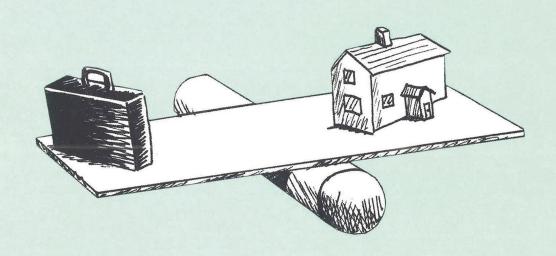
## Saija Mauno

# Job Insecurity as a Psychosocial Job Stressor in the Context of the Work-Family Interface





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Esitetään Jyväskylän yliopiston yhteiskuntatieteellisen tiedekunnan suostumuksella julkisesti tarkastettavaksi yliopiston Villa Ranan Blomstedt-salissa marraskuun 20. päivänä 1999 kello 12.

Academic dissertation to be publicly discussed, by permission of the Faculty of Social Sciences of the University of Jyväskylä in the Building Villa Rana, Blomstedt Hall, on November 20, 1999 at 12 o´clock noon.



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## **ABSTRACT**

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Diss.

The purpose of this study is to investigate the work-family interface among Finnish employees and dual-earner-couples within the framework of stress theory. The effects of various stressors, job insecurity in particular, on occupational, overall and family well-being are the main interests of the study. Besides job insecurity, a number of other stressors hypothesized to affect the work-family interface and well-being are studied, e.g., time pressures at work, job control, leadership relations, work-family and family-work conflict, number of children, employment status of a spouse. The study was a part of a broader longitudinal research project "Job Insecurity and Well-Being" which was conducted among four organizations in Central Finland during the years 1994-1998. The data were collected via structured questionnaires, which were delivered in three stages. In the first stage (1995) 636 employees, in the second stage (1996) 518 employees, and in the third stage (1997) 590 employees working in the organizations answered the questionnaire. This study utilized both cross-sectional and longitudinal data sets collected during the research project. Three main findings emerged. First, it turned out that job stressors negatively affected family well-being either directly or indirectly via occupational and overall well-being. Second, the particular psychosocial job stressor focused in this study, job insecurity, was found to be a relatively stable stressor, and consequently, an important precursor of different stress responses in terms of reduced well-being. Third, stressors encountered in the family domain (e.g., a high number of children, family-work conflict) were also found to be related to the interference from family to work and well-being. In sum, the findings indicate that work and family domains are not separate but rather related in several ways among Finnish male and female employees. As a conceptual conclusion, it is suggested that the conceptualization and measurement of two specific constructs, i.e., the work-family interface and job insecurity, need more attention in the future. On the basis of these empirical findings some implications for policy are also proposed. For example, in order to enhance occupational, overall and family well-being greater attention should be paid to job stressors, e.g., by alleviating severe pressures of time at work and by improving the quality of human relations in organizations. Furthermore, professionals should take measures targeted to decrease the negative effects of job insecurity on wellbeing.

Keywords: work-family interface, job insecurity, job stressors, well-being

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### LIST OF PUBLICATIONS

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- III Mauno, S., & Kinnunen, U. (1999). Job insecurity and well-being: A longitudinal study among male and female employees in Finland. Community, Work & Family, 2, 147-171. https://doi.org/10.1080/13668809908413938
- IV Mauno, S., Leskinen, E., & Kinnunen, U. (1999). Multi-wave, multi-variable models of job insecurity: Applying different scales in studying the stability of job insecurity. Submitted for publication. https://doi.org/10.1002/job.122

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#### 1 INTRODUCTION

## 1.1 Current research issues in the work-family interface

Research on the work-family interface during the last few decades has proliferated enormously, although the topic has been studied since the 1920s (see e.g., Hoppock, 1935; Parsons, 1959). The major reason for this growing interest in work-family issues is related to the fact that the proportion of women in the workforce has increased in many Western countries, and in Nordic countries in particular (Employment in Europe, 1996; Hantrais & Letablier, 1996; Kandolin, 1997; Kauppinen & Gordon, 1997).

Women's employment, with its demands on time, commitment and energy, has traditionally been regarded as a more problematic issue for family functioning than employment among men. This view has much in common with gender theories generally (see e.g., Rosenblatt, Talmud & Ruvio, 1999; Simon, 1992; Witz, 1990), which assume that gender has a substantial effect on both family and working lives. Among other things, gender theories suggest that women are more involved in family life and domestic duties, whereas men tend to place a greater value on employment, i.e., they see themselves as the main breadwinners in the family. Hence, the entry of women into the labor market has been regarded as problematic with regard to organizing family life. However, there have been some changes in gender norms during the last two decades. For example, men are nowdays more involved in family life and take part in the care and upbringing of children (see Doherty, Kouneski & Erickson, 1998; Huttunen, 1994). Thus, if both growing employment among women and the increasing interest being shown by men in family issues are taken into account, then it is justifiable to assume that the work-family interface nowdays concerns both genders more or less equally.

The fact that the majority of researchers also broadly agree that work and family lives are interrelated in the case of both sexes, also encourages the study of

work-family issues among men. However, despite this general agreement, which is in line with gender theories, a number of researchers have nonetheless found stronger links between work and family life for women than for men (Frone, Russell & Cooper, 1992; Gutek, Searle & Klepa, 1991; Duxbury, Higgins & Lee, 1994). The basic finding has repeatedly been that work experiences affect family life and vice versa equally among both sexes. Consequently, the view that there is mutual interaction between work and family life regardless of gender (see e.g., Barnett, 1997; Barnett & Brennan, 1997; Milkie & Peltola, 1999) was the starting point in my investigation, which was targeted at gaining further insights into the work-family interface among Finnish male and female employees and dual-earner couples.

Studies on the work-family interface have quite often focused on the negative effects of work or family domain factors on occupational, overall or family well-being. By and large, this has occurred because work-family research is, finally, reducible to the problem-focused paradigm formulated in general stress theories (e.g., Cox, 1983; Friedman & DiMatteo, 1989; Kasl, 1983; McGrath, 1970; Sarafino, 1990). This basic paradigm suggests that certain environmental factors or life events can operate as stressors, leading to various negative effects on an individual's well-being. For example, difficulties in human relations, e.g., with work colleagues or family members, may result in both decreased occupational and family well-being.

It has also to be noted that many previous studies on the work-family interface have sought to specify the effects of work domain stressors on family well-being (for a review see Menaghan & Parcel, 1990; Spitze, 1988; Swanson, 1992), whereas the impacts of family stressors on the work realm have received only limited attention (Bjoenberg, 1998; Crouter, 1984; Frone et al., 1992; Frone, Yardley & Markel, 1997). This, in turn, has probably occurred, because as the linkages between work experiences and family functioning have generally been examined from the viewpoint of work; hence work stress theories (e.g., Cooper & Marshall, 1976; Murphy, 1995) have usually been utilized in researching the work-family interface.

However, quite recently work-family researchers have realized that job stressors explain a relatively small proportion of family well-being. This has encouraged them to examine the possibility of indirect effects, i.e., mediating processes, meaning that stressors may first affect negatively well-being in the particular domain where the stressors are encountered (e.g., work); second, this reduced well-being impairs well-being in another sphere of life (e.g., the family) (see Higginbottom, Barling & Kelloway, 1993; Warr, 1987). My investigation, too, largely followed the tradition of work stress theories, signifying that the focus has been on the direct and indirect links between a variety of job stressors, job insecurity, in particular, and occupational, overall and family well-being.

The contribution of my study leans on three particular issues. *First*, I did not limit my study solely to the work-family experiences of an individual employee, but I also examined the experiences of dual-earner couples allowing to find out whether individual experiences are transmitted between couples. *Second*, I focused on a specific job stressor, which has been a relatively under-investigated in previous studies, that is, job insecurity. As a consequence of the severe

recession experienced in Finland in the early 1990s, job insecurity was clearly an important topic. Our umbrella research project "Job Insecurity and Well-Being" (Nätti, Kinnunen, Mäkinen, Loikkanen, Mauno & Virolainen, 1995; Happonen, Mauno, Kinnunen, Nätti & Koivunen, 1996; Happonen, Mauno, Nätti, & Kinnunen, 1998) conducted in different organizations during the period 1994-1998 enabled me to utilize valuable longitudinal data on job insecurity. Consequently, the *third* contribution of my study is related to the use of a longitudinal data design, which provides more reliable information on the prospective relationships between the phenomena studied.

### 1.2 Theoretical models on the work-family interface

In the literature on the work-family interface, five basic models describing the links between work and family can be distinguished, i.e., the compensation, segmentation, instrumental, spillover, and conflict models (see Barling, 1990; Crouter, 1984; Lambert, 1990; Zedeck & Mosier, 1990). Generally, in each of these models it is suggested that work and family lives affect each other, and most often in such a way that work has a greater effect on family life than vice versa.

Defined specifically, the *compensation* theory states that experiences in different spheres of life are usually completely opposite, for example, if work roles are unsatisfactory, there is greater investments in satisfaction linked to family roles. According to the *segmentation* theory, work and family environments are separate spheres, segregated by time, space and tasks. Finally, the *instrumental* theory assumes that by a role in one domain is utilized to gratify a role in another domain. However, in current research, these three models have largely been rejected, and research has generally been carried out according to the conflict and spillover models. In line with this trend, I too have concentrated on the conflict and spillover frameworks.

The very popular *conflict* theory (Barling, 1990; Greenhaus & Beutell, 1985; Frone et al., 1992; Frone et al., 1997; Kossek & Ozeki, 1998), suggests that satisfaction or success in one domain of life requires some sacrifices in another domain, meaning, for example, that family life may suffer at the expense of enormous investment in career progression. Greenhaus and Beutell (1985) have taken the view that work-family conflict may occur when an individual has to perform multiple roles: worker, spouse, and in many cases parent. To be performed adequately, each of these roles requires time, energy, and commitment. More specifically, Greenhaus and Beutell have distinguished time, strain- and behavior-based conflict. Accordingly, in time-based conflict, time requirements, e.g., long working hours, related to one role interfere with another role. In strain-based conflict strain symptoms experienced in one role hinder performance in another role, and finally in behavior-based conflict behavioral styles used in one role are incompatible with the behaviors expected in another role.

The cumulative demands of multiple roles can result in two types of conflict: interference from work to family as well as interference from family to work (Duxbury et al., 1994; Gutek et al., 1991; MacEwen & Barling, 1994). Interference or *conflict from work to family* arises when work activities impede performance of family responsibilities, whereas *conflict from family to work* occurs when family-role requirements hinder performance at work. To give examples, the former type of conflict occurs when work schedules interfere with family related activities, whereas the latter type of conflict is in question when child care responsibilities hinder work related activities.

