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Combining work and family in the Netherlands: Blessing or burden for one's mental health?

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Abstract

In this article we study which characteristics of combining work and family put people at risk for mental illness. Two alternative perspectives on the impact of multiple social roles on mental health are tested: the role accumulation perspective and the role strain perspective. Both perspectives are studied with data from a cross-sectional national survey held among a large, representative sample of Dutch people ($N=1008$). Multivariate analyses provided support for both perspectives. Having more social roles was related to better mental health. We also found a positive mental health effect of having a full-time job in combination with having children. However, having a partner who contributes less to household duties or having a job with low decision latitude or lower skill discretion was related to mental illness. So, certain aspects of social roles may also threaten people's mental health. Overall, our findings do not support the idea that combining work and family is necessarily a burden and harmful for people's mental health. Whether multiple social roles are a blessing or burden for people's mental health seems to depend on the characteristics of the social roles.

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Keywords: Work–family interference; Role conflict; Mental health; MHI-5; The Netherlands; General population

1. Introduction

Research on the work–home interface has substantially grown in recent years. This increase seems guided by the growing number of women participating in the labour market, but also the increasing number of dual earner families. In the Netherlands, but also in other European countries, the number of working women has increased rapidly in the last decade. Nowadays about 66% of Dutch women aged between 15 and 64 have paid jobs (SCP, 2004). As a consequence of the increasing number of women in the workforce, more women, but also men, have to deal with working outside the home and running a family at the same time (SCP, 1998; van Praag & Niphuis-Nell, 1997). The Dutch government has stimulated women to participate in the work force by introducing several arrangements that may enable employees to better coordinate their work and domestic obligations. These arrangements include more flexibility in work schedules,

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subsidizing child care and allowing temporary leave periods for employees to take care of children or other dependent family members. Empirical research however, has shown that a considerable part of the working population experiences problems in combining work and family. In a study among Dutch employees of different branches of industry, 40% of the employees indicated that their work demands interfered with their family obligations (Geurts, Kompier, Roxburgh, & Houtman, 2003). Combining parental and occupational roles was also found to induce depressive symptoms and physical health complaints, especially for women (e.g. Nordenmark, 2002; Pugliesi, 1989; Windle & Dumenci, 1997). On the other hand, positive effects of multiple social roles have also been reported (Fokkema, 2002; Grzywacs & Marks, 2000; Waldron, Weiss, & Hughes, 1998). Fokkema (2002) found that married and divorced women who combine a paid job and taking care of children older than four, showed better physical health than women who were full-time housewives.

Although research on the work–family interface has contributed to the understanding of the health consequences of occupying multiple social roles, many studies have had a number of limitations (see also Geurts & Demerouti, 2003). A methodological limitation of many studies on work–home interface is that they have drawn conclusions based on specific samples (e.g. highly educated people such as medical residents) or samples that include only (married) women. This seriously limits the ability to generalize findings to the general working population (Barnett, 1998; Fokkema, 2002; Geurts & Demerouti, 2003; Nordenmark, 2002). In addition, working women have been treated as a rather homogeneous group in many of these studies; they either have paid jobs, and/or children and a partner or not. The different work and family circumstances of employed women have been ignored (see also Bekker, 1995; Fokkema, 2002). To evaluate the impact of multiple social roles on people's mental health, it is necessary to account for relevant differences in the work and family situation of women, but also of men. Furthermore, many studies on the work–family interface have primarily focussed on individual characteristics, thereby ignoring the social context, i.e., the family the individual is part of (Barnett, 1998; Barnett & Gareis, 2006; Frone, 2003). A partner, however, provides several resources (e.g. income, social support) that may offset the demands experienced in social roles, and thereby protect from mental illness. Empirical research has shown that the partner's participation in household duties has been found to affect the individual's mental health (Menaghan & Parcel, 1990; Mirowsky & Ross, 1989). When husbands and wives share household work more equally, women — employed and non-employed — showed better mental health. Alternatively, the partner's resources may also put strain on the individual. Geurts, Rutte, and Peeters (1999) found that having a partner who frequently works overtime, puts pressure on the balance between work and family. This may, in turn, induce mental illness. So, in order to understand what it is about occupying multiple roles that may induce mental illness, the partner's resources need to be studied more explicitly.

The present study, which is situated at the intersection between family research, occupational health psychology, and the sociology of health, is designed to overcome the limitations noted above. First, we use a large-scale sample, which is representative of the Dutch population, thereby including both men and women in our analyses. Second, several characteristics of both work and family will be studied in order to see how these characteristics may put people at risk for mental illness. Third, the partner's work (and family) situation is accounted for in addition to individual work and family characteristics. Furthermore, the mediating role of work–family conflict on mental illness is examined. Studying people's perceptions may help to understand the mechanisms that link objective conditions of work and family and mental illness (Geurts & Demerouti, 2003). The central research question is: Which characteristics of work and family put people at risk for mental illness?

2. Theories on work–family interface and mental illness

Two main contradictory perspectives can be found in the research literature on work–family interface, each supported by empirical evidence. The dominant approach in the work–family research has been that of role conflict, also known as *the role strain perspective*. According to this perspective, time and personal energy are fixed resources and of limited quantity. Therefore, people who occupy multiple social roles inevitably experience conflict which in turn may lead to strain and mental illness. For instance, if one's paid job requires working overtime frequently, this limits the available time at home, which may conflict with family demands (work-to-family conflict) or, if one's child is sick this may put strain on work demands (family-to-work conflict). Although women's share in paid labour has increased substantially, they have stayed primarily responsible for household and family duties (van der Lippe, 1993). Men's share in the domestic duties has only slightly increased over time (SCP, 2001). This means that both working outside the home and taking care of children for (some) women means taking on an extra burden, which can bring about stress

and mental illness (Rosenfield, 1999). Research has consistently shown work–family conflict to be related to feelings of burnout, anxiety, depression and alcohol abuse (Allen, Herst, Bruck, & Sutton, 2000; Geurts & Demerouti, 2003; Jansen, Kant, Kristensen, & Nijhuis, 2003).

