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Stress, Time Use and Gender[1]

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The Danish National Institute of Social Research

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Abstract: This paper investigates the gender aspect of stress within a welfare state regime with high employment rates for both women and men. By applying an economic model, an extended model and a stress-level model, we find that higher incomes lead to stress among women, somehow confirming findings for Australia, Germany, Canada, Korea and the U.S. The number of working hours in the labour market, however, has no impact on stress. For working women, household work decreases the likelihood of their being stressed, while rush-hours work as stressors, again in particular for women. Moreover, the more satisfied women are with their economic situation, the less likely is their reporting of stress. The same holds true for satisfaction with the number of hours--and even more for men. These results underline among other things the importance of including satisfaction information when analysing the presence of stress in developing countries.

Keywords: Stress, Time-allocation, Leisure, Gender

JEL: D31, I31, J22

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1. Introduction

The gender aspect of stress within a welfare state framework, where high employment rates for women and family-friendly working conditions are supposed to go hand in hand, calls for investigating the impact of both economic and work-related factors on the likelihood of gender-related stresses.

Despite a vast psychological and sociological literature on stress and life styles, most of it explains stress only by individual characteristics and job-related conditions, see Alber and Köhler (2004) for an overview. The focus of the few economists addressing stress is on time pressure resulting from higher incomes to be earned and spent within a 24-hour time constraint. In this paper, we replicate an economic model proposed by Hamermesh and Lee (2004) to explain the variation in self-reported stress. This model includes information on household income and the spouses' use of time, together with some socio-demographic information. We also apply extended models that include working life conditions, on the one hand, and satisfaction information, on the other, the latter to control for individual characteristics, i.e., heterogeneity. The analyses rely on information from administrative registers, questionnaires and diaries from the Danish Time-Use Survey, 2001.

Most empirical investigations, however, handle self-reported stress as a dichotomy variable within a logistic framework. In this paper we also apply a multinomial model, where the determinants we have chosen explain the different levels of stress.

The paper is organized as follows: Chapter 2 gives background information about the stress issue, Chapter 3 presents the different theories. Chapter 4 describes the data and methods applied, and the results are in Chapter 5. The last chapter discusses the findings and presents conclusions.

2. Background

From an economist's point of view, stress is the mere effect of the scarcity of time. That is, the richer people are in terms of money, the more goods-intensive is their leisure time, and the harder they try to economise their time. The basic problem is that all people face the same fixed time-constraint--the 24-hour day--and that time and money (or goods) are not perfect substitutes (Bonke

et al, 2004a). By assuming maximisation behaviour, we can predict how income and time resources affect the likelihood of a person's being stressed, with the shadow price of time as the important determinant (Hamermesh and Lee, 2004).

Within psychology and sociology, different life events are often the given explanations for the presence of stress and ill-health (Surtees & Wainwright, 1998). The PERI Life Event Scale lists 102 discrete, time-limited "life-events" that require change or adaptations associated with the experience of stress and other disorders. These events are classified according to 11 life domains: school, work, love and marriage, children, family, residence, crime and legal matters, finances, social activities, health and miscellaneous (Dohrenwend et al. 1988). The highest ranked life events were work-related, a finding confirmed by Cox & Mackay (1981), who also found work cited as the major source of problems and stress, followed by work-home related problems.

However, psychologists assume that chronic stressors such as working conditions either have a negative impact on people's experience of stress or allow the release of stress during specific events. Furthermore, interactions between stressors occur, suggesting that work stress can spill over to home life (Bacharach et al., 1991) and vice versa (Quick et al., 1992). A survey of the Canadian Mental Health Association (1984) found that 56 percent of the respondents felt "some" or "a great deal of" interference between their jobs and home lives; in particular, the amount of time that the job demanded and the irregularity of working hours affected family life and leisure activities. Hochschild (1997), on the other hand, argues that the working place offers freedom from the anarchism and irregularity dominating family life, for which reason modern women prefer working life to family life. Although Kiecolt (2003) has questioned this thesis on larger scale empirical grounds, it nonetheless points to the importance of a possible working-life/family-life dilemma characterising double-earner families, suggesting the likelihood of concomitant time pressures and stress.

The working-life/family-life dilemma assumes two competing spheres resulting from the daily 24-hour time restriction. However, some people may experience working life and family life as complementary activities, implying that success in the one sphere has positive implications for satisfaction in the other one. Bonke et al. (2004b), who find a positive correlation between job-satisfaction and leisure-time satisfaction, confirm this hypothesis.

Within the literature on stress are different approaches to measuring stress (Cooper and Dewe, 2004), among which two stand out as principally different from each other. One method focuses on different symptoms of illness and behavioural problems such as loss of weight or appetite, frequent infections, high illness absenteeism, strains and headache, memory and concentration problems, irritability or anger, disaffection and involvement in conflicts. By applying different scores for these characteristics and using a weighting procedure, this method creates a so-called objective stress-index. The other method focuses on the general experience of stress among people, scaling this self-reported information (i.e., "nearly never stressed", "sometimes stressed", "nearly always stressed"), and measuring the stress according to different situations and different periods of time (Bonke, 2002). The objective measure is usually applied within the natural sciences, e.g., medicine, whereas the subjective measure is frequently applied within the social sciences.

2.1. Non-parametric statistics

The stress problem nowadays appears to be widespread in most industrialized countries (Alber & Köhler, 2004; Hamermesh and Lee, 2004). In Australia, Germany, Korea and Canada, the proportions within dual-earner couples of men reporting to be always or often stressed (excluding the "sometimes" stressed) are between 38-80 percent. Among the women, the proportions are 42-84 percent, with Austrians and Germans at the lower end and Koreans and Canadians at the upper end of the stress distribution. In Denmark more than one out of two men (60.4%) and three out of four women (75.7%) are reporting to be sometimes or nearly always stressed. The last category of "nearly always" stressed, taken separately, comprises 7.5 percent of men and 8.7 percent of women (table 1). If we compare the partners of dual-earner couples with those of single-earner couples, we find no substantial differences in their stress levels, a finding similar to those in Australia, Germany, Canada and the U.S., while the dual-earner status considerably increases the stress levels of Koreans. The total workloads, paid work and household work, taken together, are in both cases close to each other for women and men, except in Korea, where women in dual-earner couples experience a much bigger workload than women in single-earner couples (Hamermesh & Lee, 2004). These findings indicate that a change in labour market attachment from single-earner status to dual-earner status in most countries implies either that one kind of work substitutes for another equally stressful kind, or that some selection processes are at work.