In the late 1980s, researchers began to examine the work-family interface on the basis of the *spillover* model (Barling, 1990; Crouter, 1984; Lambert, 1990), assuming that work and family lives interact because of the similarity of the experiences in these two domains of life: positive or negative emotions, attitudes, skills and behaviors experienced in one domain of life spill over into the other domain of life. Simultaneously, when adopting the spillover view, researchers also recognized the necessity of studying the work-family interface among dual-earner and dual-career couples (Izraeli, 1989; Swanson, 1992; Zedeck, Maslach, Mosier & Skitka, 1989). One reason for focusing more on two-providers' families is linked to the increasing prevalence of these types of households (see e.g., Bonney, 1988; Menaghan & Parcel, 1990). Naturally, in dual-earner/career families the work-family interface concerns not only the individual employee but both partners equally.

Specifically, the experiences of the work-family interface between dual-earner couples have been defined as *crossover*, meaning that (work) stress and strain experienced by one partner affect the behavior and well-being of the other (Bolger, Delongis, Kessler & Wethington, 1989; Jones & Fletcher, 1993; 1996; Pittman, Solheim & Blanchard, 1996; Westman & Etzion, 1995; Westman & Vinokur, 1998). Yet, defined more simply, crossover might be seen as a relatively similar process to spillover with one exception; spillover describes the work-family interface from the viewpoint of the individual employee, whereas in crossover the work-family interface experiences of two dependent individuals, that is, dual-earner partners, are in focus, which also entails that the transmission of the experiences between the couples is brought under examination.

Altogether, the different theories used to describe the work-family interface are considered to compete with each other in some degree, even though Lambert (1990) has argued that each of the theoretical models contributes to understanding the work-family interface. Moreover, from the practical viewpoint, it is very likely, for example, that both spillover and compensation will be experienced simultaneously (Staines, 1980). However, despite the different theoretical approaches adopted in examining the work-family interface, an agreement concerning one fundamental issue has been reached; work and family lives are no longer regarded as separate spheres of life for either women or men. This conclusion implies that some theoretical models in investigating the work-family interface have had to be abandoned (e.g., segmentation) by researchers.

In sum, it might be argued that the theoretical emphasis of work-family interface research relies primarily on negative experiences, i.e., on taking a problem-focused view. Consequently, empirical research - including my study -

on the work-family interface has tended to concentrate on negative experiences; conflict or spillover views have been the most frequently used. I consider that the adoption of the problem-focused approach in studying work-family issues arises from the fact discussed already; ultimately, the psychological research in this field can be reduced to the basic paradigm of stress theories. In consistent with the stress theory paradigm, in many empirical studies investigating the work-family interface, irrespective of which theoretical model has been chosen, the fundamental aim has been the same: to reveal those factors, i.e., stressors, which interfere with work-family interaction.

## 1.3 The work-family interface in the context of work stress theories

#### 1.3.1 Psychosocial job stressors

Job stressors affecting the work-family interface may be divided to structural (objective) and psychosocial (subjective) stressors (Barling, 1990). Previous studies on the work-family interface conducted in the 1970s and 1980s have focused primarily on structural job stressors, usually approaching the subject from a conflict standpoint. However, researchers in the 1990s have concentrated more on examining the subjective experiences of work, and generally within the framework of spillover theory. In the line with this current trend, subjective evaluations of psychosocial job stressors were also emphasized in my investigation.

Structural job stressors are primarily associated with time-related issues, determining the amount of time an employee spends on work-related activities. Specifically, the scheduling of which days are worked and the scheduling of the hours worked each day (i.e., shift work) are involved in this category (Barling, 1990). Furthermore, job-related mobility (commuting) is also considered as a stressor of this kind. Psychosocial job stressors, in turn, specify the content of work and subjectively experienced processes linked, for example, to human relations at work, and to psychological work characteristics, for example, job autonomy, job insecurity or time demands (see Caplan, 1985). More specifically, Murphy (1995) has classified psychosocial job stressors into five broad categories as follows: factors intrisinc to the job (e.g., workload, autonomy), role in the organization (e.g., role conflict, work-family conflict), career development (e.g., over/under promotion, job security), relationships at work (e.g., supervisors, coworkers), and organizational structure or climate (e.g., management style).

Of the above psychosocial job stressors (see also French, Caplan & Harrison, 1982; Marshall & Cooper, 1979), only those which were relevant to my investigation, i.e., job insecurity, (poor) leadership relations, (low) job autonomy, time pressures at work and work-family conflict, are discussed further. Moreover, because job insecurity - defined often as the threat of job loss - was of especial interest, the concept and related empirical findings are introduced in greater detail in Chapter

1.4.

Job autonomy and time pressures at work have usually been seen in the terms of Karasek's (1979; Karasek & Theorell, 1990) widely studied idea of job strain, according to which highly stressful jobs are characterized by high demands and low control. *Job autonomy or control* over one's work refers to task authority, which involves the employee's freedom to determine how work gets done, setting one's own work goals and using one's skills at work, and having a contribution to decision making. *Time pressures at work*, in turn, can be defined as having too much to do in a limited amount of time. *The quality of leadership relations* encompasses, for example, an employee's relationship with his/her supervisors, and in particular both the quality and the quantity of supervisory support.

#### 1.3.2 Work-family and family-work conflict as psychosocial stressors

It needs to be pointed out, too, that work-family conflict, which basically means that work and family lives interfere with each other, has been considered as a sort of dual-variable: on the one hand it has been examined as a psychosocial job stressor or precursor (Frone et al., 1992; Frone, Russell & Barnes, 1996; Leiter & Durup, 1996; MacEwen & Barling, 1994; Marshall & Cooper, 1979; Matthews, Conger & Wickrama, 1996), and on the other hand as an outcome factor or stress response explained by other job stressors (Aryee, 1992; Judge, Bourdeau & Bretz, 1994; Loerch, Russell & Rush, 1989; Thomas & Ganster, 1995). For example, structural job stressors have been investigated relatively often as precursors of work-family conflict. These studies, carried out mainly in the 1980s, have indicated that working-time related issues, e.g., shift work, irregular working hours, cause work-family interference for many employees (e.g., Burke, Weir & DuWors, 1980; Hertz & Charlton, 1989; Jackson, Zedeck & Summers, 1985; Staines & Pleck, 1984). This interference occurs because employment hinders an individual from spending his/her time (i.e., time-based conflict) in family-related activities, which in turn may interfere, for example, with marital well-being (Barling, 1990; 1994, Gutek et al., 1991).

Although my study concentrates primarily on the links between job stressors and the work-family interface, the structural and psychosocial stressors encountered in the family domain will also cause interference from family to work and affect subjective work experiences. Researchers have commonly defined this phenomenon as *family-work conflict* (Frone et al., 1992; 1996; 1997a; Netermeyer, Boles & McMurrian, 1996) or family *spillover* into work (Crouter, 1984). Generally, the mechanisms according to which family stressors affect work are largely identical to those in the case of work-family conflict (i.e., time-, behavior-, energy-based conflict) or work spillover into family life (i.e., affects, emotions and attitudes evoked by family life spill over into work). If on the other hand family requirements, demands on time, commitment and energy, are too overwhelming various kinds of negative experiences are likely to follow, spilling over into the work domain.

Structural family stressors, i.e., factors linked to time-related family

activities, have been investigated quite frequently as the antecedents of family-work conflict. For example, the presence of children, especially preschool children, and spouses's high employment status, have been found to increase interference from family to work (Aryee, 1992; Greenhaus & Beutell, 1985; Loerch et al., 1989). Hence, even "normal" parenting can be considered as a stressful experience (Bjoenberg, 1998; Crnic & Greenberg, 1990; Deater-Deckard & Scarr, 1996; Lundberg, Mårdberg & Frankenhaeuser, 1994; Rodd, 1993), causing increased interference from family to work. Consistent with this, Galinsky, Bond and Friedman (1996) have recently indicated that parents perceive more workfamily interference, more stress and less effective coping in comparison to non-parents.

In parallel with work-family conflict, conflict from family to work has also been regarded as a dual-variable and in many studies it has been operated both as a precursor (or mediator) and an outcome factor (e.g., Adams, King & King, 1996; Duxbury & Higgins, 1991; Frone et al., 1992; Parasuraman, Purohit, Godshalk & Beutell, 1996). Consequently, some attempts have been made to integrate this dual-variable view into one combined model. For example, Frone et al. (1997a) have developed an integrative theoretical model in which work-family and family-work conflict are in fact defined both as an antecedent and an outcome factor. Specifically, in this model work (e.g., work overload) and family (e.g., family overload) stressors are assumed to predict a negative work-family interface, which, in turn, has a negative effect on well-being in terms of impaired work and family performance (see also Parasuraman et al., 1996). In my investigation, too, work-family and family-work conflict were considered both as predictive factors (i.e., stressors) which may affect well-being as well as outcome factors that are explained by other, particularly structural, stressors.

#### 1.3.3 Direct and indirect stress responses

For several past decades researchers have investigated how psychosocial job stressors affect *occupational* (e.g., work motivation, job satisfaction, burnout, strain symptoms, anxiety at work), and *general* (e.g., physical or mental health) *well-being* (see e.g., French et al., 1982; Hackman & Oldham, 1980; Hurrell & Murphy, 1992; Karasek & Theorell, 1990; Maslach & Jackson, 1981; Warr, 1990).

More specifically, of the stressors included in my study, it has earlier been indicated that working conditions which provide a low degree of autonomy can constitute an increased health risk for employees (Gaillard & Wientjes, 1994; Karasek & Theorell, 1990; Repetti, 1993; Theorell & Karasek, 1996) and that high work pressures (e.g., time shortages), work load, and schedule considerations are significantly linked to emotional exhaustion and burnout (Dekard, Meterko & Field, 1994; Leiter & Durup, 1996; Tunrnipseed, 1994) as well as to an increase in psychosomatic complaints (Houtman, Bongers, Smulders & Kompier, 1994). Further, a low level of supervisor support has been related to psychosocial stress (Jones-Johnson & Johnson, 1992) and to burnout and emotional exhaustion (Himle, Jayaratne & Thyness, 1989; Turnipseed, 1994). Finally, both work-family

### 1.4 Job insecurity

#### 1.4.1 The prevalence of job insecurity

One specific psychosocial job stressor, job insecurity, merits consideration as this phenomenon has become relatively widespread over the last two decades (see Ferrie, 1997; OECD, 1997; Pearce, 1998). The high prevalence of job insecurity has not attracted broad research interest in Finland or elsewhere, and therefore has not yet received adequate empirical or theoretical attention. The limited interest hitherto shown toward job insecurity is somewhat surprising, since job security was considered an important job characteristic in many early work stress theories (see Cooper & Marshall, 1976; Hackman & Oldham, 1980; Murphy, 1995).