In contrast, the *role accumulation perspective* implies that multiple social roles generally have positive effects on mental health. According to this perspective, human energy is not fixed, but rather expandable. By engaging in multiple roles, one has the opportunity to increase one's energy supply. Participation in multiple social roles provides a greater number of resources (e.g. social support, higher self-esteem and/or financial income) that can be used to promote personal growth and better functioning in other life domains (Geurts et al., 2005). The availability of alternative roles may also serve as a buffer against distress experienced in one role. The difficulties or demands in one role may be offset by the positive attributes of the other roles (Lennon & Rosenfield, 1992; Nordenmark, 2002; Sachs-Ericsson & Ciarlo, 2000). Having a partner seems to offset the possible harmful effect of parenthood. Being a single parent is generally related to higher rates of mental illness (e.g., McLanahan & Adams, 1989; Sachs-Ericsson & Ciarlo, 2000). Next to marriage, employment also seems to offset the possible harmful effect of parenthood. Employed mothers seem less distressed than mothers who mainly take care of their children (Fokkema, 2002).

Based on the empirical support for both perspectives, it is currently believed that these processes may operate at the same time and depend on people's work and family situation (Geurts & Demerouti, 2003; Hankin, 1990). Thus, occupying multiple roles in itself is believed to generate positive mental health effects. However, it is also likely that under certain conditions these benefits might diminish. These conditions have to do with the characteristics of one's work and family situation as well as with individual differences (e.g. gender). The higher the level of demands experienced in one's social role(s), the more these demands outweigh the benefits of occupying these social roles, which may induce mental illness. Hence, having multiple social roles can have both beneficial and harmful health effects, depending on the demands an individual encounters in his/her work and family situation.

2.1. Work characteristics

Work may be more demanding if people spend more time at their work because it limits the available time at home. Research on work hours has shown mixed results. Studies have reported negative health effects (e.g. Glass & Fujimoto, 1994; Sparks, Cooper, Fried, & Shirom, 1997; van der Hulst, 2003). A meta-analysis by Sparks et al. (1997) showed a relatively small, but significant positive mean correlation between weekly work hours and mental ill-health ($r = .15$). Fokkema (2002) also found that women with younger children with a part-time job of less than 24 h a week show better health than women in more time-consuming jobs. Alternately, for married women with adult children, working more hours was associated with better health. Positive health effects were also reported by Nordenmark (2002) who found that men and women who work at least 40 h a week had lower levels of psychological distress compared to men and women who work fewer hours. Barnett (1998) concluded after reviewing various studies that working long hours may be a risk factor for specific groups under specific conditions.

Apart from work schedule, the contents of one's job may also be demanding. Several work characteristics have been studied to determine how they may affect one's mental health. In the several theoretical approaches to the study of job design and well-being, three characteristics take on a central place: autonomy or decision latitude (the degree to which an individual has potential control over the tasks he or she is performing), skill variety (refers to the degree to which a job shows variety and requires the use of different skills and abilities), and what has been called job demands (refers to job pressure or workload of a certain job) (Kompier, 2003). Especially job pressure and decision latitude have been the focus of study of work and mental health. Both job characteristics were found to be related to psychiatric disorder among the Dutch working population (Laitinen-Krispijn & Bijl, 2002). De Lange, Taris, Kompier, Houtman, and Bongers (2003) found good evidence for causal effects of work characteristics on self-reported health and well-being after reviewing 45 high-quality longitudinal studies. Other studies reported that it was not necessarily high job pressure or low decisional control, but the combination of high job pressure and limited decision latitude that was associated with lower general psychological well-being, distress and burnout (Karasek, 1979; Tausig, 1999; van der Doef & Maes, 1999).

In line with the role strain hypothesis we argue that people suffer more from mental illness when they have more demanding jobs, that is when they work longer hours (*hypothesis 1a*), experience higher job pressure (*hypothesis 1b*), lower decision latitude (*hypothesis 1c*) or lower skill variety (*hypothesis 1d*).

2.2. Family characteristics

Many studies have suggested that having children has a negative impact on the psychological well-being of parents, especially single parents (Brown & Harris, 1978; Goldsteen & Ross, 1989; McLanahan & Adams, 1989; Mirowsky & Ross, 1989; Ross, Mirowsky, & Goldsteen, 1990). While this finding seems to go against popular beliefs on the value of children and the importance of being a parent, it has been replicated in several studies. Yet, the demands and benefits of parenting seem to differ depending on the age and living arrangements of children (Goldsteen & Ross, 1989; Umberson & Williams, 1999). Goldsteen and Ross (1989) showed that when children are young and still live at home, parenting is associated with negative consequences for one's mental health. There is substantial literature that shows that depression, which is the most common severe mental disorder among women, is most prevalent during childbearing and early childrearing years (e.g. Weissman & Olfson, 1995). As children mature and leave the house, parenting has been found to benefit parents' mental health. In the empty-nest period, the relationship between parent and child takes on new meaning and this may be very rewarding for parents. In this stage of the life course, the benefits of parenting seem to outweigh the costs. Umberson and Gove (1989) and Ross et al. (1990) have reported similar findings.

The time spent on household duties seems positively related to depressive symptoms for both men and women (Glass & Fujimoto, 1994; Shelton & John, 1996). Furthermore, paid employment and household labour are related: the more hours people work, the less time they spend on household duties. Nevertheless, women continue to do the majority of housework, which puts them more at risk for mental illness compared to men (SCP, 2001; van der Lippe, 1993). Studies on the partner's contribution within the family situation seem fairly consistent. The partner's social support has been shown to positively affect the mental health of (employed) women (Geurts et al., 1999; Menaghan & Parcel, 1990; Mirowsky & Ross, 1989; Roxburgh, 1997). Women whose husbands share in household work and child care also seem better able to meet the demands of work and family roles (Carlson & Perrewé, 1999).

We hypothesize that people suffer more from mental illness when there are younger children living in the household (*hypothesis 2a*), they spend more time on household duties (*hypothesis 2b*), their partner works longer hours (*hypothesis 3a*) or their partner spends less time on household duties (*hypothesis 3b*).