Table 1.

Percent Distributions of Stress or Time Pressure, Individuals in Couples

	One or two employed spouses		Two employed spouses	
	Men	Women	Men	Women
Stress/time pressure				
Denmark (2001)				
Not stressed	41.2	23.8	39.6	24.2
Sometimes stressed	52.1	66.00	52.9	67.0
Stressed	6.7	10.3	7.5	8.7
N:	480	488	376	446
Chi-squared of independence of partners' distribution				
Denmark (2001)	34.36***		22.63***	
Australia[1] (2001)	157.91**		132.55**	
Germany[1] (2002)	417.77**		252.11**	
Korea[1] (1999)	689.87**		458.19**	

Danish Questions: Q79 *How often do you feel stressed?* (*Nearly never stressed/sometime stressed/nearly always stressed, and Q80 Are you stressed at work? (Yes/no)*.
*: significant at 0,1 level. **: significant at 0,05 level ***: significant at 0,01 level
Source: Bonke (2002) and [1]Hamermesh and Lee (2004).

Table 1 shows that stress among partners correlates with highly significant chi-square values independently of using a sample of couples with single-earner spouse or dual-earner spouses. This correlation holds true not only for Denmark but also for Australia, Germany and Korea (Hamermesh and Lee, 2004). Although whether this relationship is due to the same tastes, non-measurable variables, or some other reasons remains an open-ended question, it nonetheless stresses the importance of including both cross-partner and common household information into the models we apply in this paper.

That the feeling of stress has become more widespread in Denmark is clear: within the last two decades the proportion of adult people with subjective stress has increased about 20 percent. From one out of three adults reporting some level of stress in 1987, nearly one out of two did the same in

2000 (Danish health and morbidity survey 1994 and 2000). However, we cannot know whether the same trend would appear from applying the objective measure, because no repeated investigations of this kind have taken place.

If we compare the level of subjective stress between employed and not employed people in the former European Union countries (EU 15) with similar groups in the new member countries (NMC 10), the first differential is found higher than the second (16.0 versus 11.4). This finding indicates that the productivity and, therefore, the time constraints for employed people are more binding in the most economically advanced countries (table 2).

Table 2

Self-reported stress[1] by employment.

European Union countries. 2001

	Employed	Not employed	Differential.
EU 15[2]	46.9	30.8	16.0
NMC 10[3]	43.3	31.9	11.4

[1]Eurobarometer 2002.1, Q23: *Now, let's talk about your lifestyle. Do you or don't you … regularly feel stressed?* Source: Alber & Köster (2004)
[2]The EU-member countries until 1.5.2004
[3]The new EU-member countries after 1.5.2004

All this descriptive information raises the questions of (a) understanding the stress phenomenon (i.e., the theoretical issue) and (b) exploring the underlying reasons (i.e., the empirical issues), while taking the effect of different kind of data into consideration. The following two chapters investigate and propose answers to these questions.

3. Theory

From an economic perspective, stress is about handling the time constraints of a 24- hour day. In other words, we are all potentially stressed or, to quote Hamermesh and Lee (2004, p3), "Time stress should (thus) be interpreted as strain or tension that is generated by feelings that the available time is insufficient to accomplish the desired activities".

As stress derives from the feeling of insufficient time available for everyday life, it follows that Becker's (1965) household production function might be an appropriate theoretical outset for the understanding of this issue, see Hamermesh and Lee (2004) for a detailed argumentation. That is, households are producing commodities, $Z_{i,}$ by combining home-time, T-H, and goods, X, so the household production function becomes:

(1) $$Z_i = Z_i (T_i, X_i), i = 1,2$$

The household utility function is assumed to be of the form:

(2) $$U(Z_1, Z_2) + V(H_m, H_f)$$

where the subscripts m and f denote the husband and wife, and the H_i denote market work. The assumptions are that time spent on market work implies disutility, and that U and V are additive and separable. Moreover, we assume $V_j < 0$ and $V_{jj} < 0$ and $U_i > 0$ and $U_{ii} < 0$, and more crucially, we assume no internal distribution of consumption between the spouses, meaning that we follow a unitary model of household decision making.

The household production function here is characterized by fixed coefficients:

(3) $$T_i = t_i Z_i \text{ and } X_i = b_i Z_i, i=1,2$$

With p as goods prices, the household's income spent on X_i is:

(4) $$\sum p_i X_i = H_m w_m + H_f w_f + I,$$

where I is unearned income and w_j are the spouses wage rates. This equation implies that the household has the following goods constraint and total time constraint:

(5) $$\sum T_i = T - H_m - H_f$$

The household will then maximize

(6) $$U(.) + V(.) + \mu (w_m H_m + w_f H_f + I - p_1 b_1 Z_1 - p_2 b_2 Z_2)$$

$$+ \lambda (T - H_m - H_f - t_1 Z_1 - t_2 Z_2)$$

where μ and λ are the Lagrangean multipliers on the goods constraint and the time constraint, respectively. Hamermesh and Lee (2004) also assume that time pressure is positively related to the shadow price of time, λ, and that the husband's market work hours are fixed. The implication is that the shadow price of time increases with unearned income, $\delta\lambda/\delta I > 0$, if the value of home time increases more than the value of time in the market in response to an increase in unearned income:

(7) $$w_f U_{11} U_{22} < V_{22} [p_2 b_2 t_2 U_{11} + p_1 b_1 t_1 U_{22}].$$

Moreover, if (7) holds, changes in wage rates have the same effect as a rising unearned income, which the first order conditions show

(8) $$\delta\lambda/\delta w_m = H_m * \delta\lambda/\delta I$$

(9) $$\delta\lambda/\delta w_f = \mu + H_f * \delta\lambda/\delta I$$

Thus, increasing wages for the husband and the wife and a higher unearned income will increase the problem of the time constraint. On the other hand, anything making home activities more efficient, i.e., equivalent to an increase in effective time ($\delta\lambda/\delta T < 0$), will reduce the time constraint problem (Hamermesh and Lee, 2004).