Aside from our research project "Job Insecurity and Well-being" (1994-1998), in only a few Finnish studies has been taken job insecurity into account. First, in 1977, 1984, 1990 and 1997 Statistics Finland gathered representative data sets primarily concerning the quality of Finnish working life (e.g., Lehto, 1991; Lehto & Sutela, 1998). Second, during the 1990s the Ministry of Labour (e.g., Ylöstalo, Kauppinen & Heikkilä, 1996; Ylöstalo & Rahikainen, 1998) has annually produced barometers describing the quality of Finnish working life. These surveys have also contained some brief questions on job security. In addition to these large surveys, a number of other studies have touched on the subject as well. However, these studies have focused on job termination (Koistinen & Suikkanen, 1990; Viinamäki, 1991) or the effects of downsizing and cost cutting on an employee's well-being (Heikkilä, 1998; Kivimäki et al., 1997; Vahtera & Bäckman, 1995).

In Finland, job insecurity has increased throughout the present decade. The data sets collected by Statistics Finland and the Ministry of Labour indicate that job insecurity became more widespread during the recession in the early 1990s, remaining on a higher level than during the 1980s (see Nätti, Kinnunen, Happonen & Mauno, 1998). More specifically, also utilizing the data of Statistics Finland (1990), Kinnunen and Nätti (1994) found that almost half of their respondents (n = 3503) felt at least one dimension, i.e., the threat of transfer, layoff, dismissal, unemployment or inability to work, of job insecurity in 1990. Furthermore, in a comparative study across the OECD countries, Finland was above the average in the prevalence of job insecurity (OECD, 1997). However, variation between countries is possible, for example, Schmidt and Svorny (1998) analyzed many large studies and found no decreasing trend in job security between the 1970s and 1990s in the United States.

In many industrialized countries, rising job insecurity is partly the result of an increase in the numbers of various negative changes in economic life, in labor markets as well as in working organizations (see Klandermans & van Vuuren, 1999). In Finland, these changes are mainly linked to the prolonged economic recession in the early 1990s, which forced organizations in both public and private sectors to cut back costs, merge, downsize and "rightsize". The recession between 1992 and 1994 was particularly pervasive and deep in Finland, resulting also in a sharp increase in unemployment (see Employment Outlook, 1996).

However, it needs to be kept in mind that joblessness is not usually the only

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negative consequence of economic recession, since those individuals who retain their jobs may simultaneously experience the threat of job loss, job transfers, early involuntary retirement, part-time working, and salary cuts; in other words, job insecurity. For these above reasons, one specific aim of my study was to gain more insight into job insecurity and its negative effects on well-being in different spheres of life.

#### 1.4.2 Two basic definitions of job insecurity

Job insecurity has been conceptualized from two points of view, that is, as a global or as a multidimensional concept. Most usually job insecurity has been defined and operationalized according to the *global definition*, signifying the threat of job loss or job continuity (see e.g., Caplan, Cobb, French, van Harrison & Pinneau, 1980; Davy, Kinicki & Scheck, 1997; Ferrie, 1997; Hartley, Jacobson, Klandermans & van Vuuren, 1991; Johnson, Messe & Crano, 1984). Global job insecurity has been measured, for example, according to items of the type: "How certain are you about what your future career picture looks like" (Caplan et al., 1980), or "The thought of getting fired really scares me" (Johnson et al., 1984). Usually the global definition has been applied in the context of organizational crisis or change, in which job insecurity is considered the first phase in the process of job loss (see Ferrie, 1997; Joelson & Wahlquist, 1987).

However, those researchers (Ashford, Lee & Bobko, 1989; Borg & Elizur, 1992; Greenhalgh, 1982; Greenhalgh & Rosenblatt, 1984; Rosenblatt & Ruvio, 1996; Rosenblatt et al., 1999) who have adopted the *multidimensional definition* of job insecurity argue that job insecurity refers not only to the amount of uncertainty an employee feels about his or her job continuity, but also about the continuity of certain dimensions of the job, such as opportunities for promotion or the possibility of being laid off for a short while. According to the first multidimensional definition proposed by Greenhalgh and Rosenblatt (1984), insecurity refers to "powerlessness to maintain desired continuity in a threatened job situation". On this definition, it is assumed that job insecurity consists of the severity, i.e., the importance and the probability, of losing a dimension of the total job or a job feature, and powerlessness, referring to the employee's ability to control threats relating to his/her job (see also De Witte, 1999; Ashford et al., 1989; Rosenblatt & Ruvio, 1996).

In the first part of my investigation the global definition of job insecurity was adopted (studies I-II), whereas in the second part (studies III-IV), the multidimensional approach was also included. In the first part, job insecurity was considered in the terms of job uncertainty and regarded as one significant factor only among the other psychosocial stressors examined simultaneously. In the second part of the study, job insecurity was given more emphasis and the definition of the phenomenon was also extended by viewing it as a multidimensional construct. However, regardless of whether the global or the multidimensional definition was applied, job insecurity was considered as a psychosocial job stressor, which may lead to negative consequences on well-being at the occupational, overall, and family levels.

#### 1.4.3 Job insecurity as a psychosocial job stressor

Job insecurity has been regarded as one kind of *job stressor*. In line with Hobfoll's (1989) stress model, stress is seen a consequence of the threat of losing any resource, and in the case of job insecurity the threat of losing economic or social resources, for example, work related benefits (salary) or social relations. Nevertheless, while the insecure situation persists, such threats are not actualized in terms of job loss and subsequent unemployment.

It has also been suggested by Jacobson (1991a; 1991b) that job insecurity as a stressor might be distinguished from a job loss experience. Accordingly, the subjective probability of the threat of job loss or the threat of losing an important job dimension may produce more anxiety and tension than actual job loss itself. This increased anxiety is caused, for example, by the future-related time perspective: an employee does not know whether (s)he will lose her/his job or an important job feature, and, if so, when this will actually happen. Further, the employee may feel both role ambiguity (e.g., unclear role expectations at work) and role overload (e.g., trying hard at work to retain the job) in an insecure job situation (see e.g., Greenhalgh & Rosenblatt, 1984; Jacobson, 1991a; 1991b; Lazarus & Folkman, 1984). However, in situations where job loss has actually occurred these experiences can no longer exist.

An issue of great importance in regard to job insecurity as a job stressor is the fact that it may have negative impacts on occupational, overall and family well-being. This is also the viewpoint most usually adopted in researching job insecurity, i.e., focusing on stress responses. Consequently, it has been indicated that job insecurity is associated with reduced job satisfaction (see e.g., Ameen, Jackson, Pasewark & Strawser, 1995; Ashford et al., 1989; Davy et al., 1997; Hellgren, Sverke & Isaksson, 1999; Lim, 1996; van Vuuren, Klandermans, Jacobson & Hartley, 1991a; 1991b), performance at work (Armstrong-Stassen, 1993; Greenhalgh, 1983; Rosenblatt et al., 1999), as well as decreased work and organizational commitment (Armsrong-Stassen, 1993; Ashford et al., 1989; Borg & Elizur, 1992; Rosenblatt et al., 1999; van Vuuren et al., 1991a; 1991b). Furthermore, studies have found that job insecurity is linked to various kinds of increased psychological, e.g., depression, anger, feelings of guilt, withdrawal, burnout, and physical ill-health symptoms (Dekker & Schaufeli, 1995; De Witte, 1999; Earnshaw, Amundson & Borgen, 1990; Hellgren et al., 1999; Joelson & Wahlquist, 1987; Kinnunen & Nätti, 1994; Roskies & Louis-Guerin, 1990; van Vuuren et al., 1991a; 1991b).

Recently, job insecurity has also been studied from the viewpoint of the family. It has been indicated that, for example, depression (Barling & MacEwen, 1992) mediates the relationship between job insecurity and marital satisfaction. Furthermore, job insecurity has been associated directly with increased marital tension (Hughes & Galinsky, 1994) and decreased marital and family satisfaction (Larson, Wilson & Beley, 1994). Recent studies have also found that parents' job insecurity may affect their children. Stewart and Barling (1996) found that job insecurity was mediated through a father's job dissatisfaction on his parenting behavior and further on children's mood, causing, for example, acting-out behavior (see also Kinnunen & Pulkkinen, 1999). Barling, Dupre and Hepburn

(1998), in turn, showed that perceptions of their parents' job insecurity affected children's work beliefs and attitudes (see also Barling, Zacharatos & Hepburn, 1999).

In only a few previous studies on job insecurity have longitudinal designs been used. Furthermore, these studies have often examined job insecurity in those cases where work place closure has at issue (see Ferrie, 1997). For example, Dekker and Schaufeli (1995) indicated that prolonged (lasting two months) job insecurity was more detrimental to an employee's well-being than certainty about job situation (job loss). Heaney, Israel and House (1994), in turn, found that job insecurity operates as a chronic occupational stressor, causing more negative consequences, e.g., job dissatisfaction, on well-being as the duration of an insecure period increases (see also Klandermans & van Vuuren, 1999). Consistently with this, it has been indicated that job insecurity is detrimental to health only when an insecure period lasts at least one year (Arnetz et al., 1991; Ferrie, Shipley, Marmot, Stansfeld & Smith, 1998). Finally, in a longitudinal study conducted in Sweden Hellgren et al. (1999) found that job insecurity was prospectively related to reduced well-being, e.g., job dissatisfaction, mental ill-health. At the same time these researchers argued that in previous studies the health outcomes of job insecurity have been overestimated due to the fact that the studies have been cross-sectional.

## 1.5 The aims of this investigation

My investigation was divided in two parts. In the *first part* a variety of both structural and psychosocial job and family stressors were mobilized to explain the work-family interface on the basis of cross-sectional data sets. Study I was based on the responses of individual employees (n = 501), whereas the participants in Study II were married or cohabiting dual-earner couples (n = 215). Specifically, I examined direct (Study I) and indirect (Study II) associations between stressors, work-family interference, and well-being on the occupational, overall and family levels. In the first part of the study I posed the following specific questions:

#### Study I

- 1. How prevalent are both work-family and family-work conflicts among male and female employees in Finland?
- 2. How are structural and psychosocial job and family stressors related to work-family and family-work conflict?
- 3. How are these conflicts linked to the occupational, overall and family well-being experienced by the individual employee?
- 4. Are there any gender differences in these experiences?

#### The following hypotheses were proposed in Study I:

1. No gender differences in the prevalence of work-family or family-work conflict would exist. This presumption is largely based on the fact that in Finland both

- men and women participate quite equally in working life (see e.g., Kandolin, 1997; Kauppinen & Gordon, 1997; Lehto & Sutela, 1998), and consequently gender roles have become much more alike (see also Eagle, Miles & Icenogle, 1997).
- 2. Among both sexes, work-domain stressors, in particular, would be positively related to work-family conflict (Frone et al., 1992; 1997a; Hughes & Galinsky, 1994; Izraeli, 1989; Larson et al., 1994; Lennon & Rosenfield, 1992; Voydanoff, 1988), whereas family-domain stressors, in particular, would be positively associated with family-work conflict (Aryee, 1992; Frone et al., 1992; 1997a; Greenhaus & Beutell, 1985; Loerch et al., 1989).
- 3. Structural time-related stressors would be more strongly linked to work-family interference among women, since women still bear the main responsibility for family functioning, e.g., domestic work and child care (Lundberg, 1996; Menaghan & Parcel, 1990; Niemi, 1994; Melkas, 1998; Milkie & Peltola, 1999).
- 4. Among both sexes work-family and family-work conflict would be positively linked to decreased well-being in different domains of life (occupational, overall, family) (Aryee, 1992; Frone et al., 1996; 1997a; 1997b; Gignac et al., 1996; Thomas & Ganster, 1995).

