week for elementary level. 	<ul style="list-style-type: none"> • Public programs often part-day and part-year; instructional school day shorter than parents' working day.

In the U.S. the development of childcare facilities is not as recent, while the role of government and unions in supporting parents' dual responsibilities of home and workplace is 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 & 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 & 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 hours in The Netherlands and more than 30 hours 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 & Meyers, 2003; Helburn & Bergmann, 2002). Thus, the low childcare use in The Netherlands cannot be explained by quality, but the reasons appear to be, however, cultural. It is still expected that parents should raise their children and therefore it is not considered a good sign for mothers to combine children and (full-time) work (Portegijs, Cloin, Ooms, & Eggink, 2006). Also, while day-care facilities for pre-school aged children in The Netherlands operate during standard working hours and provide full-day care (Immervoll & 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, one-and-half earner model is still a rule and couples can often afford it, whereas in the U.S. dual-earners are often essential for the household to manage. 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. (country-hypothesis if H7.1, H7.2)

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, in the U.S. the role of household characteristics in working nonstandard schedules will be more pronounced* (country-hypothesis of H1).

2.3 Data and method

2.3.1 Data

The Dutch data uses the first wave of the Netherlands Kinship Panel Study (NKPS) (Dykstra et al., 2004), and the U.S. data the first wave of National Survey of Families and Households (NSFH) (Sweet et al., 1988). The NKPS has a random sample (N=8,161) of individuals within private households in The Netherlands, aged 18 to 79. The U.S. study is a national probability sample (N=13,007) of men and women aged 19 and over. The Dutch study was modeled on the U.S. study, which makes the data comparable both in household as well as employment issues.

The sample including the current study is the working age (18-64 years old) population active in the labor market (working at least 12 hours a week). In the Dutch case, this leaves us with 4,344 individuals and in the U.S. case with 7,801 individuals. The detailed information on working days and hours, which forms the origin of 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 even more: there are 3,734 cases left in the Dutch data and 6,594 cases left in the U.S. data. For more details on data see Table A2.1, Appendix.

The two datasets are collected around 15 years apart from each other. Since the main focus of this paper is to analyze the mechanisms behind individuals' and households' choices for nonstandard schedule work in both countries, this time gap is not crucial. As shown in the descriptive part of the analysis (presented in Table 2 and discussed in more detail in the results section), and also shown in previous studies (Breedveld, 1998; Presser, 2003), already in the end of 1980s, the prevalence of nonstandard schedules in the U.S. was higher than in The Netherlands in 2004. Thus, The Netherlands and the U.S. were even then and still are two rather different cases regarding nonstandard schedule employment. Moreover, in The Netherlands the prevalence of nonstandard schedules has remained remarkably stable over the past decades (Breedveld, 2006).

2.3.2 Measures

The *nonstandard schedule* variable is constructed for the Dutch sample from the actual working hours of the week prior to data collection, and for the U.S. study, from the usual actual working hours. There are differentiated between two temporal dimensions: *hours* and *days*. Nonstandard hours are non-day hours – early morning, evening and night work – and are referred to as nonstandard shifts. Nonstandard days refer to Saturdays and Sundays, but also bank holidays. The classification of nonstandard shifts applies the majority rule where 'at least half of the hours worked most days in the prior week must fall outside 08:00 and 16:00' (see also Presser, 2003). When the majority of the hours of the working week falls between 08:00 and 16:00, the person is regarded as working in a fixed day shift; when between 16:00 and 24:00 as in fixed evening shift; and when between 00:00 and 08:00 as in a fixed night shift. When no dominant pattern in nonstandard shifts can be observed, the person is classified as working the shifts of varying hours. Nonstandard 'day' work refers to work that takes place in fixed day shifts, but when all or part of it is carried out during the weekends, i.e. Saturday and/or Sunday. Nonstandard shifts and days are thus mutually exclusive categories. A

standard working schedule is a fixed-day shift which is worked only during weekdays (between Monday and Friday).