The assumption that men's working hours are fixed is important, because the predictions do not necessarily hold if it is relaxed. In other words, an income effect may outweigh the male wage effect on the shadow price of time, and even bring into question the positive effect of unearned income on time pressure. Moreover, because most Danish women are in the labour market and work nearly the same number of hours as Danish men, the two spouses come up with very similar labour supply elasticities, thereby challenging the predictive power of the model. Another problem that Hamermesh and Lee (2004) mention is that the unitary model of household decisions is

appropriate to apply only if the household is maximizing utility by first determining the hours of market work and the amount of commodities to be produce, and only secondly deciding how the spouses are to share these commodities. This two-step problem, however, might not be great here, because most spouses in Denmark are working full-time, and declare that they are pooling their economic resources (Bonke & Uldall-Poulsen, 2004).

Finally, we have to relaxe the general assumption in the economic model that the tightness of the time constraint is a proxy for the level of self-reported time stress across individuals, because the productivity of time obviously varies between people. Ruuskanen (2004) thus introduces multitasking in household work as a productivity measure showing that there is a negative relationship between the number of activities performed at the same time and being rushed during the day. However, the relationship between being rushed or stressed and multitasking points to the ambiguity of any causal explanations for these relationships. Another productivity measure is health, which Hamermesh and Lee (2004) consider one of the most important determinant stressors for both market work and household work; therefore, we include this variable in all the models we apply in the following empirical analyses.

Among other factors moderating the stress effect of economic resources are workplace conditions and people's responses to these conditions. Following Cox (2000), the Engineering approach conceptualises occupational stress as an aversive or noxious characteristic of the work environment. The assumption is that the environment somehow demands such efforts and strengths that people cannot cope efficiently enough to escape stress and other negative reactions. This assumption leads to the idea of a stress threshold above which people are vulnerable to environmental conditions and events affecting these conditions. Another similar approach treats stress as a generalised and non-specific physiological response syndrome, i.e., an internal process that, given an alarm and some possible resistance, ends up with the exhaustion of stress. As opposed to the engineering approach, this approach focuses on internal reactions, leaving external stress factors out of consideration. Finally, a third approach tries to bridge the other two by explicitly focusing on the interaction between people and their work environment. This approach suggests that stress depends not only on the worker's attitudes and abilities to meet the demands of the job but also on the ability of the job environment to meet the worker's needs for using his or her knowledge and skills on the job. To test

this theory empirically, therefore, we need to include both job characteristics as well as individual information (Chen & Spector, 1991).

Furthermore, individual characteristics, including coping efforts, are important for predicting stress (de Rijk et al, 1998), as are possible compensating factors in domestic life such as a good family and well-functioning social networks. The integration of non-working related conditions or the home-work interface phenomenon are thus important for the determination of the likelihood of being stressed.

In the following empirical analyses, we include all these different phenomena. However, we take the outset in the economic model that Hamermesh and Lee (2004) developed. We chose this model because we believe that time-use and economic rewards are the main determinants for explaining the variance of stress, and the factors found within psychological and sociological theories are moderators of the hazard-stress-harm relationship (Cox, 2000).

4. Data and methods

4.1. Data

The data used come from the Danish Time-Use Survey, which includes approximately 3,600 people 16 to 74 years old as representative of the Danish population. The design of the 2001 survey follows the guidelines of an expert group on time-use surveys in Eurostat (2000). In addition to a questionnaire-based interview, each person received two diaries – one for a weekday and one for a weekend day — and each spouse likewise received two diaries for the same days. The respondents completed the time-use diaries, noting the main and secondary activity information for each 10-minute interval of the actual day.

The questionnaire includes information about working hours, household work, incomes, family background, attachment to the labour market, job-characteristics, domain satisfactions, while the diary covers only working hours and household work. Information on marital status, urbanization and income stem from register information, Statistics Denmark. Of special interest for this analysis are the questions in the questionnaire on so-called subjective stress: Q79: *How often do you feel*

stressed? (*Nearly never stressed/sometimes stressed/nearly always stressed)*, and Q80: *Under which circumstances? (When shopping/ on work /at home/ to and from work/ in other situation/ always)*. In the following analyses, we define stress as sometimes or nearly always stressed (Q79) including stress stemming from all situations (Q80).

As we limited the data set to only spouses in couples with at least one person working, our sample comprises 996 respondents, with 488 females and 480 males.

4.2 Description of variables

The variables in the empirical analyses fall into three main groups: economic variables, including some socio-economic variables for controlling reasons; working-life variables; and domain satisfaction variables. Table 3 presents the means and standard deviations of these variables separately for men and women.

The *economic variables* refer to working time and income. The number of paid working hours, including overtime not compensated for in time, hours spent on extra jobs, and hours spent on household work (shopping, housework, do-it-yourself work and child care) constitute the time-use information. Not surprisingly, most working men and women (56% and 51%) work 37 hours a week, i.e. the number of hours agreed upon within the general negotiations between the labour market organisations. The majority of the remaining women have part-time jobs (34%), and a minority (15%) have career jobs involving more than 37 hours a week for paid work. The opposite is the case for men, with 40% in career jobs and only 4% in part-time jobs. As table 3 shows, the average number of paid working hours is thus higher for men than for women (42-43 hours weekly v. 36 hours). The household work is, on the other hand, mostly women's task, as they spend 16 hours a week on average, compared to only 10 hours for men, when relying on questionnaire information. If we apply diary information, the household work increases for both sexes, as do the variations, although not in relative terms. For paid work the number of hours decreases for both men and women going from questionnaire information to diary information, while the variances increase considerably.

Table 3.

Means and Standard Deviations (). Individuals in Couples. Denmark. 2001

	Questionnaire information				Register and diary information	
	One or two employed spouses		Two employed spouses			
	Men	Women	Men	Women	Men	Women
1. Economic variables:						
Working hours (weekly)	42.3	36.2	42.9	36.3	37.5	29.1
	(10.8)	(6.6)	(10.9)	(6.6)	(17.3)	(16.3)
Household work (# hours per week)	10.2	16.2	10.4	16.5	17.1	24.0
	(7.1)	(8.7)	(7.0)	(8.7)	(13.0)	(11.6)
Rush hour (<1.5 hours break. pct.)	..	..	..	..	27.2	50.9
Health (very good or good. pct.)	87.1	87.1	87.8	86.8	..	..
Household income (disposable/month	26.5	27.9	28.1	28.4	27.5	28.4
1,000 DKK)	(8.9)	(8.8)	(8.8)	(8.8)		
Wage-rates, DKK	0.173	0.142	0.180	0.142	0.199	0.155
2. Other variables, pct.:						
Partnership (married)	..	..	..	..	77.8	81.9
Urbanization (Metropolitan area)	..	..	..	..	30.9	31.0
Children (-6 years)	24.0	21.9	22.3	23.3	..	..
Children (7- years)	17.9	21.1	20.2	22.9	..	..
3. Partner:						
Working hours (weekly)	..	..	35.2	37.6	29.6	37.6
			(10.9)	(17.0)	(16.1)	(16.3)
Household work (# hours per week)	15.7	10.8	15.4	10.5	23.5	15.9
	(9.3	(7.6)	(8.9)	(7.2)	(11.7)	(11.2)
4. Working-life variables, pct.:						
Flexibility of working time (flexibility)	57.1	44.2	59.0	43.2	..	..
Working weekend	21.0	25.5	21.3	25.2	..	..
Working evening or night	21.3	23.0	22.6	22.4	..	..
Occupational sector (public occupation)	25.5	51.6	25.1	51.1	..	..
Regular leisure activity (yes)	52.7	56.8	53.7	58.3	..	..