#### Study II

- 5. Do job stressors spill over into marital well-being indirectly via occupational and overall well-being?
- 6. Do job stressors experienced by one spouse cross over into the marital well-being of the other spouse?
- 7. Are there any gender differences in spillover or crossover processes?

#### The following hypotheses were proposed in Study II:

- 1. The effects of psychosocial job stressors would spill over indirectly into impaired marital well-being, that is, via occupational and overall well-being (Barling & MacEwen, 1992; Higginbottom et al., 1993; Kelloway & Barling, 1995; Matthews et al., 1996).
- 2. The effects of these job stressors would be transmitted between the partners, signifying that job stressors would reduce first the occupational well-being and then the overall well-being of the one, which in turn would reduce the marital well-being of the other (Bolger et al., 1989; Matthews et al., 1996; Westman & Etzion, 1995; Zedeck et al., 1989).
- 3. No gender differences either in spillover or crossover process would exist. First of all, this assumption was derived from recent findings suggesting that gender differences in crossover process (Matthews et al., 1996; Westman & Etzion, 1995; Zedeck et al., 1989), or in work experiences more generally are minor, tend to diminish or are non-existent (Aryee, Luk & Stone, 1998; Barnett, 1997; Barnett & Brennan, 1997; Lehto & Sutela, 1998; Rydstedt & Johansson, 1998; Windle & Dumenci, 1997) even in occupations characterized by sex segregation (see

Kauppinen & Gordon, 1997; Kauppinen-Toropainen et al., 1988; Kauppinen-Toropainen & Kandolin, 1991; Lambert, 1991). Second, as mentioned previously, nowdays both sexes participate in the work force to much the same extent in Finland as well as elsewhere in Europe; paid work has thus become increasingly important for women (Hantrais & Letablier, 1996; Lewis & Cooper, 1995). Altogether, these findings imply that no gender differences in work spillover or crossover into family life would be found to exist.

In the *second part* of my study the emphasis was in one particular psychosocial job stressor, that is, in job insecurity, and its links to well-being. This part of the study was based on one-year (Study III) and three-year (Study IV) longitudinal data, enabling the stability of job insecurity as well as the cause-effect relationships between insecurity and well-being to be investigated more reliably. First, I examined the predictive associations between perceived job insecurity and occupational, general and family well-being (Study III). Second, I investigated the stability and construct validity of perceived job insecurity using four different scales to measure the phenomenon (Study IV). In this second part of the study I posed the following specific questions:

#### Study III

- 8. Does job insecurity operate as a psychosocial job stressor, leading to impaired occupational, overall and family well-being, or is this relationship rather vice versa, that is, level of well-being predicts level of job insecurity over a one-year period?
- 9. How stable are the phenomena studied (job insecurity, occupational, overall and family well-being) over a one-year period?

#### The following hypotheses were proposed in Study III:

- 1. Among both sexes job insecurity would operate as a long-lasting job stressor, reducing an employee's well-being over a one-year follow-up period (Arnetz et al., 1991; Dekker & Schaufeli, 1995; Heaney et al., 1994)
- 2. Each of the phenomena studied would remain relatively stable during the follow-up period. However, no previous studies on the stability of job insecurity exist, and consequently this hypothesis is based on findings indicating in general that work experiences other than job insecurity, e.g., work-family interface experiences (Crouter & Manke, 1996), role stress (Lee & Ashford, 1993), occupational stress (Kinnunen & Leskinen, 1986), relations with supervisors (Kinnunen, Mauno, Nätti & Happonen, in press), job satisfaction (Steel & Rentch, 1997) and burnout (Capel, 1991; Poulin & Walter, 1993), have turned out to be relatively stable phenomena. Furthermore, perceptions of somatic symptoms or physical health have proved to remain relatively invariant (e.g., Hays, Marshall, Wang & Sherbourne, 1994; McKegney, Aronson & Ooi, 1988).

#### Study IV

- 10. How stable a phenomenon is perceived job insecurity over a three-year period measured via four different job insecurity scales?
- 11. Do different scales of job insecurity give a similar picture of the stability of the phenomenon?

12. How valid and reliable as measures are the abbreviated job insecurity scales applied?

The following hypotheses were proposed in Study IV:

1. It was expected that different measures of job insecurity would provide a slightly different picture of the stability of the phenomenon, as the scales capture somewhat dissimilar aspects of job insecurity. The four following scales were used to measure job insecurity; (1) the global scale (threat of job loss), (2) the importance scale (the importance of the various changes which might occur at an employee's work), (3) the powerlessness scale (an employee's control over job changes) and (4) the probability scale (likelihood of various changes which might occur at an employee's work).

It has been argued that job insecurity depends on both subjective (e.g., personality) and objective (e.g., organization's economic situation) factors (see Jacobson, 1991a; Klandermans & van Vuuren, 1999; van Vuuren, 1990); some employees may feel more job insecurity than others regardless of the nature of the objective situation. It was hypothesized that the first three scales mentioned above would reflect the influence of the subjective more than the objective factors on job insecurity, and consequently, it was expected that the stability of job insecurity assessed via these three scales would be relatively stable during the nearly three-year follow-up period. However, job insecurity evaluated through the fourth scale, i.e., the probability scale, was assumed to be more or less unstable as organizational circumstances - which in fact changed somewhat during the follow-up - would primarily determine this type of job insecurity.

2. The different brief job insecurity scales applied would prove to be reasonably valid and reliable operationalizations of the phenomenon in question. Furthermore, since global job insecurity measures have succesfully been used in previous studies (see e.g., Caplan et al., 1980; De Witte, 1999; Ferrie, 1997; Hartely et al., 1990; Johnson et al., 1984), it was expected that here too the global job insecurity measure would turn out to be a valid and reliable measure of the phenomenon. However, multidimensional job insecurity scales have been more rarely used (see e.g., Ashford et al., 1989; Greenhalgh & Rosenblatt, 1984; Rosenblatt et al., 1999); consequently, the reliability and validity of these scales have not been studied extensively. Therefore, the results of studying the psychometric properties of scales of this type should be considered exploratory and a basis for further development.

## 2 METHODS

## 2.1 Participants and Procedure

My study was a part of a broader longitudinal research project "Job Insecurity and Well-being", which was conducted among four organizations in Central Finland during the years 1994-1998 (see Nätti et al., 1995; Happonen et al., 1996; Happonen et al., 1998). The organizations were chosen to represent various economic areas; export industry (a paper mill), the domestic services and retail sector (a bank and a supermarket) and the public sector (a municipal social and health care department).

In each organization a number of changes took place during the follow-up period (1994-98). In the *paper mill*, which is part of the larger forestry industry group, a variety of rationalization plans had been under implementation since the early 1980s. Personnel cuts were usually achieved by means of early retirement. The *bank* is a regional co-operative bank which was hit by the deep recession of the 1990s in the domestic sector. It shed personnel by conducting early retirements and layoffs. The *supermarket* is part of a national retail co-operative chain. In spite of the domestic recession it coped relatively well compared to smaller retailers, although an increase in part-time working and job transfers occurred. The *municipal social and health care* department suffered from financial problems: over the period its funding was cut. This has decreased the number of temporary employees.

This study was conducted in the three stages. In the *first stage* (Time 1, February 1995), 636 employees (response rate 65%), in the *second stage* (Time 2, February 1996), 518 employees (response rate 53%) and in the *third stage* (Time 3, November 1997), employees 590 (response rate 68%) working in the four or three (Time 3) organizations answered a self-report questionnaire. The questionnaires were distributed to each employee through inter-office mail. The supermarket employees (all were invited) participated in the study in 1995 and 1996, but not in 1997 when the supermarket refused to allow further participation. In the other

organizations, a random sample of employees was selected from a list provided by the organization. Respondents returned their completed questionnaires in sealed envelopes to a mailbox at the workplace. Anonymity was preserved as names were not used.

Because detailed information on the demographic characteristics of the participants is provided in the original studies, only a short summary is given here. Study I is based on responses of those employees who participated in the first stage of the study. However, only data from subjects who reported being married or cohabiting (n = 501) were used. Study II is based on the second stage of the study, in which we obtained responses from 215 dual-earner couples. One partner of each couple worked in one of the four above-mentioned organizations. Study III derives from both the first and second stage of data collection, hence the longitudinal design. Specifically, Study III is based on the panel data consisting of the responses of those employees (n = 219) who participated in the study in 1995 and in 1996. Study IV is also based on longitudinal data collected in the three stages, including the responses of those employees (n = 109) who participated in the study at every stage. Table 1 summarizes the information on the methods, including data sets, variables and statistical methods, used in each study.

Both the one-year and three-year longitudinal data sets were based on the matched responses. As names were not used in order to preserve anonymity in studying a sensitive issue, i.e., job insecurity, the panel data were formed by matching the data of those employees who participated in each phase of the study. Consequently, the data collected at different stages were matched according to stable key variables concerning respondents' stable demographic characteristics, i.e., gender, year of birth, education, marital status, organization and position in that organization (see Study III and IV in detail). Those subjects who could not be differentiated from each other by these matching variables were discarded. Furthermore, to increase the reliability of our panel data, we also eliminated subjects on the basis of the information provided by such variables as the age of the youngest child, and years of employment in the organization. If the values for these variables did not increase during the follow-up, the case was omitted.

The small number of subjects in these panel data was largely caused by the computer-based matching process, by which those subjects who had the same values in the matching variables were discarded. However, even though the number of participants was small in the longitudinal data sets, for example, in the case of the three-year follow-up data, the subjects represented relatively well the respondents in the first cross-sectional data set. The proportions of male and female employees were very similar: in the first study 73% were women and 27% were men, and in the panel 76% and 24%, respectively. The respondents' mean age in both data sets was also similar, i.e., in the first study 43.48 years and in the panel data 43.44 years. Furthermore, there were no significant variations in the distribution of employees in the organizations or in education (for more detail see Kinnunen, Mauno, Nätti & Happonen, 1999; in press; Mauno & Kinnunen, 1999).

## 2.2 Methods of data analysis

The primary method of data analysis was Structural Equation Modeling (SEM) conducted via the LISREL program (see Table 1). The method was chosen since it has been highly recommended in analyzing longitudinal data (see Farrell, 1994; Zapf, Dormann & Frese, 1996) as well as indirect (mediator) effects. Longitudinal data sets were used in Study III and IV, whereas mediator effects were on focus in Study II. In addition to these methods, I also used hierarchical regression and multivariate analysis of variance (Study I).