Next to working schedules, an additional dependent variable is 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 A2.1), 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 it 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 the additional information on industry. This allows making 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 hours a week. The same indicator is used for creating the categorical variable of full-time/part-time work, where working weekly 12-31 hours is considered working part-time and 32 and more hours as working full-time work. Highest achieved *education* of the respondent is measured in years spent in education. Respondent's *socio-economic status* is measured using the International Socio-Economic Index (ISEI) (Ganzeboom, de Graaf, & Treiman, 1992). Respondent's *age* is measured in full years. Household characteristic *partnership status* refers to the presence of a co-residential partner, regardless of whether it is a married or cohabiting union, against being single/separated/divorced/widowed. Presence and age of children refers to the age of the youngest child in the household. 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 full-scale ISCO-88 coding was used. On 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 50 cases. Thus, in the final grouping there are occupational groups that range from lowest the 3-digit level precision (for examples nursing and midwifery associate professionals) to the highest of 2-digit level precision (for example teaching professionals).

The analysis on the effect of occupational characteristics and schedules on earnings uses the 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 hours shifts are collapsed into one category in most of the inferential analyses. Country differences are estimated by interacting the main effects with 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 - it is just a different way of presenting the results from the original model (here a logistic regression model). As the effects of the latent variables are presented in a standardized way (standard deviation = 1), the effects are more easy 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

According to the NKPS data (Table 2.2), in The Netherlands about every fourth (26.9 %) labor market participant is engaged in nonstandard working time, which is in line with previous findings based on the 2005

European Labor Force Survey data (Presser et al., 2008). 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 the previous findings using the 1997 Census data (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 widely spread 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), while in the U.S., the gender difference is more pronounced (43.7% of work in nonstandard schedules for men and 35.7% for women). Regarding schedule types, weekend work tends to dominate over the shift work: 63% of nonstandard schedules in The Netherlands and 60.6% in the U.S. are weekend work.

As hypothesized (H4), nonstandard schedules are often worked in part-time hours. 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 hours less a week and night shifts workers 2.9 hours less a week than standard schedule worker. In the U.S., employees who work in the evenings work 1.6 hours less a week than standard schedule worker. Thus, in support of the country hypothesis (country-hypothesis of H4), hour reduction is clearer in the Dutch case, being true for both men and women. Moreover, in the U.S., working in varying hours shifts even significantly increases the number of average weekly working hours. These workers work about 20 hours more a week than standard schedule workers. Varying hours' shifts are disproportionally more often worked among drivers, construction workers, some office clerks, restaurant and shop managers. Thus, especially in the U.S. working in (varying hours) shifts might be attributed to relatively lower level jobs with potentially lower wages, prompting the workers to be employed in more hours to earn a decent income.

Also weekend work shows a higher number of weekly working hours than standard schedules, this being the case for both countries (8.6 hours more in The Netherlands and 8.9 hours 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 a white-collar/higher level occupation and male phenomenon than shift work, and the high number of hours related to overwork.

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

	Netherlands			United States		
	All	Men	Women	All	Men	Women
Schedule type (%)	100.0	100.0	100.0	100.0	100.0	100.0
Standard schedule						
Day shift, weekdays	73.1	72.9	73.3	60.4	56.3	64.3
Nonstandard shifts						
Fixed evening shift	4.9	4.2	5.5	9.0	8.9	9.0
Fixed night shift	1.3	0.9	1.7	3.9	4.5	3.4
Hours vary shift	3.0	2.1	3.9	2.2	2.3	2.1
Nonstandard days						
Weekend day	17.7	20.0	15.5	24.5	28.0	21.2
Number of hours (hrs)						
Standard schedule						
Day shift, weekdays (Ref)	35.5	41.3	30.1	41.3	43.5	39.4
Nonstandard shifts						
Fixed evening shift	- 5.8**	- 4.8**	- 5.2**	- 1.6**	- 0.6	- 2.8**
Fixed night shift	- 2.9+	- 6.3**	+ 1.4	+ 0.2	- 0.6	+ 0.3
Hours vary shift	+ 0.8	+ 4.0*	+ 1.8	+ 20.0**	+ 23.8**	+ 15.5**
Nonstandard days						
Weekend day	+ 8.6**	+ 9.6**	+ 5.8**	+ 8.9**	+ 11.8**	+ 4.2**
Total (N)	4,133	1,983	2,150	7,344	3,602	3,742

Data: Netherlands – NKPS, 1st wave, 2002-04; United States – NSFH, 1st wave, 1987-88; Author's calculations.

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

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

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 (H3), but it may vary across countries (country-hypothesis of H3). 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, in the U.S. also weekend days – relates negatively to wages, meaning that those 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).