2.3. Combining social roles: interaction between family and work characteristics

In addition to the impact of demands of different social roles we will explore whether the mental health effect of a given role may vary depending on other social roles that people may hold. We will study the interacting effects of three major social roles, that is employee, parent and partner, and explore to what extent the combination of several of these social roles is related to mental illness. Of course, people may also occupy other social roles such as volunteer or caregiver for aging or disabled family members and friends. However, these social roles will not be studied here.

The health effect of one's work situation may be different for people with certain family situations. For instance, the effect of work schedule on mental health may vary according to whether one has (young) children. In particular, the combination of full-time employment and parental responsibility for young children is often thought to be harmful for people's mental health. This implies an interaction effect of work schedule on mental health according to the age of children. The effect of the work schedule may also vary depending on whether one has a partner. Waldron, Hughes, and Brooks (1996) found that for unemployed women, married women had better health than unmarried women. For employed women, this effect was not found. They argued that employment and marriage provide alternative resources and therefore may substitute for each other (Waldron et al., 1996, 1998). People who occupy either role may experience a significant health benefit, but there may be little additional health benefit from occupying both roles. Consequently, employment may be less beneficial for the mental health of married men and women. Finally, we will explore whether the effect of parenthood on mental health differs for people with a partner. Being a single parent is generally found to be associated with mental illness (McLanahan & Adams, 1989; Sachs-Ericsson & Ciarlo, 2000). Having a partner therefore may act as a buffer against the demands of parenthood.

2.4. Work–family conflict

Thus far we have formulated hypotheses on work and family characteristics that may put people at risk for mental illness. We stated that people with high demands in the work and/or family situation suffer more from mental illness. In

order to explain this relationship we will focus on the perception of work–family conflict in its two manifestations of work-to-family conflict and family-to-work conflict. Work–family conflict reflects the balance between work and family life and therefore may function as a pathway through which conditions of work and family affect one’s mental health. Previous studies have found support for this notion (Geurts et al., 2003; Noor, 2002; van Rijswijk, Bekker, Rutte, & Croon, 2004). Accordingly, we state that people with high demands in the work and/or family situation will suffer from mental illness due to conflicts between work and family (*hypothesis 4*).

3. Data, measurement instruments and method

3.1. Sample

To test the formulated hypotheses we used a large cross-sectional data set that has been newly collected as part of the national Dutch survey ‘Social and Cultural Developments in the Netherlands in 2000 (SOCON 2000)’. The aim of this survey was to map attitudes and behaviour on a wide scope of subjects such as religion, value systems, ethnocentrism, and mental illness in the Netherlands in the year 2000. Also, extensive information was gathered on the respondent’s social background and that of his partner. Of the respondents who were approached, 1008 were personally interviewed (CAPI), thereby providing a net response rate of 43.7%, which is a fairly common proportion in face-to-face interviews. The sample is representative of the Dutch general population (age 18–70 years) by degree of urbanisation, age, gender and marital status. A more detailed description of the project objectives, sampling procedure, fieldwork and data processing can be found elsewhere (Eisinga et al., 2002). For the multivariate analyses only employed people were analysed ($N=697$).

3.2. Dependent variable: mental illness

Mental illness was measured by the short Mental Health Inventory (MHI-5), which is one of the eight subscales of the SF-36. The MHI-5 is a generic measure of mental health in which people are asked to what extent they experienced certain feelings during the last four weeks (e.g.: “how often during the past four weeks did you feel downhearted and blue?”). This self-reported mental health measurement has been frequently used in different health studies, across different countries and within different populations (both in the general population and in specific populations of patients), and has been proven valid and reliable (Berwick et al., 1991; Rumpf, Meyer, Hapke, & John, 2001; Ware & Gandek, 1998). The MHI-5 has performed well in detecting clinically diagnosed mental disorders such as major depression and anxiety (Berwick et al., 1991; Rumpf et al., 2001) and thus appears to objectively reflect mental health. In this study, we consider the MHI-5 as a ‘risk identifier’ rather than as a ‘case-identifier’. We constructed sum scores over the five mental health items (Cronbach’s $\alpha=.77$), after which the scores were linearly transformed to a scale ranging from 0 to 100, with high scores indicating better mental health (see Ware, 1993). Lower scores indicate less good mental health, i.e., mental illness.¹ The mental health score in the general Dutch population is normally distributed, but somewhat skewed to the left (mean 74.4, $SD=13.6$).

3.3. Work characteristics

To measure *work schedule*, respondents were asked if they had a paid job at the moment of the interview, and if so, how many hours they usually work each week. The numbers of working hours were categorised into three categories: working less than 21 h a week (which could be considered having a small part-time job), working 21 through 36 h a week (which is considered a large part-time job) and working more than 36 h a week (which is considered a full-time job). Table 1 shows that 33.8% of the respondents have a full-time job. A rather similar number of people (35.4%) hold a part-time job, either small or large. More qualitative aspects of one’s job were measured by three separate scales:

¹ Our aim is to study the consequences of social arrangements. The impact of such consequences is more likely to be continuous and generalized, with ranging severity, rather than discrete and specific (Horwitz, 2002). We therefore chose a continuous symptom scale which seems best suited to examine the consequences of social arrangements and the variation in well-being across groups (Aneshensel, Rutter, & Lachenbruch 1991; Horwitz, 2002). So in this study, mental illness and mental health are considered opposite poles of the same continuum. Different labels are used to qualify states of mind along the same continuum.