5. Domain satisfactions, pct.:						
Satisfaction with own economic situation (not satisfied)	16.9	15.4	15.2	15.7	..	..
Satisfaction with the number of weekly working hours (not satisfied)	18.3	26.0	20.0	26.0	..	..
N =	480	488	376	446	324	348

As Hamermesh (1999), Hersch and Stratton (1997) and Bonke et al. (2004c) have shown, not only the household workload but also the timing of this work is important for women's and men's wages. For that reason, we also use the diary information to construct a variable measuring the time breaks between household work and paid work in the morning and between paid work and household work in the afternoon, both breaks exclusive of commuting time. The assumption is that large breaks indicate flexible household work, so that this work interferes less with market work and thus suggests a smaller time constraint. Not surprisingly, more women (51%) than men (27%) have a break shorter than 1.5 hours.

We use the disposable household income as a proxy for consumption possibilities, with an average of 27.-28.000 DKK per month. This income is independent of the data-source used. The spouse's wage rates, which we include as proxies for their productivity levels, vary considerably with the data source. If gross monthly earned income reported within the questionnaire is divided by the ordinary number of working hours deriving from the same source, men and women earn around 180 and 140 DKK per hour, respectively, whereas earned income stemming from the tax registers divided by the same working hours yields wages of 200 and 155 DKK. The discrepancy, however, might partially be explained by different number of cases in the two calculations in table 3.

As the spouses are supposed to face the same overall economic conditions and their time restrictions have a mutual influence on their behaviours, we include information about both partners paid work and household work. Table 3 shows that this cross-partner information is closely related, whether going from the husband to the wife or from the wife to the husband. The only exception is the number of men's working hours, which wives report to be smaller than the numbers husbands

themselves report in the questionnaire, while no deviance is found when relying on diaries filled in separately by each spouse. However, when it comes to household work, both men and women report in the questionnaire fewer hours than the diary shows they actually do, while the reporting on their spouse's household work matches the spouse's own reporting.

For these reasons, and because questionnaire information is found less reliable than diary information (Bonke, 2005), we apply only the latter in our analyses. The only exception is when calculating wage-rates, where personal income is divided by working hours found in the questionnaire. We make this exception because most agreements on wages refer to normal working hours, apart from day-to-day variations in working time. About income, register information is usually more reliable than questionnaire information, so we apply the register information in this case.

The controlling variables include partnership, urbanization and the presence of children at different age groups. Forming a more permanent partnership (i.e., marriage as opposed to a consensual union) is assumed to decrease the likelihood of being stressed, as is living in a non- or less urbanized area as opposed to the metropolitan area of Copenhagen and its suburbs. The presence of children and their relative age are assumed to influence the level of stress, because children require time and goods simultaneously, with goods probably substituting for time as the child gets older. This assumption implies that children increase the time pressure either one way or the other. The number of households with preschool (0-6-years olds) children amounts to 22-24%, and with only school children (7- years old) to another 18-23%.

The time-use survey includes a number of *working life variables* possibly having an impact on self-reported stress, e.g. the flexibility in working conditions, the time of the day and of the week people are working, and the occupational setting. If we distinguish between men and women with normal flexitime (i.e., those allowed variations in their working schedule) on the one hand, and those with no kind of flexible working hours on the other, the first group comprises 57-59% of the men and 43-44% of the women (table 3). Men and women regularly working at least two hours in the evening (between 6-10 p.m.) or during the night (10 p.m. to 6 a.m.) are 23% and 22-23%, while 21% and 25% work regularly on Saturdays or Sundays.

Another working life variable concerns being occupied within either the public or private sector. This information tries to capture different degrees of family-friendly working conditions, with the public sector usually found the most attractive (Datta Gupta & Smith, 2002). About 50 percent of the women work in the public sector, whereas only 25 percent of men do.

We also include participation in regular leisure time activities as a de-stressor. The assumption is that this kind of time use allows people to put their minds and energy outside the workplace, with a relaxing effect that doesn't necessarily relieve the time pressure, but that introduces a stress-reducing coping strategy (de Rijk et al 1998). About one out of every two men and women participate in regular leisure time activities.

Finally, we include two *domain satisfaction variables*. One deals with the ways in which people view their economic conditions and the other is whether they are satisfied with their actual number of weekly working hours. The first variable obviously tries to capture the frustrations of not being able to making ends meet – the classical poverty-question – a condition describing 15-17 percent of the respondents. The importance of the second variable is that it indicates whether people's time pressures are voluntary or involuntary (the percentages of men and women not satisfied with their working hours are 18-20 and 26, respectively). Ruuskanen (2004, p 193) cites Piekkola (2003) for the finding of ".. a clear correlation of the feeling of rush and the disparency between desired and actual hours".

4.3. Procedure

The statistical analyses apply different models with the same dependent "stress" variable: "not stressed", "sometimes" stressed" and "nearly always" stressed. In the first analysis, we collapse the two first categories, i.e., the dependent variable gets the value of 1 if the person reports being "sometimes" or "nearly always" stressed and 0 for "not stressed" (tables 4 and 5). The collapsing allows us to use a probit-model. In the second analysis, we apply a multi-nominal logit-model, taking the logarithm to the relationship between the likelihoods of belonging to one of the three stress-categories, distinguishing first between the "sometimes" stressed and the "not stressed", and second between the nearly always stressed and the "sometimes" stressed (table 6). An ordered probit model could as well have been applied, but was found less appropriate here, because of the specific focus on the stress-level effects.