TABLE 1 Summary of the variables and methods used in studies I-IV

Study	Data	Variables	Statistical Methods
Study I Antecedents and Outcomes of Work-Family. Conflict Among Employed Women and Men in Finland.	- men n=145	- full-time employment (IV) <sup>a)</sup> - non-day shift (IV) - a number of children (IV) - preschool children (IV) - full-time employment of spouse (IV) - job insecurity, leadership relations, job autonomy (IV) - work-family conflict, family-work conflict (DV, IV) - job anxiety, job depression, job exhaustion (DV) - psychosomatic symptoms (DV) - marital satisfaction, parental satisfaction (DV)	hierarchical multiple regression analysis     MANOVA     separate analyses for the sexes
Study II The Effects of Job stressors on Marital Satisfaction in Finnish Dual-Earner Couples.		<ul> <li>- job insecurity, job autonomy, time pressures at work, leadership relations, work-family conflict (IV)</li> <li>- job exhaustion, psychosomatic symptoms (DMV)</li> <li>- marital satisfaction (DV)</li> </ul>	<ul><li>Structural Equation Modeling (SEM)</li><li>LISREL</li><li>joint analysis for the couples</li></ul>
Study III Job Insecurity and Well-Being: A Longitudinal Study Among Male and Female Employees in Finland.	- longitudinal data - collected 1995 and 1996 - men n=60 - women n=159	- job insecurity (DV/IV) - job exhaustion (DV/IV) - somatic symptoms (DV/IV) - work spillover into parenthood (DV/IV)	- SEM based on the idea of cross-lagged panel analysis - LISREL - separate analysis for the sexes
Study IV Multi-Wave, Multi-Variable Models of Job Insecurity: Applying Different Scales in Studying the Stability of Job Insecuri	- longitudinal data - collected 1995, 1996 and 1997 - n=109	<ul> <li>global scale (job loss)</li> <li>importance scale (the importance of job changes)</li> <li>probability scale (the probability of job changes)</li> <li>powerlessness scale (control over changes at work)</li> </ul>	- multi-wave, multi-variable modeling - LISREL

a) IV = independent variable(s), DV= dependent variable(s), DMV = dependent, mediator variable(s), DV/IV = dependent or independent, relations were tested

#### 3 OVERVIEW OF THE RESULTS

### Study I

The main purpose of this study was to investigate the prevalence, antecedents, and consequences on well-being of work-family and family-work conflict among employed women and men in Finland. The antecedents were divided into demographics (age, education), structural (full-time employment, non-day shift) and psychosocial (job insecurity, poor leadership relations, low job control) job stressors, and into structural family (high number of children, existence of preschool children, full-time employment of spouse) stressors. Well-being outcomes were examined in three spheres of life; work (job anxiety, depression, exhaustion), family (marital, parental dissatisfaction), and overall (psychosomatic symptoms) domains.

Consistent with my assumptions, work-family conflict was most significantly predicted by work domain stressors, whereas family-work conflict was best explained by family domain stressors. Yet, there were some gender differences in the antecedent factors: for the women, a high number of children, full-time job, job insecurity and poor leadership relations, predicted work-family conflict, whereas for the men high education and high number of children were significantly linked to work-family conflict. Furthermore - and in accordance with my hypothesis - the structural job stressors were associated with work-family interference only among the women.

There were, however, also a lot of similarities among the sexes. First, in line with my expectation, there were no gender differences in perceptions of either work-family or family-work conflict; interference from work to family was more prevalent than from family to work among both sexes. Second, for both female and male employees, a high number of children was related to both types of conflict. Third, job insecurity was associated with increased family-work conflict among both sexes. Fourth, the well-being outcomes of work-family conflicts were similar across the sexes: work-family conflict was negatively linked to

occupational well-being by increasing job anxiety, job depression and job exhaustion. Family-work conflict, in turn, reduced well-being in the family domain via decreasing marital and parental satisfaction. In addition, a high level of work-family conflict was associated with intensified psychosomatic symptoms and impaired parental satisfaction.

## Study II

The first aim of this second study was to investigate whether the effects of psychosocial job stressors, i.e., job insecurity, (low) job autonomy, time pressures at work, the quality (poor) of leadership relations and work-family conflict, on marital satisfaction are indirect, signifying that those effects are mediated via job exhaustion and psychosomatic symptoms (spillover process). Second, I studied whether the effects of the job stressors in question are transmitted between the dual-earner partners (crossover process). The crossover process was also expected to occur indirectly, meaning that job stressors first increase one's job exhaustion, and then, one's psychosomatic symptoms, which, in turn, impair the marital well-being of one's spouse.

Consistent with my assumption, the results showed that the same model was valid for both sexes. Of the five job stressors studied, four (except for job autonomy) were directly related to job exhaustion. Time pressures at work and work-family conflict were the most significantly linked to increased job exhaustion. Job exhaustion in turn increased psychosomatic symptoms, which further predicted marital dissatisfaction. In conclusion, the results indicated that the negative effects of job stressors spilled over into marital well-being via reduced well-being in the sphere where the stressors were initially encountered (at work). However, my assumption about the crossover process (i.e., stress transmission between partners) was not confirmed. Overall well-being experienced by one partner did not affect the other partner's marital satisfaction. Hence, job stressors perceived by one partner, regardless of gender, did not interfere with the other partner's marital satisfaction.

## **Study III**

My third study focused on one specific psychosocial job stressor, i.e., job insecurity, and its negative effects on occupational (job exhaustion), overall (somatic symptoms) and family (negative work spillover into parenthood) wellbeing. Specifically, using the method of cross-lagged panel analysis, I tested to find out whether job insecurity would cause a negative stress response in terms of reduced well-being in the three domains of life. Contrary to my previous studies

(Study I-II), in this study, I defined and operationalized job insecurity according to the multidimensional view, concentrating on both the threat of job loss and the threat of losing certain important dimensions of the total job.

In line with my hypothesis, the results showed that among the women job insecurity predicted occupational and family well-being over the one-year period: job insecurity perceived in 1995 resulted in both increased job exhaustion and negative work spillover into parenthood in 1996. Inconsistent with my assumption for the men, job insecurity did not affect their well-being, or vice versa well-being did not predict job insecurity during the one-year follow-up period. In addition, the phenomena studied, i.e., job insecurity and well-being indicators, turned out to be relatively stable during the follow-up period among both sexes.

## Study IV

The aim of my fourth study was primarily methodological focusing on different operationalizations of job insecurity. Applying the method of multi-wave, multi-variable (MWMV) modeling, I first investigated the stability of job insecurity during a follow-up period of nearly three years. The secondary target was to examine the construct validity, i.e., invariance properties, of the job insecurity scales applied as well as the reliabilities of the separate scale items.

Job insecurity was operationalized in accordance with both the global and multidimensional definitions of the phenomenon. This means that job insecurity was evaluated as the threat of job discontinuity (comprising a global scale), but also as the threat of losing important dimensions of the total job (comprising multidimensional scales). More specifically, multidimensional job insecurity was measured via three different scales: (1) an importance scale, in which employees evaluated the importance of five possible changes (job transfer, job termination, layoff, part-time working, salary cuts) concerning their job, (2) a probability scale, focusing on the probability of these five changes being realized, and (3) a powerlessness scale, encompassing perceived control over work-related negative events.

MWMV analysis showed that job insecurity measured via the global scale remained relatively stable, meaning that those employees who were likely to experience a high degree of threat of job loss in 1995 were also prone to perceive this kind of threat after two years. In addition, the global scale turned out to be a reliable and valid measure of the threat of unemployment.

Of the three multidimensional job insecurity scales applied, two scales, i.e., the importance scale and powerlessness scale, indicated a relative high degree of stability and invariant construct validity across the different time points. Hence, those subjects who perceived the specific job changes as important events in 1995 also considered these changes important in the two following years. Furthermore, those employees who experienced a low or high level of job control over negative

events occurring at work at Time 1 continued to have similar evaluations later on. However, job insecurity measured via the probability scale, stressing the probability of the changes defined above being realized, was not stable during the follow-up period. In fact, I came to the conclusion that the scale did not measure the same construct at the different time points, signifying also that the estimation of stability of the probability scale was not even justified. To conclude, my analysis questionized whether the different multidimensional scales could be used together as a composite scale, as the developers (Ashford et al., 1989) of the scale have suggested.

#### 4 GENERAL DISCUSSION

### 4.1 Major findings

The major contribution of my investigation can be summed up in one empirical finding; it turned out that the work and family domains were not separate, but rather were interconnected in several ways among the sample of Finnish male and female employees. This conclusion is based on three specific results. First, job stressors negatively affected family well-being either directly or indirectly via occupational and overall well-being. Second, the particular psychosocial job stressor focused on in my study, job insecurity, was found to be both a relatively stable stressor and, consequently, an important precursor of different stress responses in terms of reduced well-being. Third, stressors encountered in the family domain were also found to be related to experiences of the work-family interface. These main findings are discussed below in greater detail.

In agreement with previous studies on psychosocial job stressors, I found that poor leadership relations (Gaillard & Wientjes, 1994; Himle et al., 1989; Repetti, 1993), severe pressures of time at work (Dekart et al., 1994; Leiter & Durup, 1996), work-family conflict (Frone et al., 1996; 1997a; 1997b; Thomas & Ganster, 1995), and job insecurity (Ashford et al., 1989; Dekker & Schaufeli, 1995; De Witte, 1999; Kinnunen & Nätti, 1994) were associated with reduced self-reported well-being in the different domains of life studied, i.e., the occupational, overall and family domains. Most importantly and in accordance with Warr's (1987) notion, the job stressors studied seemed to affect first one's context-specific well-being (at work) and second one's overall well-being (context-free), which in turn impaired one's family (context-free) well-being. Hence, the negative effects of job stressors spilled over into family functioning through impaired well-being in the domain where the stressors were initially encountered (e.g., Duxbury et al., 1994; Higginbottom et al., 1993; Hughes & Galinsky, 1994; Kelloway & Barling, 1995; Leiter & Durup, 1996; Lennon & Rosenfield, 1992; Matthews et al., 1996).

On the basis of my findings as well as on other current research results, I

propose that the most obvious mechanism via which experiences of the work-family interface occur is an indirect one. Accordingly, job stressors do not initially affect family well-being, but rather as a consequence of various negative reactions, emotions and attitudes they create at work, that it to say, via the spillover mechanism (see Barling, 1990; Lambert, 1990; Zedeck & Mosier, 1990). From a practical point of view, this signifies that, for example, job dissatisfaction, negative mood at work, decreased accomplishment at work, job exhaustion, strain or depersonalization, might operate as such mediating mechanisms. However, I still consider that the mechanisms mediating between job stressors and family functioning deserve more attention. Future research should seek to identify further the specific factors of work-related well-being which operate as mediators between specific job stressors and family well-being.