Table 1
Description of work and family characteristics (N=1007, SOCON 2000)

Variables	Proportion/mean score
Number of social roles	
No work, no children and no partner	5.6%
One role: children	4.6%
One role: partner	2.5%
One role: work	12.0%
Two roles: children and partner	18.0%
Two roles: work and children	3.3%
Two roles: work and partner	12.7%
Three roles: work, children and partner	41.3%
<i>Work characteristics</i>	
Work schedule: no job	30.8%
<21 h a week	12.8%
21–36 h a week	22.6%
>36 h a week	33.8%
Decision latitude	8.1 (±1.6)
Job pressure	10.8 (±2.6)
Skill discretion	3.6 (±1.0)
<i>Family characteristics</i>	
Having children: no children	32.9%
Children 0–4 years	14.2%
Children, 5–18 years	20.4%
Children >18 years living at home or not	32.5%
Time spent on household duties	20.5 (±19.6)
Having a partner: partner	74.4%
No partner	25.6%
Work schedule of partner: no job	30.7%
Working less than 21 h a week	12.9%
Working 21 through 36 h a week	19.9%
Working more than 36 h a week	36.5%
Time spent on household duties partner	25.3 (±21.2)
Work-to-family conflict	1.8 (±.5)
Family-to-work conflict	1.3 (±.4)

decision latitude, job pressure and skill discretion (Karasek, 1979). These three scales indicate different potentially stressful aspects of work. Factor analyses also showed that these three aspects of work are (moderately) related, yet distinct from each other. *Decision latitude* was measured by two items (e.g. “on my job I get to take part in decisions that affect me”, Cronbach’s alpha = .79). *Job pressure* was measured by three items (e.g. “I am asked to do excessive amounts of work”, Cronbach’s alpha = .86). In both cases, a new variable was constructed by summing up scores over all items. *Skill discretion* was measured by one single item in which the respondents were asked if their jobs required people to do repetitive tasks.

3.4. Family characteristics

To measure whether respondents *have young children living in the household*, we constructed a typology based on whether the respondents had children, whether children were living at home and the age of the youngest child living at home. Based on these variables we constructed a typology comprising four categories: no children, youngest child living in the household 0 through 4 years, youngest child living in the household between 5 and 18 years, and children older than 18 either living in the household or not. Of our sample, 67.1% stated they have children; 14.2% of the respondents had pre-school children aged between 0 and 4 years, and 22.6% had school-going children living in the household.

The *time spent on household duties by respondents* was measured in two steps for reasons of accuracy. First, people were asked how many hours a week they usually spent on household duties. Household duties were described as all

duties (like cleaning, doing groceries, laundry, gardening, house maintenance, finances, etcetera) with the exception of taking care of children. Next, people were asked how many hours per week they usually spent on their children. To calculate the total time people spent on household and family—besides work—the total number of hours was added. On average, people spend 20.5 h on household duties (including taking care of children). However, there is considerable variation in the time respondents spend on such family obligations ($SD=19.6$).

A dichotomy was constructed to measure whether people *have a partner* based on whether respondents stated to be married or co-habiting with a partner. The vast majority of those in our sample, 74.4%, have a partner. The *work schedule of the partner* and the *time spent on household duties by the partner* were measured as were the work schedule of the respondent and the time he or she spent on household duties. About 30.6% of the partners in our sample did not have a paid job. Of the partners who did have a job, 36.6% have a full-time job. Partners, on average spend 25.3 h on household duties ($SD=21.2$).

3.5. Control variables

As control variables we included gender (50.2% female) and the psychiatric history of the respondent in our analyses. The psychiatric history of the respondent may give us some clues about possible selection processes (Dohrenwend et al., 1992). Observed differences in mental health between people with or without a partner, for instance, may be due to prior episodes of mental illness. Having a partner may protect people from mental illness (protection effect), but in order to find a partner or maintain a stable relationship one may need to have good mental health (selection effect). Similar statements can be made with regard to having a job or being a parent. Waldron et al. (1996) provided evidence for both marriage protection and marriage selection effects. In order to make inferential statements about whether the nature of the relationship between social roles and mental health might be due to selection processes one needs longitudinal data, preferably panel data. However, in this study we used a cross-sectional data set. To make causal inferences on role occupancy and mental illness more grounded we took into account the former psychopathology of the respondent. A dichotomy was constructed to measure the psychiatric history of the respondent, based on the question as to whether the respondent had ever been treated by someone for mental health problems for three months or longer. Of our sample, 14.1% of the people reported a history of mental illness.

3.6. Intermediating variables: work–family conflict

Work–family conflict was measured by two separate scales, one indicating work-to-family conflict (WFC), the other indicating family-to-work conflict (FWC). We will distinguish between WFC and FWC, since conflicts between work and family are reciprocal in nature: work can interfere with family (work-to-family conflict) and family can interfere with work (family-to-work conflict) (Allen et al., 2000). The two types of work–family conflict have been shown to be distinct, yet related concepts, which have different antecedents and consequences (Frone, Russell, & Cooper, 1992; Grzywacs & Marks, 2000). Both WFC and FWC were measured by four items which were derived from the ‘Survey Work–Home Interaction—Nijmegen’ (SWING) (Geurts et al., 2005). WFC and FWC were constructed in similar ways by computing the mean score of the four items, when at least three items had valid scores (Cronbach’s alpha WFC = .76, FWC = .72). A more extended description of work and family characteristics described in this section can be found in Table 1.

3.7. Statistical analysis

We used multivariate regression analysis (Ordinary Least-Squares OLS) to test the hypotheses formulated. The effect of work and family characteristics on mental illness was tested in several steps to test different hypotheses. In order to draw conclusions about the potential differences between categories of respondents, three variables were dummified (Hardy, 1993): the work schedule of the respondents and their partner, and whether respondents had children living at home. To compare the relative weight of these dummified categorical variables with other variables, we constructed three so-called compound variables (Eisinga, Scheepers, & van Snippenburg, 1991). A compound variable is computed as the weighted sum of the previously estimated unstandardized regression coefficients of the dummies. Then, the model was estimated again, now with inclusion of the three compound variables. The direction of the parameters of these standardized compound variables cannot be interpreted meaningfully, since it is positive by definition as a consequence of the procedure. For the direction of the

parameters one needs to inspect the unstandardized regression coefficients. Age was not included in our analyses as a covariate because of its high correlation with the age of the youngest child living at home, which causes collinearity.