5. Results

As already mentioned, we begin the data analyses with probit-estimations, to explore the relationship between a constructed binary stress-variable and the different variables introduced in chapter 4.2. Then follow analyses applying a multinomial logit-model, as Chapter 4.3, explains, with the aim of taking the ordinal structure of the dependent stress-variable in consideration.

By applying the different models, we can compare our findings with those of Hamermesh and Lee (2004), who investigate stress in Australia, Germany, Canada, Korea and US. In addition, we can also analyse and explain the occurrence of different levels of stress that individuals in Danish dual-earner couples experienced in 2001.

5.1. The economic model

The estimations in table 4 are similar to those of Hamermesh and Lee (2004) and include economic variables such as the respondent's working hours, household work and health status, household income, and the partner's working time and household work. Moreover, Table 4 includes some socioeconomic variables such as marital status, urbanization, and the presence of preschool and school children. We did the analyses separately for men and women, because, as will become clear, different stress-factors affect men and women differently. Moreover, if we apply the same model on a dataset that simultaneously includes women and men in dual-earner households, we find that women are likely to be significantly more "nearly always" or "sometimes" stressed than men (not shown).

The findings in Table 4 confirm the prediction of the model. The command over market goods – expressed as higher incomes – leads to stress among women and men. The positive coefficients are, however, significant for women but not for men, which is properly explained by the small number of observations used in the models. For Australia, Germany, Canada, Korea and the U.S most of the similar coefficients are significant, which is properly because of the much greater samples used for these countries.

Table 4.

Probit Estimates of the Determinants of Time Stress (sometime stressed or stressed). Individuals in Couples. Denmark. 2001

	One employed spouse		Two employed spouses	
	Men	Women	Men	Women
1. Economic variables:				
Working hours (weekly)[2]	.0005	.0042	-.0040	.0041
	(.0043)	(.0048)	(.0054)	(.0052)
Household work (# hours per week)[2]	-.0026	-.0156**	-.0015	-.0144**
	(.0062)	(.0069)	(.0070)	(.0073)
Health (very good or good)[1]	-.5423***	-.4628**	-.6712***	-.4885**
	(.1954)	(.2189)	(.2342)	(.2254)
Household income (disposable)[3]	.0081	.0151**	.0045	.0214***
	(.0065)	(.0072)	(.0066)	(.0082)
2. Other variables:				
Marital status[3]	-.2931*	.0056	-.3660**	.0008
	(.1527)	(.1778)	(.1784)	(.1894)
Urbanization[3]	.1367	.2291	.1971	.2478
	(.1403)	(.1548)	(.1592)	(.1648)
Children (-6 years)[1]	.0714	-.1346	-.0015	-.0169
	(.1581)	(.1770)	(.1797)	(.1852)
Children (7- years)[1]	.0932	.2559	.1167	.3069*
	(.1672)	(.1684)	(.1850)	(.1744)
3. Partner:				
Working hours (weekly)[2]	..	..	.0016	-.0001
			(.0052)	(.0050)
Household work (# hours per week)[2]	-.0019	-.0035	.0017	-.0073
	(.0053)	(.0056)	(.0072)	(.0072)
Pseudo R^2	0.109	0.134	0.118	0.147
N =	412	379	323	348

[1]: Questionnaire information [2]: Dairy information [3]: Register information
*: significant at 0,1 level. **: significant at 0,05 level ***: significant at 0,01 level
Note: The coefficients are the effects of a unit increase in the variable of the probability of being "sometimes" stressed or stressed compared to "not stressed". The parentheses show standard errors.

We also analysed whether the distribution of income between the spouses contributes to the explanation of self-perceived stress. We did so by including the respondent's personal income and controlling for household income, assuming that fixed income constitutes only a small amount of money. The results (not shown here), however, show no such effect, and we interpret them as confirming the unitary model, where every DDK is shared and thus has the same value for both spouses.

The number of working hours has no significant effect on perceived stress among men and women, although most of the coefficients are positive, as expected, and as found for Australia, Germany, Canada, Korea and the U.S. The household work, on the other hand, comes up with negative coefficients, and for women these relationships are significant. This result is opposite to our expectations and to most of the findings in Hamermesh and Lee (2004). Moreover, it questions the "spill-over" theory (Bacharach et al., 1991), which argues that job-related and non-job-related stress are highly correlated.

The productivity measure applied here is self-reported health status, which in all the analyses occurs as a positive and significant determinant of self-reported stress. As Hamermesh and Lee mention, self-reported information on both sides of the equation might yield some problems. Other studies, however, show that self-reported health and objective stress are correlated, and that excluding health from the analyses increases the effect of household income on stress, originating from a positive correlation between health and income. For these reasons we believe we only face a minor problem here.

That the partner's behaviour impacts on the other's perceived stress is confirmed for dual-earner couples, where the husband's contribution to household work lessens the wife's level of stress. The wife's household work, on the other hand, does not affect the husband's level of stress, nor did we find any cross-partner effects from the number of working hours on the spouse's level of stress (table 4). However, none of the effects are found significant.

The other variables are marital status, urbanization, and the presence of preschool and school children. The results show that being married decreases men's stress levels, while living in the metropolitan area increases women's stress levels more than men's, although the latter effects are

not significant. The presence of preschool children does not seem to affect either the mother's or the father's reported level of stress. However, having school-age children significantly increases the mother's stress level within households with two working parents, whereas no significant effects is found within the sample including also households with only one working parent. In contrast, the effects on men, though also positive, are not significant in any case. Whether these findings match those for Australia, Germany, Canada, Korea and the U.S. is moot, as Hamermesh and Lee (2004) included no coefficients for these variables.

5.2. The extended model

Before we extend the economic model, we substitute for the household work variable with some calculated rush-hour information, because household work came up with unpredicted results. The reasoning is that the *timing* of activities might affect the occurrence of self-perceived stress. Thus, the timing is measured here as the length of the break between household work and paid work including commuting time in the morning and between paid work including commuting time and household work in the evening. If then, this break is short – less than 1.5 hours both times – we assume that the person is rushed or time-pressed (see also Bonke et al., 2004c, who apply the same variables in a numeric form within a wage regression framework).