Table 2.3 Earnings^a across working schedules in The Netherlands and the United States; OLS regression coefficients

	Model 1			Model 2			Model 3		
	Nether-lands	United States	Dif	Nether-lands	United States	Dif	Nether-lands	United States	Dif
Schedule type (Ref–standard day)									
<i>Fixed evening shift</i>	-.52**	-.34**	*	-.31**	-.14**	*	-.12*	-.11**	
<i>Fixed night shift</i>	-.15	-.07		.12	.14*		.29**	.13**	
<i>Hours vary shift</i>	-.19*	-.30**		-.03	-.19*		.06	-.49**	**
<i>Weekend day</i>	.04	-.07**	*	.08*	.02		-.02	-.18**	**
Individual characteristics									
<i>Age</i>				.01**	.02**	**	.01**	.02**	**
<i>Education</i>				.05**	.09**	**	.04**	.09**	**
<i>Socio-econ. status</i>				.01**	.01**		.01**	.01**	
Occupational characteristics									
<i>Number of hours</i>							.03**	.02**	**
<i>Self-employment</i>							-.10*	-.00	+
Constant	7.23**	7.17**		5.61**	4.98**		4.72**	4.02**	
R2	.02	.01		.12	.16		.23	.25	
Total (N)	3,851	6,301		3,851	6,301		3,851	6,301	

Data: Netherlands – NKPS, 1st wave, 2002-04; US – NSFH, 1st wave, 1987-88; Author’s calculations

Notes: Sample: 18-64 years old population, works at least 12 hours 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

The crucial explanatory aspect for 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 about 34% in The Netherlands and about 14% in the U.S. It can be that as due to the data limitations (the data does not allow to control whether one works in rotating shifts), the (positive) effect of nonstandard shifts on wages is

somewhat underestimated. However, regarding earning working nonstandard schedules is not an entirely homogenous phenomenon – for the 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 as all nonstandard schedule workers (except the night workers) earn significantly less than standard schedule workers. Thus, the findings support the country difference hypothesis (country-hypothesis of H3) predicting stronger positive association with wage earning in The Netherlands than in the U.S.

2.4.2 Where are nonstandard schedules located?

Nonstandard schedule work seems to be systematically related to somewhat lower occupational status supporting the respective hypothesis (H2). A descriptive analysis about the mean socio-economic status of occupations across dominantly worked schedule types shows that the status is highest among fixed day workers (46 in the U.S. and 53 in The Netherlands on 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 position compared to those engaged in weekend day work only. Here the socioeconomic status is highest for those in varying hours (mean of 41 for U.S. and 42 for The Netherlands on ISEI scale), followed by evening shifts (mean ISEI of 38 for the U.S. and 42 for The Netherlands) and being the lowest for night shift workers (mean ISEI of 36 for the U.S. and 37 for The Netherlands).

A more detailed look at 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 Dutch case; 37.8% of shift work and 27.9% of weekend work for 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.), and drivers and mobile plant operators (25.6% of weekend work in The Netherlands and 26.5% in the U.S.). Once more a distinct difference between nonstandard shifts and days can be observed. 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 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 concentration of schedules into specific jobs only is clearer for the nonstandard shift occupations, whereas weekend work is more spread. Originally most major groups show a significant difference from associate professionals (a group with 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 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 shift concentration in certain occupational fields is 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 here smaller. Only Dutch managers have a high prevalence, which differs significantly from the U.S. case.

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 ^d
		Occu- pational group ^b N (%)	Nonstandard schedules in group (%)		Occu- pational group ^b N (%)	Nonstandard schedules in group (%)		
			Shift ^c	Day ^d		Shift ^c	Day ^d	
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
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

Table 2.4 *Continued*

ISCO88 code	Sub-major or minor occupation group	Netherlands			United States			Remarks ^d
		Occu- pational group ^b N (%)	Nonstandard schedules in group (%)		Occu- pational group ^b N (%)	Nonstandard schedules in group (%)		
			Shift ^c	Days ^d		Shift ^c	Days ^d	
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	Sales/services elem. occ-s (ex. dom-c cleaners (ex. 9130) Agriculture; Mining, construction, transport	81 (2.0)	19.8	6.2	535 (7.3)	24.1	24.7	Assembling laborers; Transport laborers;
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 (100.0)	381 9.3	725 17.7	7,283 (100.0)	1,104 15.2	1,790 24.6	

Data: Netherlands – NKPS, 1st wave, 2002-4; US – NSFH, 1st wave, 1987-88. Author's calculations

Notes: Sample: 18-64 years old population, works at least 12 hours a week (NL: N = 4,344; US: N = 7,801). ^aMeasured via aggregated ISCO-88 occupational groups. 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'. ^eDescr. 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.