4. Results

4.1. Bivariate analyses: number of social roles and mental health

From Table 1 it can be seen that the majority of people in our sample combine several social roles (75.3%). Most of them, 41.3%, occupy all three social roles; they are employee, partner and parent at the same time. Among people who combine two social roles (34.0%) the combination of having a partner and children is most common. 19.1% of the respondents in our sample participate in one single role. The mean mental health of people with different social roles is described in Fig. 1. In this figure we view the quantity of social roles: the number of social roles a person occupies and people's mental health. As can be seen, the mean mental health scores increases as the number of social roles increases. People with only one social role report more mental illness than people with two or three social roles. This pattern is interrupted by single parents who work and at the same time take care of children. Combining work and family seems more difficult for these single parent families, possibly because they lack the support of a partner.

However, not having a job at all seems more detrimental for their mental health. Single parents without a job show even lower mental health scores. Their mean mental health scores are comparable to the health scores of people with the fewest social roles: people without children, work or a partner. People with the most social roles seem to have the best mental health. These results are in line with the role accumulation perspective: occupying multiple social roles seems positive for people's mental health.

4.2. Multivariate analyses: work and family characteristics

The quality of the experiences of each of these social roles was also examined. The characteristics of each of these social roles may be more important for one's mental health than occupying these social roles per se. Therefore, we considered how work and family characteristics are related to mental illness, controlled for by gender and the psychiatric history of the respondent.

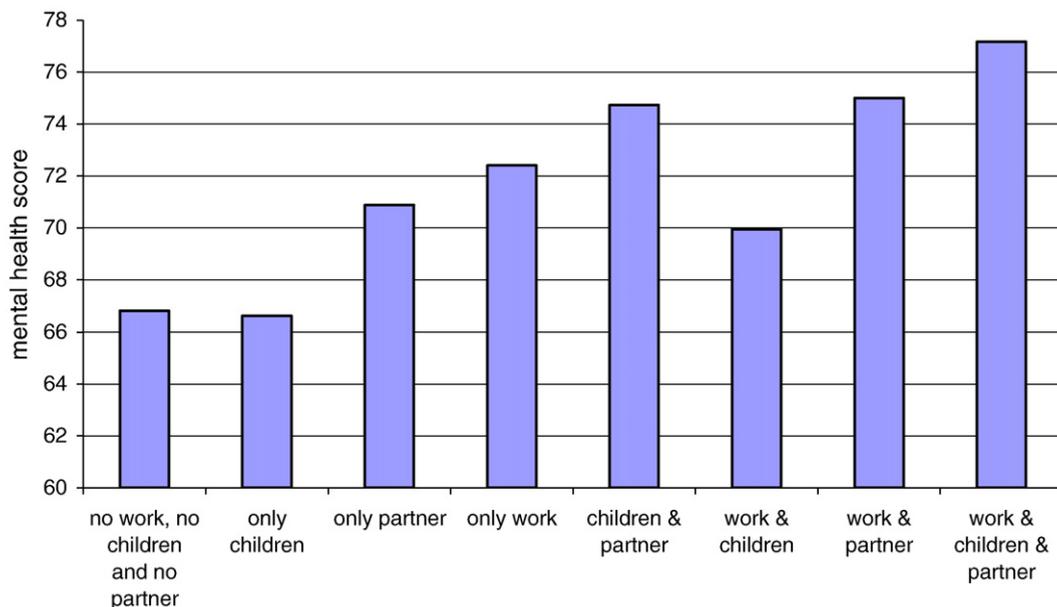


Fig. 1. Mean mental health score by the number of social roles.

Table 2

Unstandardized regression coefficients of work and family characteristics on mental health (models I through III), and work–family conflict (models IV and V) ($N=674$)

Model	Mental health			WFC	FWC
	Model I	Model II	Model III	Model IV	Model V
Constant	63.81	65.97	77.19	.78	1.35
Gender (male = ref.)	2.00	2.29~	1.10	-.03	-.08*
Psychiatric history respondent (never treated = ref.)	-8.20**	-7.92**	-6.36**	.12*	.20**
<i>Work characteristics</i>					
Work schedule (<21 h = ref.)					
21–36 h	1.18	.87	3.21*	.25**	.12**
>36 h	2.91~	-.74	6.12**	.46**	.14**
Decision latitude	.72*	.69*	.47~	-.02*	-.02**
Job pressure	-.29	-.33~	.19	.07**	.01*
Skill discretion	1.92**	1.96**	1.91**	.03	-.02~
<i>Family characteristics</i>					
Having children (no children = ref.)					
0–4 years	-.86	-3.08	-1.14	-.05	.03
5–18 years	.58	-.93	.99	.01	.10*
>18 years living at home or not	.52	-2.94	.67	.06	.02
Time spent on household duties	-.02	-.01	.02	.00	.01*
Having a partner (partner = ref.)	-4.00**	-4.43	-4.02**	-.07	.08~
Work schedule partner (no job = ref.)					
<21 h	1.14	1.18	.40	-.04	-.08~
21–36 h	.96	1.11	.86	.04	-.08~
>36 h	-.73	-.74	-.44	.06	-.02
Time spent on household duties partner	.06*	.07*	.07*	.00	-.00
<i>Interaction-terms</i>					
Work schedule by children					
21–36 h × 0–4 years		3.42			
21–36 h × 5–18 years		-.40			
21–36 h × >18 years		-.12			
>36 h × 0–4 years		2.86			
>36 h × 5–18 years		2.46			
>36 h × >18 years		7.65~			
Work schedule by partner					
21–36 h × no partner		-1.98			
>36 h × no partner		2.86			
Having children by partner					
0–4 years × no partner		-20.78*			
5–18 years × no partner		5.17			
>18 years × no partner		-.67			
<i>Intermediating variables</i>					
Work-to-family conflict			-5.74**		
Family-to-work conflict			-6.61**		
Adjusted R^2	.13	.14	.24	.22	.08

Significance level ** $p < .01$; * $p < .05$; ~ $p < .10$ (two-tailed).

Table 2 shows the unstandardized regression coefficients for five models. In the first model the work and family characteristics are related to mental health. Based on this model (model I) hypotheses 1 through 3 will be tested. In the second model (model II) interaction terms are included to explore possible interaction effects between work and family characteristics. Model III considers if WFC and FWC mediate the relationship between work and family characteristics and mental illness (*hypothesis 4*). Models IV and V show how work and family characteristics are related to WFC and FCW.