In contrast to the negative impact of household work on women's stress levels, the presence of rush-hour implies positive coefficients for both sexes, and for women the coefficients are significant. At the same time, the inclusion of this variable also yields negative coefficients for women's paid work, although the coefficients do not prove significant (table 5). Therefore, the timing of household work not only has a greater impact on perceived stress for women than the amount of time women spend on this activity, but also makes any effects of the number of working hours into a negative sign. This result confirms the existence of a working-life/family-life dilemma and shows that this dilemma is more pronounced and stressful for women.

Another variable included in the economic model is the wage rate, which we use as a proxy for the shadow price of time, cf. the model in chapter 3. Thus, the higher the wage rate, the more expensive is time and the greater the expectation of higher time pressure. The results meet the expectation for men, whereas we find a negative relationship for women. However, none of the coefficients are

significant. This result indicates that the income effect is greater than the substitution effect for women, whereas the opposite is the case for men.

Table 5.

Probit Estimates of the Determinants of Time Stress (sometime stressed or stressed). Individuals in Two-earner Couples. 2001

	Model 1		Model 2		Model 3	
	Men	Women	Men	Women	Men	Women
1. Economic variables:						
Working hours (weekly)[2]	-.0021	-.0029	-.0023	-.0025	-.0024	-.0028
	(.0059)	(.0058)	(.0061)	(.0059)	(.0059)	(.0058)
Household work (# hours per week)[2]	-.0018	-.0151**	-.0013	-.0157**	-.0018	-.0155**
	(.0073)	(.0074)	(.0074)	(.0075)	(.0073)	(.0075)
Rush hour (<1.5 hours break)[2]	.1966	.3179*	.2268	.3252*	.2145	.3208*
	(.1751)	(.1637)	(.1817)	(.1690)	(.1760)	(.1648)
Health (very good or good)[1]	-.7587***	-.4359*	-.7278***	-.4354*	-.7792***	-.3984*
	(.2643)	(.2330)	(.2672)	(.2351)	(.2662)	(.2351)
Household income (disposable)[3]	.0023	.0182**	.0034	.0179*	.0020	.0195**
	(.0074)	(.0092)	(.0077)	(.0093)	(.0076)	(.0094)
Wage-rates. DKK[4]	.2836	-.5210	.2575	-.3927	.2950	-.3714
	(.3248)	(1.475)	(.3413)	(1.489)	(.3233)	(1.488)
2. Other variables:						
Marital status[3]	-.3787**	-.0326	-.3652*	-.0437	-.3655*	-.0248
	(.1868)	(.1960)	(.1884)	(.1970)	(.1893)	(.1966)
Urbanization[3]	.1562	.2855*	.2048	.3000*	.1661	.2624
	(.1668)	(.1696)	(.1702)	(.1767)	(.1679)	(.1715)
Children (-6 years)[1]	-.1147	-.1015	-.1123	-.0995	-.1271	-.1729
	(.1931)	(.1904)	(.2008)	(.1926)	(.1945)	(.1948)
Children (7- years)[1]	-.0058	.2650	-.0294	.2545	-.0097	.2445
	(.1944)	(.1794)	(.1971)	(.1805)	(.1957)	(.1802)
3. Partner:						
Working hours (weekly)[2]	.0033	.0004	.0039	-.0011	.0034	-.0001
	(.0055)	(.0052)	(.0056)	(.0053)	(.0055)	(.0053)
Household work (# hours per week)[2]	.0033	-.0070	.0038	-.0075	.0034	-.0081
	(.0075)	(.0073)	(.0077)	(.0074)	(.0076)	(.0074)

4. Working-life variables:						
Flexibility of working time (flexibility)[1]	..	..	-.1698	.0278	..	..
			(.1587)	(.1651)		
Working weekend[1]	..	..	.1923	.0575	..	..
			(.2480)	(.2149)		
Working evening or night[1]	..	..	.0046	-.0754	..	..
			(.2321)	(.2053)		
Occupational sector (private occupation)[1]	..	..	-.0809	.1440	..	..
			(.1784)	(.1574)		
Regular leisure activity (yes)[1]	..	..	.0749	.0802	..	..
			(.1546)	(.1529)		
5. Domain satisfactions:						
Satisfaction with own economic situation[1]	..	..	..	..	.1975	.4338*
(not satisfied)					(.2276)	(.2400)
Satisfaction with weekly working hours[1]	..	..	..	..	.2091	.1447
(not satisfied)					(.1903)	(.1694)
Pseudo R^2	0.127	0.147	0.143	0.148	0.132	0.161
N =	295	335	294	334	295	335

[1]: Questionnaire information [2]: Dairy information [3]: Register information [4]: Questionnaire/dairy information

*: significant at 0,1 level. **: significant at 0,05 level ***: significant at 0,01 level

Note: The coefficients are the effects of a unit increase in the variable on the probability of being sometime stressed or stressed compared to not stressed. The parentheses show standard errors.

The second extended model – model 2 - with working life information shows that the only condition somehow influencing the level of stress is flexible working hours, and that this result holds true only for men, although not significant. For women, we find no indication of such an effect, perhaps because flexible working hours are not necessarily implemented in the same way in workplaces predominantly populated by women than in those predominantly populated by men. Even though we control for occupational sector (i.e., public or private), an important factor in determining the great gender segregation in the Danish labour market, the results stand. It is clear that working in the public sector is close to reduce the presence of self-reported stress among

women, confirming the general belief that this sector usually has family-friendly working conditions.

The remaining working life conditions — working on weekends, in the evenings, or at night — are mostly positive but far from significant.

Moreover, participation in regular leisure time activities has no effect on perceived stress. As the effects of household income, paid work, household work and health on perceived stress are nearly unaffected by the inclusion of working life conditions and leisure time activities, we see this result as confirming the strength of the economic model with time, income, and productivity being the most important determinants of stress.

However, variables other than economic ones contribute to the explanation of self-perceived stress. Thus, Model 3 in Table 5 shows that not being satisfied with one's economic situation increases the likelihood of reporting stress for both men and women, although this effect is only significant for women. Furthermore, not being satisfied with the number of working hours also has a positive but not significant effect on women's and men's perceived stress, suggesting that working the preferred number of hours proves equally essential to both men's and women's well-being. Again, the inclusion of self-reported information on both sides of the equation might cause problems, for which reason the results have to be taken with caution.