In comparison to other psychosocial job stressors (e.g., job control), job insecurity, defined as the threat of job loss or the threat of losing important dimensions of the job, has received less attention. However, since the 1980s, researchers have began to show more interest in the topic (see Ashford et al., 1989; Greenhalgh, 1982; Greenhalgh & Rosenblatt, 1984; Hartley et al., 1991). There is also some evidence that job insecurity has risen in the industrialized countries (OECD, 1997). This has occurred because fluctuations in global and domestic markets have forced organizations to take a number of measures, for example, downsizing, "rightsizing, cost cutting, in order to retain their marketability. For the individual employee, all this has meant increased job insecurity and the decreased well-being related to it.

My investigation, in fact, confirmed that job insecurity may function as a severe and relatively stable stress factor at work inducing reduced well-being in different domains of life, i.e., work, overall, family (see Arnetz et al., 1991; De Witte, 1999; Ferrie, 1997; Hellgren et al., 1999; Hughes & Galinsky, 1994; Joelson & Wahlquist, 1987; Larson et al., 1994; Lim, 1996; van Vuuren et al., 1991a; 1991b). In this area, the most reliable information concerning the negative effects of job insecurity on well-being comes from employing longitudinal data analysis, in performing which I found that previously experienced job insecurity increased job exhaustion and negative work spillover into parenthood one year later (cf. Rosenblatt et al., 1999). However, this only concerned women, whereas mens' well-being was not affected by job insecurity experiences (cf. De Witte, 1999).

Various explanations can be proposed to account for this unexpected gender difference. First, the number of male employees in my data was small which makes it difficult to obtain statistically significant effects in a longitudinal analysis. Second, the sex-role hypothesis according to which family roles are more salient for women and work roles for men (Simon, 1992), may partly explain the findings, for example, the stronger linkage between job insecurity and parental well-being among the women. Third, in our longitudinal data sets male and female employees worked in different occupations and positions; the women were mostly lower level white-collar and the men often higher white-collar or blue-collar workers and thus employed in higher paid and higher qualified jobs in comparison to the women (see also Rosenblatt et al., 1999; Witz, 1990). As a result, women would have felt less employment security than men. This interpretation was supported by our results, which showed that, generally, the

women felt more job insecurity than the men (see e.g., Happonen et al., 1996; Happonen et al., 1998; Kinnunen et al., 1999; in press; Nätti et al., 1995). However, it has been found elsewhere that even though male employees experienced more job insecurity than women, womens' work attitudes were more often affected by job insecurity in comparison to men (Rosenblatt et al., 1999).

Perhaps the level of perceived job insecurity needs to be above a certain threshold - as would seem the case among the women studied here - in order to have negative effects on well-being. It is possible that the critical threshhold is different for both sexes, depending for example on gender differences in personality factors (see Kling, Hyde, Showers & Buswell, 1999) and appraisal processes. Furthermore, there is also some evidence to show that job insecurity only has negative effects on occupational well-being during periods of organizational change (see O'Quin & LoTempio, 1998). Altogether, it has to be understood that both subjective and objective factors determine job insecurity experiences.

In addition, when considering gender differences in work experiences of any kind, it is important to take note of certain structural facts, as discussed in gender theories, e.g., occupational segregation, gendered occupations and organizations (see e.g., Witz, 1990). We cannot speak about real gender differences until we compare the work experiences of men and women who share the same occupation, position and perhaps even workplace (Barnett, 1997; Barnett & Brennan, 1997; Lefkowitz, 1994). For example, Rosenblatt et al. (1999) have suggested that those men working in female-dominated occupations such as teaching and nursing should also experience job insecurity because of the poor financial rewards and female dominance found to those occupations. These researchers do not, however, have a view on whether women employed in male-dominated occupations experience less job insecurity as one might expect from the above argument. In addition, it is also of relevance whether a given organization is male- or female-dominated, as segregation may also create certain gender-specific roles and norms.

Nevertheless, in previous studies - including my investigation - work experiences between the sexes have often been compared, even if the men and women studied worked in relatively different occupations or positions. On these occasions, other factors such as variation in job control and in work content may better explain the observed gender differences. In sum, the viewpoints suggested by gender theories have to be taken into account in future studies on work experiences.

Some scholars (e.g., Crouter, 1984; Duxbury et al., 1994; Frone et al., 1992; 1997a; Gutek et al., 1991; Lunberg et al., 1994) have suggested that family domain experiences may also affect work experiences, meaning that the work-family interface occurs bi-directionally; from family to work as well as work to family. Accordingly, my investigation indicated that structural family stressors, a high number of children, and preschool children in particular, were related to increased work-family interference among both sexes (see also Kinnunen, Koivunen & Mauno, 1997; Kinnunen, Loikkanen & Mauno, 1995). Despite the explicitly stated need to investigate the bi-directional nature of the work-family interface, the majority of studies have concentrated solely on interference from

work to family, as for example, in the previously discussed effects of job stressors on family well-being. However, it is reasonable to expect that in addition to structural, psychosocial family stressors (e.g., parenting stress, marital/family discord, health problems of family members') might also have an impact on work experiences. Furthermore, family stressors could affect reactions and emotions at work indirectly, for example, via reduced marital, parental, or family satisfaction (i.e., context-specific well-being). In fact, one limitation of my investigation is related to this notion; psychosocial family stressors were not included in my study, and hence neither the direct nor indirect effects of negative family experiences on work domains were examined.

In future, therefore researchers examining the work-family interface should pay greater attention to family stressors or family events (see e.g, Crnic & Greenberg, 1990; Deater-Decard & Scarr, 1996; Doherty et al., 1998; Hobfoll & Spielberger, 1992; Rodd, 1993; Taylor, Roberts & Jacobson, 1997). For example, in the line with family stress theory, many researchers (Bjoenberg, 1998; Hobfoll & Spielberg, 1992; Lavee, McCubbin & Patterson, 1985; Lundberg & Frankenhaeuser, 1999; McCubbin & Patterson, 1983) have proposed a number of family related events, e.g., the birth of child, divorce, parent-child strain, economical difficulties, as resulting in either family adaption or maladaption (stress response). Furthermore, these researchers have taken into account family resources (e.g., cohesion, mastery, family self-esteem, social support) which may affect (moderate) the associations between family stressors and stress responses.

Insofar as the work-family interface is considered as a complex bi-directional process involving both family and work related factors, I regard the work stress framework (Cooper & Marshall, 1976; French et al., 1982) as too a narrow an approach in investigating the effects of both work and family factors on wellbeing in different spheres of life. Particular, when we are studying more than one family member, for example, when the responses of dual-earner or -career couples, or children, are in question, and when stress transmission between significant others is in focus (i.e., crossover process). Altogether, in order to obtain a more holistic view of the work-family interface, we should attempt to integrate empirical and theoretical information concerning the psychology developed both in the work and family contexts. This aim might, for example, be achieved by borrowing from traditional life events research (see e.g., Holmes & Rahe, 1967; Dohrenwend, Krasnoff, Askenasy & Dohrenwend, 1978) which takes into account stressors or changes occurring in both the work and family domains. However, many life events scales are relatively long and have been criticized on account of various shortcomings (Sarafino, 1990). It is therefore up to researchers to elaborate both the substance and ratings of these scales so that they might also be used in examining the work-family interface.

Furthermore, it also needs to be pointed out that researchers have not yet sufficiently emphasized the positive effects of multiple roles, such as worker, spouse, parent, on well-being (for exceptions see Cohen, 1997; Crouter, 1984; Gutek, Repetti & Silver, 1988; Kauppinen-Toropainen & Kandolin, 1991; Kirchmeyer, 1992; Mauno & Kinnunen, 1999a; Wharton, 1997), signifying, for example, that satisfaction (e.g., work) derived from one role spills over into other roles (e.g., marriage). Furthermore, taking this more positive view toward

multiple roles, also means rejecting the scarcity hypothesis emphasizing the harmful effects of multiple roles and instead adopting the expansion hypothesis that multiple roles have more positive than negative effects on the individual (see Barnett, 1993; Waldron, Weiss & Hughes, 1998). The expansion hypothesis also seems to be very realistic and promising starting point for future research, which should focus more on positive spillover effects between work and family life.

## 4.2 Conceptual and methodological conclusions

### 4.2.1 The concept of the work-family interface

Both the conceptualizations and operationalizations of the two specific constructs, i.e, the work-family interface - defined conflict or spillover - and job insecurity, need to be developed further. In previous empirical studies the work-family interface has been assessed both directly and indirectly. In the former, conflict approach, direct questions concerning the work-family interface have been presented to the respondents, e.g., "How often does your job interfere with your family life?" (e.g., Frone et al., 1992; 1997a; 1997b; Kossek & Ozeki, 1998; Netermeyer et al., 1996; Stephens & Sommer, 1996).

In the indirect spillover approach researchers have specified how job stressors or work experiences are related to family well-being (e.g., Barling, 1990; Barling & MacEven, 1992; Hughes & Galinsky, 1994). In empirical studies based on this indirect view, it has been assumed that the work-family interface is a process subsisting between various stressors (e.g., job control, time demands at work, job insecurity) and stress responses (e.g., family well-being indicators). In the more direct conflict view, in turn, work-family conflict has often been regarded as a sort of mediator variable between job stressors and well-being, meaning that it has been assumed that job stressors first increase work-family conflict which, in turn, reduces well-being (e.g., Adams et al., 1996; Duxbury & Higgins, 1991; Frone et al., 1992; 1997a).

However, on the basis of previous empirical studies, it is hard to find any real differences between the conflict and spillover views; in the end, both approaches have focused on the direct or indirect effects of structural work characteristics or psychosocial work experiences on work-family interaction. Obviously, the difference between conflict and spillover is hard to discern due to the fact that both constructs are actually assumed to be mechanisms via which the work-family interface operates. The operationalizations used to measure the work-family interface also support this notion; for example, spillover has been measured by using direct questions (e.g., "Worrying about my job is interfering with my relationship with my spouse") concerning the perceived interference from work to family (e.g., Small & Riley, 1990). Hence, according to this operationalization, spillover has been regarded as a direct process, even though this type of spillover might also be well defined as work-family conflict.

Because of the conceptual vagueness discussed above, researchers need to define more precisely what difference - if any - exists between the most often adopted theoretical frameworks, i.e., between the conflict and spillover views. I would suggest that we apply the concept of conflict in those studies where workfamily interface experiences are directly sought from respondents, that is to say by using questions or statements related to time-based (e.g., "The amount of time my job takes up makes it difficult to fulfill family responsibilities"), strain-based (e.g., "My job produces strain that makes it difficult to fulfill family duties"), and behavior-based (e.g., "I am not able to act the same way at home as at work") conflict. The concept of spillover, in turn, should be used to examine the direct or indirect associations between work experiences or occupational stress factors and family well-being, for example, when studying the linkages between job control and decision-making latitude and marital or parental satisfaction.