The results of model I indicate a weak, positive effect of having a full-time job and mental health. People with full-time jobs report better mental health than people with small part-time jobs, our reference category. The effect of having a larger

part-time job is not significant, meaning that it does not seem to matter for one's mental health whether one has a small or a large part-time job. Nevertheless, *hypothesis 1a* needs to be rejected. We hypothesized a negative impact of working longer hours on mental health. Our results indicate the opposite: working full-time seems related to better mental health. This finding may be (in part) due to selection-processes: people with less good mental health may have more difficulty in working longer hours a week and thus 'select' themselves into part-time jobs. Examination of the distribution of people with a prior history of mental illness by work schedule indeed shows that people who have been treated for mental complaints are underrepresented in full-time jobs and overrepresented in larger part-time jobs ($\chi^2 = 5.797$, $df = 2$). So, less healthy people select themselves into part-time jobs. However, after accounting for these past differences in mental health, the effect of work schedule remains significant as model I shows. So, although less healthy people select themselves into part-time jobs, it seems fair to say that working more hours promotes one's mental health.

When we look at other work characteristics, it can be seen that having higher decision latitude and higher skill discretion are both positively related to mental health. People who experience more control and who have more skill variety in their job, report better mental health. So, lower decision latitude and lower skill are related to mental illness. *Hypotheses 1c* and *1d* are therefore supported by our data, as opposed to *hypotheses 1b* on job pressure. Job pressure does not seem directly related to mental illness.²

When we look at family characteristics it can be seen that having children living in the household, irrespective of their age, is not related to mental health. The mental health of people with children does not significantly differ from the mental health of people without children. *Hypothesis 2a* needs to be rejected. *Hypothesis 2b* also needs to be rejected. The time people spent on household duties and child care is not related to mental illness.

As for the impact of the partner, it can be seen that people with no partner report more mental illness. The partner's work schedule however does not relate to the mental health of the other spouse. *Hypothesis 3a* therefore needs to be rejected. The time spent on household labour by the partner is associated with mental health. Those whose partner spends more time on household duties report better mental health. So, having a partner who spends less time on household duties is related to mental illness. *Hypothesis 3b* is supported.

To summarize, aspects of work that are related to good mental health are: having a full-time job, a job which requires a variety of skills and provides opportunity to exercise control over the work process. As for family characteristics, having a partner and a higher contribution of the partner to household duties are also found to be related to good mental health. All of these characteristics of work and family are relevant to people's mental health. To compare the relative weight of these characteristics we looked at the standardized regression coefficients or beta's (see [Table 3](#)).

Of the work and family characteristics we studied, work schedule seems most decisive for mental health ($\beta = .19$), followed by another job characteristic: skill discretion. Somewhat less decisive is having a partner and the contribution of the partner to household labour. The decision latitude in one's work is ranked last of the significant predictors of mental health. Although the additional variance explained by both sets of predictors seems relatively small, work characteristics seem more important for one's mental health than family characteristics. Yet, some aspects of work are more important for good mental health than others.

4.3. Interaction between work and family characteristics

To explore whether occupying certain social roles serves as a buffer for the impact of other social roles on people's mental health we added several (two-way) interaction terms, as can be seen in model II ([Table 2](#)). Significant interaction parameters indicate that the effect of a certain variable has differing effects on mental health, depending on the level of the interacting variable.

If we look at the interaction parameters of work schedule by the age of the youngest child living at home, one of the parameters is significant. This indicates that the effect of work schedule on mental health varies between categories of people. Having a full-time job seems beneficial for the mental health of people with adult children. People with adult children and full-time jobs report significantly less mental illness than people without children who hold small part-time jobs (reference category). Other interaction parameters fail to reach significance. So, people with pre-school children and a full-time job do not report more mental illness than the reference category. Yet, the effect of work

² Some studies have reported the effect of job pressure to be dependent on the level of decision latitude. To test this possibility we included an interaction term into our model (analyses not shown here). No significant interaction effect of job pressure and decision latitude however was found in our data. De Lange et al. (2003) also concluded, after reviewing forty-five longitudinal studies, that multiplicative interaction effects are rare.

Table 3

Standardized direct effects (beta's) of work and family characteristics on work-to-family conflict, family-to-work conflict and mental health ($N=674$)

Model	Mental health	Work-to-family conflict	Family-to-work conflict
Gender ^a	.04	.03	.11*
Psychiatric history respondent ^a	.18**	.08*	.19**
R^2 change	.03**	.01~	.04**
<i>Work characteristics</i>			
Work schedule ^a	.19**	.32**	.15**
Decision latitude	.06~	-.07*	-.11**
Job pressure	.04	.33**	.08*
Skill discretion	.16**	.05	-.07~
R^2 change	.06**	.20**	.03**
<i>Family characteristics</i>			
Having children ^a	.06	.06~	.10*
Time spent on household duties	.03	.09~	.14**
Having a partner ^a	.14**	.05	.09*
Work schedule of partner ^a	.04	.07	.09*
Time spent on household duties partner	.11**	.04	-.06
R^2 change	.04**	.02*	.03**
<i>Intermediating variables</i>			
Work-to-family conflict	-.25**		
Family-to-work conflict	-.19**		
R^2 change	.11**		
Adjusted R^2	.24	.23	.09

Significance level ** $p < .01$; * $p < .05$; ~ $p < .10$ (two-tailed).^a Compound-variables.

schedule on mental health varies depending on the age of the youngest child living in the household, since the mental health of people with adult children benefits from having a substantial job.

The effect of work schedule on mental illness does not vary depending on whether one has a partner. Both interaction parameters fail to reach significance. Excluding both parameters from the model also does not lead to a significant loss of explained variance.