Thus, for country differences (country-hypothesis for H2), there is no clear evidence that nonstandard schedule concentration into 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 have still 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 also household characteristics. In support of the hypothesis (H5), those who are in partner 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 (H6) – nonstandard shift work increases respondents nonstandard shift work and partner’s weekend work increases respondents weekend work, in both countries. Note that the effect refers to situation where presence and age of children (more precisely, not having children) is controlled for. Once having children in the household, also desynchronization effect becomes somewhat stronger. Moreover, it appears that children tend to have a stronger effect 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-aged (4-7 years) in household, supporting respective hypothesis (H7.2). (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 effect of young children on nonstandard shifts and days. These country differences also contradict the hypothesis (country-hypothesis for H7.2) which predicted a stronger child effect for the U.S.

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		
	Nether-lands	United States	Dif	Nether-lands	United States	Dif	Nether-lands	United States	Dif	Nether-lands	United States	Dif
Main occupation category (Ref – Professionals)												
<i>Managers</i>	.09	-.73 ** *		-.00	-.76 ** +		.59 **	.02 *		.74 **	.07 *	
<i>Associated professionals</i>	.06	-.22		-.02	-.16		-.48 **	.16 **		-.37 *	.16 *	
<i>Clerks</i>	-.98 *	-.55 **		-1.10 *	-.56 **		-.49 *	-.33 **		-.52 *	-.30*	
<i>Service and sales workers</i>	1.10 **	.46 ** *		.90 **	.45 **		.48 **	.61 **		.55 *	.61**	
<i>Agriculture</i>	-.13	-.52		-.11	-.66		1.92 **	2.20 **		1.89 **	2.24**	
<i>Craft trades workers</i>	.08	-.12		-.10	-.18		-.24	.08		-.14	.08	
<i>Plant & machine operators</i>	1.36 **	.39 + *		1.04 **	.42 +		-.51	-.36 *		-.87 +	-.38*	
<i>Elementary occupations</i>	1.59 **	.72 ** *		1.28 **	.63 **		-1.14 *	.05 *		-1.17 *	-.01 *	
Nonstandard shift jobs												
<i>3230 –32 Nurses, midwives</i>	2.37 **	1.81 ** +		2.32 **	1.88							
<i>4200 –23 Customer clerks</i>	2.48 **	1.60 ** +		2.31 **	1.62							
<i>5120 –23 Restaurant workers</i>	1.64 **	1.04 ** +		1.64 **	1.09							
<i>8100 –90 Stat. plant operators</i>	.40	.33 +		.51	.35							
<i>9130 –33 Cleaners, launderers</i>	.36	-.15		.34	.10							
Nonstandard day jobs												
<i>1300 –19 Managers (small ent.)</i>							.35	1.37 ** **		.29	1.30** **	
<i>3230 –32 Nurses, midwives</i>							1.07 **	.31 **		1.02 **	.27 *	
<i>5200 –20 Salespersons</i>							.96 **	.49 ** +		1.04 **	.53** +	
<i>8300 –40 Drivers</i>							.96 *	.49 **		1.64 **	.50* *	
<i>9130 –33 Cleaners, launderers</i>							1.25 *	.44 *		1.61 *	.38+ +	

Table 2.5 Continued

	Nonstandard shifts ^a						Nonstandard days ^b					
	Model 1			Model 2			Model 3			Model 4		
	Nether-lands	United States	Dif	Nether-lands	United States	Dif	Nether-lands	United States	Dif	Nether-lands	United States	Dif
Partner (Ref - Co-resident; full-time standard schedule work)												
<i>No partner</i>				.44*	.37**					.10	.27**	
<i>Not working</i>				.06	-.13					.01	.19+	
<i>Part-time work</i>				-.44+	-.16					.01	.37*	
<i>Nonstandard shifts^a</i>				.62*	.67**					-.05	.02	
<i>Nonstandard days^b</i>				.11	.19					.75**	.40**	+
Age of children (Ref - No children)												
<i>Youngest child 0 - 3 years</i>				.37	.07					-.41*	.09	*
<i>Youngest child 4 - 12 years</i>				.43*	-.03	*				-.29*	.02	+
<i>Youngest child 13 + years</i>				.34	-.21	*				.12	.20*	
Mean household income				-.90**	-.10	*				.41	-.07	*
Constant	-3.09**	-1.94**		-3.31**	-2.07**		-1.54**	-1.17**		-1.68**	-1.45**	
Nagelkerke R2	.19	.10		.21	.12		.10	.07		.12	.08	
N	4,104	7,276		3,426	5,807		4,104	7,276		3,426	5,807	