I would also argue that we lack of a theoretical framework in which the specific position of the work-family interface variables (e.g., work-family/family-work conflict) can be properly justified. This means that researchers have to consider, whether, for example, work-family conflict is regarded as a predictor or mediator explaining various well-being outcomes, or whether it is better considered as an outcome variable predicted by demographic factors and other structural and psychosocial stressors. To this end, Frone et al. (1997a) have recently developed a combined model, in which work-family (and family-work) conflict is seen clearly as a mediator construct between context-specific stressors and stress responses (see also Parasuraman et al., 1996). However, the validity of this needs to be tested with longitudinal data using statistical tools appropriate to the analysis of causal relationships in longitudinal data (e.g., cross-lagged panel analysis).

Nevertheless, it has to be remembered that despite the conceptual shortcomings discussed above, empirical studies conducted via different theoretical approaches have, altogether, provided valuable information on the work-family interface, leading to the conclusion that work and family lives are interwined in various ways.

#### 4.2.2 The concept of job insecurity

My investigation indicated that the concept and operationalization of job insecurity also needs to be elaborated further. Other recent studies on job insecurity confirm my argument by indicating that the operationalization of job insecurity is anything but standardized (see Klandermans & van Vuuren, 1999). The phenomenon has been defined and measured from several points of view, for example, as a subjective (perceived) or as an objective (flexible job contract) phenomenon measured on either unidimensional or multidimensional scales.

Specifically, I examined job insecurity using a three-year longitudinal data via four different scales; the global, importance, probability and powerlessness scales. The global scale assessed solely the threat of job loss. Via the importance and probability scales the employee evaluated how important and probable were

various changes (e.g., layoff, job termination, wage cutting) that might occur in his or her job. Through powerlessness scale subjects rated their control over the certain negative events that may occur in relation to job.

One-dimensional global definitions of job insecurity have been the most widely used in empirical studies (see Caplan et al., 1980; De Witte, 1999; Ferrie, 1997; Johnson et al., 1984). However, as a result of an increase in various organizational changes in the 1980s some researchers redefined job insecurity multidimensionally; not only as the threat of job loss, but also as the threat of losing important features of the job, and as powerlessness to resist negative events at work (Ashford et al., 1989; Borg & Elizur, 1992; Greenhalgh & Rosenblatt, 1984; Rosenblatt & Ruvio, 1996; Rosenblatt et al., 1999).

In my study, it turned out that three of the scales studied, i.e., the global, importance and powerlessness scales, were relatively reliable, valid and invariant operationalizations. However, the invariant nature of the probability scale could not be evaluated, since the scale did not even measure the same construct at the different time points. The various changes which occurred in the target organizations partly explain this finding; during the follow-up the likelihood of various changes occurring at the workplace fluctuated as a function of variations in economic situations, budget plans, and management strategies in each organization. For this reason, employees evaluated the probability of the changes differently in each follow-up year.

Firstly, the findings clearly show that job insecurity can be defined in terms of threat of job termination or the prospect of unemployment. Secondly, I suggest that we need more information on what precisely are the specific job changes (e.g., wage cutting, job transfer, layoff etc.) which are perceived as job insecurity, and further, whether these job changes form a single construct, or whether they are rather unrelated, separate dimensions of the job (see Klandermans & van Vuuren, 1999; Pearce, 1998). Third, I argue that the association between perceived powerlessness at work and the threat of changes in job characteristics should be examined. Conceptualized more broadly, powerlessness is nothing more than job control or autonomy at work, and defined as a such it may also operate as a precursor of job insecurity or as a moderator between job insecurity and wellbeing outcomes (see Barling & Kelloway, 1996; Büssing, 1999).

Consequently, we need more longitudinal studies to be able to specify what constitute the individual (e.g., gender, age, personality factors, coping) as well as job characteristics (e.g., employment status, job control, social support) which determine in a way or another job insecurity experiences (see Büssing, 1999; Klandermans & van Vuuren, 1999). For the time being, the longitudinal studies on the antecedents of job insecurity are very scarce (see Kinnunen et al., 1999; in press). Furthermore, future studies should consider job insecurity both as a subjective and objective phenomenon; on the one hand, an employee may experience job insecurity even though no "objective" threats (e.g., downsizing, temporary job contract) are present; on the other hand, objective risks - which have actually increased in the present decade - may produce or strengthen the sense of job insecurity.

In conclusion, we require more precise theoretical and operational formulations concerning the two specific constructs stressed in my study; the work-family interface (i.e., conflict and spillover) and job insecurity. After redefining these concepts, reoperationalizations should follow with careful empirical testing, for example, via the method of confirmatory factor analysis. Once agreement is reached regarding theoretical and measurement issues, more emphasis should be given to the relationships between these two phenomena. Apart from my study, only a few other studies (Barling & MacEven, 1992; Barling et al., 1998; Hughes & Galinsky, 1994; Kinnunen & Pulkkinen, 1999; Larson et al., 1994; Stewart & Barling, 1996) have investigated the linkages between job insecurity and the work-family interface, and, furthermore, none of these studies has been longitudinal.

Some methodological limitations concerning my study have to be acknowledged. First, every data set was based on self-report questionnaires, and hence the magnitude of the relationships could be inflated due to the variance common to this method. Second, socioeconomic status in our data sets varied according to gender, therefore we should adopt a cautious attitude toward the gender differences observed. Third, a number of other important factors remained unexamined, for example, personality factors. However, personality factors have been included in other studies based on the same data sets as my study (see Feldt, Kinnunen & Mauno, in press; Kinnunen et al., 1999). These studies have indicated that self-esteem and sense of coherence are relevant issues in the context of job insecurity (see also Roskies & Louis-Guerin, 1990; van Vuuren et al., 1991b). More specifically, our longitudinal analyses showed that low self-esteem increased job insecurity and that sense of coherence mediated the negative effects between job insecurity and well-being. Obviously, the relationship between personality and job insecurity is a complex process which has not yet been fully investigated.

Furthermore, the role of personality factors in the context of the work-family interface is still insufficiently understood (for an exception see Noor, 1997), and therefore merits further examination in the future. Taking into account the important role of personality characteristics in work stress experiences (e.g., Cooper & Payne, 1993; Kivimäki, 1996; Robertson & Callinnan, 1998), it is very likely that those factors are also involved in experiences of the work-family interface experiences, or in work-family conflict.

# 4.3 Implications for policy

In order to decrease the negative aspects of the work-family interface, that is, work spillover into family life or work-family conflict, we need to pay greater attention to both structural and psychosocial job stressors. Consequently, various improvements in working life are called for. Structural measures, including supportive family policies in the workplace such as parental leave, flexible timetables, job sharing and part-time and telework, should be made more advantageous for male and female employees alike. For example, a six-hour working day should be possible for both men and women.

Moreover, psychosocial job stressors need to be minimized, for example, by

alleviating severe pressures of time at work (e.g., via recruiting additional personnel, job redesign) and improving the quality of colleague and leadership relations in organizations. In fact, recent studies have indicated that supervisor and management responsiveness to and support for work-family issues in organizations are beneficial for their employees (Aryee et al., 1998; Bowen, 1998; Milliken, Martins & Morgan, 1998) and also affect employees work attitudes (Scandura & Lankau, 1997). In practice, all this means that organizations should conduct, for example, regular questionnaires or interviews to clarify employees' family situations, needs and attitudes toward work and family issues (see e.g., Sanders, Lengnick-Hall, Lengnick-Hall & Steele-Clapp, 1998). In Finland, one large research project targeted at promoting the work-family interface in organizations is already being implemented (see e.g., Lammi-Taskula, 1998a; 1998b; Salmi, 1996; 1998). Finally, different steps targeted to improve working life may also promote positive work spillover into the family domain, i.e., satisfaction derived from the work role spilling over into satisfaction experienced in family roles.

If, as my results show, job insecurity is a stressor, it is important that steps be taken to decrease or minimize its negative effects on well-being. Consequently, I suggest that professionals, e.g., personnel managers, need to provide various kinds of support and help to job-insecure employees. For example, more attention should be paid to stress management and coping at the individual as well as organizational level. Employees' feelings of personal control and ambiguity tolerance should be enhanced. In practice, organizations should provide possibilities for their employees to acquire further professional education, since this might be one key factor in increasing an employee's experiences of control at work. Furthermore, open and honest communication, and fairness in implementing organizational changes need to be taken into account. It would be also useful, if human resource managers were able to anticipate what is the demand of the personnel in the future. Of course, always in planning personnel issues of any kind, employees' opinions should be considered, due to the fact that they possess a special knowledge of their work content. If employees' opinions are not taken into account, job insecurity experiences are likely to follow.

Furthermore, it should to be pointed out that flexible job contracts in various forms have increased since the recession of the early 1990s (see e.g., Lehto & Sutela, 1998; Parjanne, 1998). These types of job contracts might generate increased job insecurity. It has been argued that contingent work targets women, in particular. However, apart from possibly increasing job insecurity, non-permanent job contracts may also inhibit an employee's readiness to advance his or her own interests and needs in relation to issues in combining working and family lives. A contingent worker may not even dare to discuss his or her family situation and needs due to the threat of job loss, e.g., (s)he may not receive a new job contract, if (s)he is considered a "difficult" and demanding employee. Moreover, in practice, many contingent workers do not receive all the benefits (e.g., paid parental leave, access to education) available to employees with permanent jobs. Altogether, more measures are needed to improve the position of non-permanent employees. Both social and labour market policy should pay more attention to this employee group. In addition, in order to decrease job insecurity

and its related negative side effects, employers should have the statutory duty to provide equal benefits and opportunities for permanent and non-permanent workers alike.

Job insecurity aside, time demands at work and productivity requirements have also increased enormously during the 1990s (e.g., Kolu, 1991; Lehto, 1991; Lehto & Sutela, 1998). I would suggest that at least in Finland this has occurred because of the various resource cuts implemented in certain fields (e.g., public sector, domestic market) during the recession of the early 1990s. However, at present, in some fields (e.g., telecommunication services) are experiencing a labour shortage owing to a lack of trained professionals, while in certain other fields (e.g., municipal social and health care centers) resources do not permit the hiring of new workers despite the demand for their services. For the individual's well-being this is potentially a stressful situation, since in both cases (s)he may have too much to do at work. This, in turn, may negatively affect his or her wellbeing in the most severe cases, for example, to burnout which in all likelihood will also have negative effects on other members of the family (Westman & Etzion, 1995). If organizations cannot afford to hire new employees, there are nonetheless other measures what could be taken or made more widely accessible in Finnish working life to enhance the well-being of the individual employee, such as job sharing, reduced working hours, part-time retirement, and work reorganization (see Julkunen & Nätti, 1997).

In the last few decades, family life has also changed in many respects. For example, the number of dual-earner families has increased, signifying among the other things that parenting and housework responsibilities should be shared equally between the dual-earner partners. Luckily, in Finland we already have a number of measures in place which help families cope with paid work requirements and thereby enhance the work-family interface. Let us consider some of these relatively recent improvements. First, Finnish families can receive domestic help at reasonably costs; perhaps dual-earner families could further utilize this benefit. Second, tax allowances related to commuting between work and home are to be increased in the near future. Moreover, new measures are being planned, e.g., longer parental leave for fathers and ways of enhancing wellbeing at work, which will also facilitate combining the demands of work and family.