If we look at the interaction parameters of having (young) children and having a partner, again one of the parameters is significant. This indicates that the impact of having young children on mental health depends on whether one has a partner or not. Particularly single parents with pre-school children suffer more from mental illness compared to the reference category of people with no children, but who do have a partner.³ No significant differences were found for people with school-going children or grown children. So, when children are young and do not go to school it seems very demanding to be a single parent. When children go to school, demands seem to decrease, which benefits the parent's mental health. Having a partner around reduces the demands of parenting, specifically with pre-school children.

4.4. Work–family conflict

In order for work–family conflict to be able to mediate the relationship between work and/or family characteristics and mental health, work and family characteristics first of all need to be related to WFC and FWC. Second, WFC and FWC need to be associated with mental illness. Finally, the impact of work and family characteristics on mental illness needs to be reduced to an insignificant level, for WFC and FWC to be (full) mediators.

In models IV and V (Table 2) work and family characteristics are related to WFC and FWC. Antecedents of WFC are mainly aspects of one's work situation: work schedule, decision latitude, job pressure and whether one has been treated

³ Choosing different reference categories gave similar results: Single parents with young children living in the household consistently report higher levels of mental illness.

Table 4
Overview of hypotheses and their support

Hypotheses	Support
<i>Work characteristics</i>	
H1a Working more hours	Rejected
H1b Higher job pressure	Rejected
H1c Lower decisional authority	In accordance with hypothesis
H1d Lower skill discretion	In accordance with hypothesis
<i>Family characteristics</i>	
H2a Younger children living in the household	Rejected
H2b Spending more time on household duties	Rejected
H3a Partner who works more hours	Rejected
H3b Partner who spend less time on household duties	In accordance with hypothesis
<i>Intermediating perceptions on work–family interface</i>	
H4 Perception of work–family conflict	Partly rejected, partly in accordance with hypothesis

for mental health problems. Work schedule ($\beta = .32$) and job pressure ($\beta = .32$) are particularly important predictors for work-to-family conflict (see Table 3). People with either a large part-time job or a full-time job report more work-to-family conflict than people with small part-time jobs. Also, higher job pressure and lower decision latitude are associated with more work-to-family conflict. Predictors of FWC can be found in both the work and family domain: work schedule, decision latitude, job pressure, but also having children aged between 5 and 18 years, the time people spent on household duties and whether one has been treated for mental health problems. Having a partner, the partner's work schedule, and skill discretion, are variables that show rather weak effects on FWC. Furthermore, FWC seems more difficult to predict than WFC: although a larger number of antecedents have been identified compared to WFC, these predictors explain a smaller proportion of the variance of FWC.

Next, WFC and FWC are both negatively related to mental health. By including WFC and FWC into our model (model III, Table 2), the total variance explained increases from 13% to 24%, meaning that these two variables themselves contribute to the explanation of variation in mental health scores. People who feel that their work interferes with their family situation or their family situation interferes with their work report more mental illness. This leaves us with the question as to whether work–family conflict mediates the relationship between work and family characteristics and mental illness. The answer to this question seems to be mixed.

When work–family conflict is accounted for (model III, Table 2), the parameter of having a full-time work schedule is not reduced to an insignificant level, which we would expect when work–family conflict acts as a mediator. On the contrary, the effect increases. The effect of having a large part-time job also increases and even turns significant ($p < .05$). So, by controlling for WFC and FWC, the relationship between work schedule and mental illness becomes stronger. Working more hours a week is positively related to mental health, but at the same time working more hours is also related to more work–family conflict, which affects one's mental health negatively. Work–family conflict in this case both mediates and suppresses the relationship between work schedule and mental health. A similar mechanism can be seen in those who have a partner. The absence of a partner is related to mental illness. At the same time, the absence of a partner is also associated with less family-to-work conflict, which in turn is positive for one's mental health.

In case of decision latitude and having a psychiatric history, work–family conflict in part mediates the reported relationship with mental illness. The estimated parameters both decrease by including work–family into the model, yet they remain significant. In these cases, *hypothesis 4* cannot be rejected. People with more control in their work feel less conflict between work and family in part because of this they report less mental illness. People who have been treated for mental health problems also report more mental illness, in part due to more conflict between work and family. This indicates that people who have been treated for mental health problems may have more difficulty in successfully combining work and family. For three of our work and family characteristics, work–family conflict does not mediate the reported relationship with mental health. The estimated effects of skill discretion, having a partner or the time spent on household duties by the partner seem unaffected by including work–family conflict into the analyses. In these cases, *hypothesis 4* needs to be rejected. Table 4 synthesizes our results.

5. Conclusions and discussion

In this article we studied the impact of occupying multiple social roles on people's mental health based on two alternative theoretical perspectives. The *role accumulation perspective* predicted positive mental health effects of combining multiple social roles, while the *role strain perspective* predicted negative effects. To test which of these perspectives is supported most, we analysed several work and family characteristics with data from a large, representative sample of Dutch people. Both the number of social roles as well as qualitative aspects of work and family were related to the mental health of men and women.

Of the *work characteristics*, having a full-time job was found to protect people from mental illness. People who work more hours reported better mental health. Of all the characteristics of both work and family we studied, work schedule seemed most decisive for one's mental health. Having a full-time job is therefore considered to be a valuable resource, from which women may especially benefit. Having a full-time job implies a higher contribution to the household income, which in turn was found to be associated with more power within relationships (Shelton & John, 1996). This power can be employed to negotiate the division of household labour between partners and arrange more equality in the distribution of household duties between partners (Glass & Fujimoto, 1994; Menaghan & Parcel, 1990; Rosenfield, 1999; van der Lippe, 1993). A shared responsibility in household labour promotes mental health in both women and men (Härenstam & Bejerot, 2001). In the Netherlands, there seems to be a consistent trend towards a more equal division of paid and unpaid labour between men and women. Still, women continue to take on the majority of household labour (SCP, 2006). Other work characteristics that were found related to good mental health were high decision latitude and high skill discretion. Job pressure was not associated with mental illness. So, having a job seems to protect one from mental illness, but some jobs protect better than others. Jobs with low authority and self-directedness over one's tasks and low variety in skills put people at risk for mental illness.