Data: Netherlands - NKPS, 1st wave, 2002-4; US - NSFH, 1st wave, 1987-88. Author's calculations.

Notes: Sample: 18-64 years old population, works at least 12 hours 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). ^aNonstandard shifts include the categories 'Fixed evening shift', 'Fixed night shift' and 'Hours vary shift'. ^bNonstandard 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

Regarding the interplay between occupational and household characteristics, the data supports the hypothesis that the main predictor for working nonstandard schedules is occupational factors (H1). Firstly, as can be noted 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 model only slightly. Also, controlling for the effect of the family situation did not remarkably change the occupation effects.

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		
	Nether-lands	United States	Dif	Nether-lands	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+	0.00	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, 2002-4; US - NSFH, 1st wave, 1987-88. Author's calculations.

Notes: Sample: 18-64 years old population, works at least 12 hours 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

Secondly, the sheaf coefficients (Table 2.6) show that the occupational related factors increases the chance to work in nonstandard shifts 2.4 in the Dutch case and 1.81 times in the U.S. case. For nonstandard day work, the coefficient is respectively 1.86 for the Netherland and 1.55 for the U.S. In

both countries and schedule types, the impact of occupational characteristics in predicting the working nonstandard schedules differs significantly from the effect of household characteristics. They also differ from the effect of 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 significantly stronger in case of Netherlands for predicting nonstandard day work.

2.5 Discussion

Despite the argument of an ever emerging 24-hour-economy, nonstandard schedules seem not have penetrated all the 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 more general country-specific context, such as regulation of working time and work-family policies.

Regarding the occupational aspects, nonstandard schedules tend to strongly concentrate in certain occupations; occupations of these schedules have lower mean socio-economic position than occupations where nonstandard schedules are regularly worked; work in these schedules is often compensated with some extra pay (e.g. when working night shifts); the schedules are often worked in part-time arrangements (evening shifts) or long hours (weekend work). As of country-specific features, in The Netherlands where working time restrictions are more stringent, the concentration of schedules in just specific jobs is stronger; association between part-time work and nonstandard schedule work is clearer (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 society. 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. Stronger regulation and implementation of various 'buffer-mechanisms', on the other hand, protect the workers against the 'unhealthy' effect of the

schedules and allow these be more likely a natural part of certain, and not necessarily bad jobs.

Although to a lesser extent, next to occupational aspects also household characteristics shape the prevalence and location of these schedules. Similarly to occupational aspects, also here appeared some rather universal and several country-specific features. There seems to be a positive association between partners' nonstandard schedule work—so-called schedule synchronization—while one partner works nonstandard schedules, also other has higher probability to be engaged in this type of schedule. Moreover, when having young children in the household who need care, the risk for working nonstandard schedules raises even more. Thus, 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 runs normally according to 'standard' schedule. Also here, institutional context and work-family policies may make a difference both in which households these schedules concentrate more likely and what is 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 like in the U.S. In other words, where nonstandard schedules have no 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 mark rather marginal employment situation, working nonstandard schedules as a way to arrange child may be much more of a forced choice of specific type of households who cannot afford or have no access to (public) childcare facilities.

Thus, in the backdrop of 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 known from previous studies, work in nonstandard times relates to various negative individual consequences such as increased levels of stress or burn-out (Fenwick & Tausig, 2001; Jamal, 2004), there is 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 even more. As current findings suggest, institutional differences such as work time regulation or work-family policies can shape both the prevalence, location, but most likely also the impact of these schedules 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 current study, whereas both would deserve further investigation for understanding even better where are nonstandard schedules located and who works them.

2.6 Appendix

Table A2.1 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, 2002-4; US – NSFH, 1st wave, 1987-88. Author's calculations.

Notes: Sample: 18-64 years old population, working at least 12 hours 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.