Nonetheless, this final point brings up Hamermesh and Lee's (2004) comment that "The analysis can also be extended to consider satisfaction with income in a more rigorous way than has been seen in the burgeoning economics and immense psychology literature". The argument is that "thinking about the predictions for subjective psychology outcomes that result form consumers' utility maximization is something that should be useful in a variety of areas that are widely discussed in the other social sciences (but) to which economists have paid very little attention". As we have shown here, satisfaction with both income and the number of working hours somehow affects the way in which dual-earner spouses perceive and experience stress.

5.3. The stress-level model

In the models we have already discussed, we investigated the likelihood of being "nearly always" stressed or "sometimes" stressed, relative to not being stressed. Here, we go a step further by distinguishing between the two levels of stress, to investigate whether different explanations occur. For example, being "nearly always" stressed may threaten a person's health in the long run, while being "sometimes" stressed 'only' affects people's immediate well-being.

We apply a multinomial logit model where the estimation uses a maximum likelihood procedure. The categories are unordered, and the dependent variable has three categories, in which two different sets of coefficients appear. One set shows the log likelihood of being "sometimes" stressed relative to not being stressed, and the other set shows the log likelihood of being "nearly always" stressed relative to not being stressed. For all the models, we include the variables from the previously discussed extended models, allowing the simultaneous inclusion of economic information, controlling variables, partner information, work-life information and satisfaction information.

Table 6 shows that only for men the number of weekly working hours is close to affect being "nearly always" stressed, while no such effect on the likelihood of being "sometimes" stressed occurs for either men or women. One explanation could be that especially men working many hours constitute a selected group. A selection bias may also explain why women become stressed – "sometimes" and "always" – during rush-hour, while men are not significantly getting stressed during rush-hour. Thus, it might be that "rushed" men are somehow more family-friendly than other men, so that the extra burden does not affect self-perceived stress in general. For women, family-friendliness might have nothing to do with being rushed, as women per se are expected to feel more responsible for family affairs. Moreover, these findings do not result from different preferences between the two genders about the number of working hours to be worked, as we control for this phenomenon. The preferences, however, show that women not experiencing the optimal number of working hours are more likely to report being "sometimes" stressed, while men in the same position experience the likelihood of being "nearly always" stressed. None of these coefficients, however, are found significant.

The cross-partner information on time use shows that the spouse's work affects both men and women: The more the partner works, the more likely it becomes that the other partner is

"sometimes" or "nearly always" stressed, although only the wife's work affects the husband's always feeling stressed significantly. For household work, the woman's contribution positively affects the husband's feeling of being "nearly always" stressed, while the contribution of the husband has the opposite effect, that is, the more they contribute to household work, the less stressed the wife becomes, again, however, none of those are significant. A straightforward conclusion, therefore, is that a reallocation of household work from women to men might, properly, diminish the likelihood of feeling "always" stressed among spouses. However, because the wife's own contribution to household work has a negative impact on self-perceived stress, she might be in favour of their dual contribution to this work.

The economic model exercised in Table 4 showed that the household income had a positive impact on women's perceived stress, and that this finding holds even with the inclusion of information on satisfaction with the economic situation (see the extended model, table 5), which in itself negatively affects women's and somewhat men's stress reporting. When we distinguish between the different stress-levels, as in Table 6, the household income has the biggest impact on women's being "always" stressed, while the other effects are smaller and far from being significant. This result underlines the importance not only of including economic satisfaction information but also of properly categorising stress when we analyse the effects of household income.

Health conditions continue to affect the feeling of stress for both genders, although with no significant impact on the "sometimes" stressed situation for men. Only women are affected at both levels of stress – "sometimes" and "always" – of their health conditions.

Among the control variables, marriage still works as a de-stressor for men who feel "sometimes" stressed, although not significant. Living in the metropolitan area likewise affects both men's and women's stress levels, but more the feeling of being "sometimes" stressed than that of "always" stressed. In contrast to the finding in Table 5, where the feeling "sometimes" stressed and "almost" stressed were collapsed, we now find that preschool children affect the mother's feeling of being "sometimes" stressed, although not significant. Because the having of 0-olds children implies generous leave opportunities in Denmark, we also calculated the effects separately for this group and for the 1- to 6-year-old group, but the results didn't change. For men with preschoolers, we found a negative, not significant, effect on "sometimes" stressed. If the youngest child is in school,

both fathers and mothers experience a decrease in the likelihood of being "sometimes" stressed. The likelihood of being "always" stressed, on the other hand, affects only the mother, by increasing reported stress. Again, these coefficients are not found significant on the chosen levels.

Table 6.

Regressions – multinomial logit-model - of the Determinant of Time Stress (sometime stressed/not stressed and stressed/not stressed). Individuals in Two-earner Couples. 2001

Model 5	Men		Women	
	Sometime stressed/ not stressed	Stressed/not stressed	Sometime stressed/ not stressed	Stressed/not stressed
1. Economic variables:				
Working hours (weekly)[2]	.0073	-.0144	.0030	-.0025
	(.0200)	(.0105)	(.0225)	(.0110)
Household work (# hours per week)[2]	.0039	-.0063	-.0305	-.0241*
	(.0248)	(.0127)	(.0283)	(.0141)
Rush hour (<1.5 hours break)[2]	-.2943	.4083	1.211*	.7225**
	(.6152)	(.3107)	(.6346)	(.3264)
Health (very good or good)[1]	-.6092	-.8899*	-2.467***	-1.272**
	(.7979)	(.4698)	(.7689)	(.5877)
Household income (disposable)[3]	-.0073	.0082	.0035	.0177
	(.0209)	(.0196)	(.0389)	(.0166)
Wage-rates. DKK[4]	1.065	-1.523	-1.692	-.7709
	(1.163)	(2.087)	(6.800)	(2.915)
2. Other variables:				
Marital status[3]	-.8269	-.3176	.3409	-.0319
	(.5387)	(.3319)	(.7734)	(.3683)
Urbanization[3]	1.621***	.1017	1.180*	.4269
	(.5123)	(.2981)	(.6231)	(.3575)
Children (-6 years)[1]	-.8408	.0210	.7581	.3641
	(.7329)	(.3441)	(.6323)	(.3881)
Children (7- years)[1]	-.6937	.0869	-.6901	.5350
	(.6695)	(.3368)	(.8521)	(.3463)
3. Partner:				
Working hours (weekly)[2]	.0155	.0170*	.0237	.0112