Although we used cross-sectional data to study the impact of multiple social roles, we did account for a possible prior history of mental illness. This allowed us to examine whether the positive relationship between work schedule, job and mental health, was (in part) due to health-based selection processes. One could state that in order to have a full-time job, one needs to have good mental health. Our results showed that although people with a prior history of mental illness in part select themselves into part-time jobs, working more hours does promote one's mental health. The effect of work schedule remained significant after accounting for past mental health problems. These results are in line with other studies which reported (small) selection effects in addition to protection effects (Fokkema, 2002; Laitinen-Krispijn & Bijl, 2002; Nordenmark, 2002).

The impact of *family characteristics* on one's mental health seems to a large extent determined by the presence of a partner and his/her contribution to the household. The actual time the partner is at home does not seem to matter, but rather the partners' contribution to household labour and child care. Whether or not the partner works long hours, having a partner who contributes less to the household duties was related to individual mental illness. This study thereby supports earlier findings by Geurts et al. (1999) and Roxburgh (1997). Having a partner is a valuable resource, but at the same time may also reduce an individual's mental health, depending on the partner's resources. One's own time spent on household labour and child care was not found to be associated with mental illness, nor did having young children at home. Possibly, not the actual amount of time spent on household duties and child care matter for one's mental health, but rather the allocation of household labour between partners: the perceived equity in the distribution of household labour and responsibilities between partners (Glass & Fujimoto, 1994). Having a (supportive) partner seems a more valuable resource than having children.

In addition to the effect of specific roles and role characteristics on mental health, we studied the interaction effects of role combinations. Our exploratory analyses showed that the mental health of people with adult children benefits from having a full-time job. A full-time job therefore seems an effective strategy to overcome the empty-nest syndrome. We found no support for the claim that having a full-time job in combination with having young children was harmful for one's mental health. Having pre-school children, however, did seem harmful for single parents. When children are young, it seems very demanding to be a single parent. As children go to school, demands seem to decrease and this benefits the parents' mental health. The effect of work schedule on people's mental health did not vary by having a partner. One's mental health seems to benefit from having a full-time job, irrespective of whether people have or do not have a partner. People who occupy either role experience a significant health benefit, but there seems little additional health benefit from occupying both roles. This indicates that these resources may compensate for each other.

Our conclusions on the differential effects of work, parenting and partners need to be treated with care. Because of a lack of statistical power due to a still limited number of observations, we cannot conclude firmly from these analyses. A larger sample would provide a more definite test of our findings.

Besides the question as to which of the characteristics in work and family put people at risk for mental illness, we studied whether the relationship between work and family characteristics and mental illness was mediated by perceptions of conflict between work and family. Our findings show that work-to-family conflict and family-to-work conflict can be considered antecedents of mental illness. People who found it more difficult to balance work and family report more mental illness. This finding is consistent with findings reported by other studies such as Frone et al. (1992) and Kinnunen, Geurts, and Mauro (2004). Work-to-family conflict was triggered mainly by aspects of work, whereas the perception of family-to-work conflict was triggered by aspects of both work and family. The claim by Frone et al. (1992) that antecedents of work-to-family conflict can be found mainly in the work domain, and antecedents of family-to-work conflict mainly in the family domain therefore was only partially reproduced by our findings. Our results as to whether work–family conflict acts as a mediator between work and family characteristics and mental illness were mixed. Some of the reported relationships between work and family characteristics and mental illness could partially be explained by the perception of work–family conflict. In some cases we found both mediating and suppressing effects of work–family conflict. None of the reported relationships could be fully interpreted by perceived work–family conflict.

This study provided support for both of the theoretical perspectives we tested. In favour of the role accumulation perspective were our findings that a substantial job and having a partner both relate to good mental health. Yet, there seems no additional mental health effect of having a partner once people have a substantial job. As for being a parent, having a partner seems especially beneficial for one's mental health for those who have pre-school children, whereas having a full-time job seems beneficial for one's mental health when having adult children. Mental health differences between people with school-going children with or without a partner, with a part-time or full-time job, were small and non-significant. This latter finding contradicts the role accumulation perspective.

In line with the role strain perspective were our findings that having a job with low decision latitude or low skill discretion, and having a partner who contributes less to the household duties were related to mental illness. So, more social roles do not necessarily increase mental health, it depends on the characteristics of the social role. When studying the impact of multiple social roles the focus should be on qualitative aspects of the social roles people hold instead of just counting the number of social roles. For some people, combining work and family seems more beneficial for their mental health than for others, depending on the characteristics of one's work and family situation. However, the general image of combining work and family as a burden certainly needs to be adjusted. The formal arrangements recently offered by the Dutch government which should enable employees to better coordinate their work and family obligations no doubt provide benefits. Yet it seems rather early to conclude as to their effectiveness. Many employees do not use available work–home arrangements (Dijkers, Geurts, den Dulk, Peper, & Kompier, 2004). According to recent numbers only three out of ten—mainly more highly educated—employees use parental leave (SCP, 2006). Also, more highly educated employees use formal child care, while employees with less education and employees from ethnic minorities mainly use informal child care like family and friends. This may be due to unfamiliarity with available arrangements and poor communication between employers and employees about the institutionalised work–family policies. However, it may also have to do with perceptions of people about good parenting, being a good employee and corporate cultures. Despite the availability of formal access to work–home arrangements, such perceptions may undermine the utilization and thus the effectiveness of Dutch work–family policy.

The aim of this article was to identify work and family conditions which are related to mental illness for the general Dutch population. One of the issues that may deserve additional attention is the possible gender differences. Our results showed that some resources seem more valuable than others. Possible gender differences may play a role here. Some resources may be more protective for women's mental health than for men's. Combining work and family may be more burdensome for women than for men, as some studies have already suggested (Nordenmark, 2002). This may also have to do with the meaning men and women attach to occupying certain roles (Simon, 1995). As stated earlier, different perceptions of social roles of men and women may impede the good intentions of the Dutch government to facilitate a better coordination of work and home obligations. Future research should therefore focus more on the potentially different vulnerability of men and women, but also of people with different educational levels or from different ethnic backgrounds.

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