	(.0173)	(.0097)	(.0188)	(.0100)
Household work (# hours per week)[2]	.0087	.0183	.0097	-.0183
	(.0256)	(.0131)	(.0246)	(.0141)
4. Working-life variables:				
Flexibility of working time (flexibility)[1]	-.1504	-.4103	.1340	.1661
	(.5070)	(.2734)	(.5912)	(.3200)
Working weekend[1]	.6202	.3781	-.2514	.1581
	(.7931)	(.4300)	(.8177)	(.4110)
Working evening or night[1]	.0624	.0660	.1405	-.2426
	(.7331)	(.4013)	(.6911)	(.3966)
Occupational sector (private occupation)[1]	.5556	-.2812	.2218	-.0103
	(.5537)	(.3045)	(.5709)	(.3012)
Regular leisure activity (yes)[1]	.0787	.0409	-.5170	.1019
	(.5081)	(.2681)	(.5445)	(.2953)
5. Domain satisfactions:				
Satisfaction with own economic	.2584	.3434	1.788	.8485
situation[1] (not satisfied)	(.7591)	(.3971)	(.7784)	(.5339)
Satisfaction with weekly working hours[1]	.5072	.4596	.6517	.0682
(not satisfied)	(.5878)	(.3363)	(.5581)	(.3332)
Likelihood Ratio (Chi^2)		493,42		453,52
N =	294	294	334	334

[1]: Questionnaire information [2]: Dairy information [3]: Register information [4]: Questionnaire/dairy information
*: significant at 0,1 level. **: significant at 0,05 level ***: significant at 0,01 level
Note: The coefficients are the effects of a unit increase in the variable on the probability of being sometime stressed or stressed compared to not stressed. The parentheses show standard errors.

Finally, only one working life variable is close to matter for perceived stress in the models we apply here: flexible working hours, which has a negative impact on men's feeling "always" stressed but not on "sometimes" stressed. Therefore, by distinguishing between different stress levels for men, we can qualify the findings (table 5) that flexible working hours work as de-stressors for men. Moreover, working in the private sector implies that men more often feel "sometimes" stressed, while the feeling of being "always" stressed is, for these men, on the decrease. None of these coefficients, however, are significant.

The last determinant is participation in regular leisure time activities. Results for this variable show that the likelihood of being "sometimes" stressed decreases, but not significantly, for women, whereas it has no impact on the likelihood of their being "always" stressed. This finding confirms the expectation that being engaged in some non-work activities make stress less likely — even though it increases the number of definite and time-consuming activities — because it allows the women to focus elsewhere.

For all the comparisons with the extended model in chapter 5.2, we emphasize that the models are different from each other. For example, in chapter 5.2 we include either working-life variables or satisfaction variables. However, using exactly the same models does not change any of the coefficients significantly, [not published results show].

If we apply a Wald-test on the different variables included in the stress-level model, to examine if we can omit any without reducing the explanatory power of the model, we find that women's health and the presence of school-age children are important for the models ability to explain stress. For men, only urbanization matters, if we deal with a 10 per cent p-value (results not shown here).

6. Conclusions

That stress is a widespread problem in modern societies is well-documented (Cooper and Dewe, 2004), and now also confirmed through a large time-use survey recently conducted in Denmark. However, an economic model with income and time as the main elements for explaining stress among working people is a recent development. Hamermesh and Lee's (2004) model, the basis for the present analyses, allowed us to compare the effects of the same determinants of self-reported stress in four other developed countries.

The findings confirmed the prediction of the model. That is, the command over market goods, expressed as higher incomes. leads to stress among both women and men. The positive coefficients were, however, significant only for women. For Australia, Germany, Canada, Korea and the U.S. most of the similar coefficients are significant.

We also investigated the crucial assumption in the economic model — that the spouses are pooling their incomes — by including the respondents' personal income and by controlling for household income. The result indicates that the unitary model is at work in Denmark, when applied on the stress issue.

Another finding showed that the number of working hours has no significant effect on perceived stress among men and women, although most of the coefficients were positive, as expected and found for Australia, Germany, Canada, Korea and the U.S. Household work, on the other hand, came up with negative coefficients, and for women these relationships were in some cases even significant. This finding contradicted not only our expectations but most of the findings in Hamermesh and Lee (2004).

The time allocation of the partner had also somewhat of an impact, but only for wives, who become less stressed the more the husband contribute to housework. The wife's household work, on the other hand, does not affect the husband's level of stress, nor did we find any cross-partner effects of the number of working hours on the spouse's level of stress.

The most important determinant of stress in all the models was self-reported health, which we used as a proxy for productivity. For both women and men, good health decreases stress, as Hamermesh and Lee (2004) also report.

In the extended models, the amount of household work was replaced by the length of the break between household work and paid work and vice versa, exclusive of commuting time, and positive coefficients for this rush-hour variable resulted for women. This finding confirms the existence of a gendered working-life/family-life dilemma. In addition, the wage rate positively but not significantly affected stress among men. For the working life information, flexible working hours somehow affects stress negatively, but only for men. Moreover, working in the public sector is close to reduce the presence of self-reported stress among women, confirming that this sector in Denmark is usually family-friendly.

The inclusion of domain satisfaction information proved important for self-perceived stress; i.e., the more satisfied men and women are with their economic situation, the less likely is their reporting of stress, although this effect is only significant for women. Moreover, satisfaction with the number of working hours had also a negative impact on the perceived stress of both genders, but, again, the effects were not significant. It is evidently especially stressful for women not to be able to make ends meet, while working the preferred number of hours on the labour market is equally essential to the well-being of both men and women.

The application of a stress-level model showed that the determinants had different impacts on men's and women's levels of self-perceived stress. The number of weekly working hours somehow affects men's feeling "nearly always" stressed negatively, while we found no such effect for the likelihood of either men's or women's being "sometimes" stressed. Moreover, the cross-partner information on time use showed that both men and women are affected by the spouse's outside work: the more the partner works, the more likely it becomes that the wife or husband feels "sometimes" or "always" stressed, although only the men's feeling "always" stressed is significantly affected. For household work, the wife's contribution increases the husband's feeling of being "always" stressed, while for the wife the husband's contribution has the opposite effect — the more they contribute to household work, the less stressed the wife becomes. However, all these cross-partner effects are relatively small numerically, and in most cases non-significant.

Finally, income and working satisfactions proved to be important determinants for men and women's being either "sometimes" or "always" stressed. This result shows that including economic satisfaction and categorising stress is essential to discovering the real effect of household income on stress in the Danish welfare state, which is usually considered characterized by a high degree of equity between the sexes and a family-friendly working environment.

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