However, it needs to be recognized that, where implemented the measures discussed above have been conducted on the macro level, signifying that the services are provided by society. On the microlevel, and in this case I refer to private families, much remains to be done, as shown by the results of a recent Finnish study (Melkas, 1998) which indicated that equality in sharing housework is not yet a feature of the Finnish family; domestic duties continue to be done more often by women. There is also empirical evidence showing that among dualearner and dual-career couples unequal division of the housework between the couples, often causes distress and may increase family-work conflict (e.g., Barnett & Shen, 1997; Bird & Ross, 1993; Kinnunen et al., 1997; Perry-Jenkins & Folk, 1994). Accordingly, we need changes in attitudes as well as in behavior so that dual-earner couples become aware of the importance of sharing domestic work and child care (see Kushnir, Malkinson & Kasan, 1996; Lundberg, 1996).

### **YHTEENVETO**

Väitöskirjatutkielmani käsittelee työn ja perheen vuorovaikutusta ja yksilön hyvinvointia stressiteoreettisesta viitekehyksestä käsin. Tutkielmassa selvitin, kuinka etenkin työn stressitekijät, kuten esimerkiksi työn epävarmuus, aikapaineet ja vähäiset vaikutusmahdollisuudet työssä sekä ongelmat työyhteisön ihmissuhteissa, ovat yhteydessä työn ja perheen vuorovaikutukseen sekä yksilöiden kokemaan hyvinvointiin työssä ja perheessä.

Tutkielmani perustuu kyselyaineistoihin, jotka kerättiin Työsuojelurahaston rahoittamassa tutkimusprojektissa "Työn epävarmuus ja hyvinvointi" vuosina 1994-1998. Kyselyt toteutettiin neljässä organisaatiossa: kunnansosiaali-ja terveystoimessa, pankissa, kaupassa ja tehtaassa. Ensimmäinen artikkelini perustuu 1995 kerättyyn poikkileikkausaineistoon (n = 501) ja toinen vuonna 1996 kerättyyn puolisokyselyyn, jossa oli mukana 215 työssäkäyvää av(i)oparia. Kolmas artikkeli perustuu vuoden (n = 219) ja neljäs artikkeli kahden vuoden (n = 109) seurantaaineistoon, jossa ovat mukana ne organisaatioiden työntekijät, jotka osallistuivat kyselyihin eri vuosina.

Ensimmäisessä artikkelissa tavoitteena oli saada kokonaiskuva työn ja perheelämän välisestä vuorovaikutuksesta yksittäisen työntekijän kokemana. Teoreettisesti artikkeli perustuu ristiriita- (konflikti) näkökulmaan, jossa oletetaan työn ja perheen vuorovaikutukseen sisältyvän aina jossain määrin ristiriitaa: yhtäältä työ häiritsee perhettä ja toisaalta perhe työtä. Artikkelissa tarkastelin sekä työstä perheeseen että perheestä työhön suuntautuvan ristiriidan yleisyyttä sekä työhön ja perhe-elämään liittyviä stressitekijöitä, jotka voivat aiheuttaa ristiriidan tuntemuksia. Lisäksi tutkin, millaisia seurauksia työn ja perheen välisistä ristiriidoista on hyvinvoinnille.

Tuloksetosoittivat, että työhäiritsiuseammin perhe-elämää kuin perhe työtä. Työn stressitekijät, kuten työn epävarmuus, huonot esimiessuhteet työyhteisössä ja vähäiset vaikutusmahdollisuudet työssä, olivat yhteydessä etenkin työstä perheeseen suuntautuvaan ristiriitaan. Sen sijaan perheen stressitekijät, kuten lasten lukumäärä ja puolison työssäkäynti, olivat yhteydessä erityisesti perheestä työhön suuntautuvaan ristiriitaan. Ristiriita työstä perheeseen oli yhteydessä lisääntyneisiin työahdistuksen,-masennuksenja -uupumuksen tuntemuksiin, kun taas ristiriita perheestä työhön oli yhteydessä heikentyneeseen parisuhde- ja vanhemmuustyytyväisyyteen. Lisäksi molemman suuntaiset ristiriidat olivat yhteydessä voimistuneeseen psykosomaattiseen oireiluun. Tuloksetosoittivat, että työssä ja perheessä kohdattavat stressitekijät voivat vaikeuttaa työn ja perheen yhteen sovittamista ja että työn ja perheen väliset ristiriidat voivat puolestaan heikentää koettua hyvinvointia elämän eri alueilla.

Toisessa artikkelissa tarkastelin, miten työ ja perhe-elämä ovat vuorovaikutuksessa av(i)opuolisoiden välillä. Näkökulma oli siis av(i)opari- eikä yksilökeskeinen. Erityisesti selvitin sitä, miten työn stressitekijät heijastuvat yksilön omaan (spillover) ja hänen puolisonsa (crossover) parisuhdetyytyväisyyteen. Tutkin myös niitä mekanismeja, joiden kautta työn stressitekijät välittyvät parisuhteeseen. Teoreettisesti artikkeli pohjautuu näkemykseen, jossa stressiteki-

jöiden oletetaan heikentävän hyvinvointia ensin sillä elämän alueella, missä ne kohdataan (esim. työ) ja vasta tämä hyvinvoinnin aleneminen heikentää hyvinvointia toisella elämän alueella (esim. perhe).

Tuloksista ilmeni, että työn epävarmuus, aikapaineet työssä, heikot esimiessuhteet ja ristiriita työstä perheeseen olivat yhteydessä ensin yksilön kokemaan työuupumukseen, joka taas oli yhteydessä psykosomaattiseen oireiluun. Psykosomaattinen oireilu oli yhteydessä heikentyneeseen parisuhdetyytyväisyyteen molemmilla sukupuolilla. Työn stressitekijöiden hyvinvointivaikutukset eivät kuitenkaan siirtyneet puolisoiden välillä eli yksilön kokema työstressitekijöiden aiheuttama psykosomaattinen pahoinvointi ei ollut yhteydessä hänen puolisonsa parisuhdetyytyväisyyteen. Vaikka työstressi ei näyttänyt siirtyvän puolisolta toiselle, tutkimuskuitenkinosoitti, että yksittäisen työntekijän kohdalla työstressi on haitallista: työn stressitekijät voivat heikentää parisuhteen laatua epäsuorasti työ- ja yleisen hyvinvoinnin kautta.

Kolmannessa artikkelissa painopiste oli työn epävarmuuden ja yksilön kokeman hyvinvoinnin välisten vaikutusten tutkimisessa. Erityisesti tarkastelin sitä, kuinka työn epävarmuus, hyvinvointi työssä (työuupumus), yleinen hyvinvointi (somaattiset oireet) ja hyvinvointi perheen tasolla (työn aiheuttamat kielteiset siirräntävaikutukset vanhemmuuteen) ovat yhteydessä toisiinsa vuoden seuranta-asetelmassa. Teoreettisesti artikkelissa oletettiin työn epävarmuuden toimivan yksilön hyvinvointia heikentävänä työn stressitekijänä vuoden aikavälillä eli vuoden 1995 epävarmuuden oletettiin heijastuvan kielteisesti vuonna 1996 koettuun hyvinvointiin.

Havaitsin, että näin tapahtui ainoastaan naisten kohdalla, joilla vuonna 1995 koettu työn epävarmuus lisäsi työuupumusta ja työn ulottamaa kielteistä siirräntää vanhemmuuteen vuotta myöhemmin. Sen sijaan miehillä työn epävarmuuden ja hyvinvoinnin välillä ei havaittu yhteyttä eli yhtäältä työn epävarmuus ei ennustanut hyvinvoinnin heikkenemistä ja toisaalta hyvinvointi ei vaikuttanut työn epävarmuuteen seuraavana vuonna. Tulos osoittaa, että työn epävarmuuden ja hyvinvoinnin välinen yhteys on monimutkainen ja voi myös olla erilainen miehillä ja naisilla.

Neljännen artikkelin pääasiallisen tarkoitus oli tutkia työn epävarmuuskokemusten pysyvyyttä kahden vuoden seurannassa. Työn epävarmuutta tarkasteltiin työttömyyden uhkana, työn muutosten merkittävyytenä ja todennäköisyytenä sekä voimattomuutena vastustaa työssä tapahtuvia muutoksia. Tutkimuksessa oletettiin työn epävarmuuden pysyvyyden vaihtelevan riippuen siitä, millä mittarilla epävarmuutta arvioitiin.

Analyysit osoittivat, että työttömyyden uhka sekä työssä tapahtuvien muutosten merkittävyys oli suhteellisen pysyvää eri ajankohtina. Myös voimattomuus vastustaa työssä tapahtuvia muutoksia säilyi melko muuttumattomana seuranta-aikana. Näillä kolmella skaalalla arvioituna työn epävarmuus osoittautui siis melko pysyväksi ilmiöksi: voimakas työn epävarmuus vuonna 1995 merkitsi voimakasta epävarmuutta myös kaksi vuotta myöhemmin. Sen sijaan neljäs käyttämäni mittari, jolla arvioitiin työssä tapahtuvien muutosten todennäköisyyttä, osoittautui puutteelliseksi psykometrisiltä ominaisuuksiltaan eikä epävarmuuden pysyvyyttä voitu lainkaan arvioida tämän mittarin avulla. Työssä tapahtuvien muutosten todennäköisyys liittyy eniten muuttuviin olosuhteisiin organisaatiossa,

mikä voi aiheuttaa sen, että tämän tyyppistä työn epävarmuutta on vaikea arvioida samalla mittarilla eri ajankohtina. Analyysien perusteella päädyin kahteen keskeiseen johtopäätökseen. Ensinnäkin työn epävarmuus voidaan määritellä työttömyyden uhkana ja toiseksi työn epävarmuuden käsitteeseen sekä mittaamiseen olisi jatkossa kiinnitettävä enemmän huomiota.

Tutkielmani perusteella voidaan esittää, että kehittämällä työelämää voidaan edistää työn ja perheen vuorovaikutusta: mitä positiivisemmin yksilö työnsä kokee, sitä vähäisemmin työ ulottaa kielteisiä vaikutuksia perhe-elämään. Työn varmuus, hyvät vaikutusmahdollisuudet työssä, aikapaineiden vähentäminen ja toimivat ihmissuhteet työyhteisössä edistävät yksilön hyvinvointia niin työssä kuin perheessä.

### **REFERENCES**

- Adams, G. A., King, L. A. & King, D. W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology*, 81, 411-420.
- Ameen, E. C., Jackson, C., Pasewark, W. R. & Strawser, J. R. (1995). An empirical investigation of the antecedents and consequences of job insecurity on the turnover intentions of academic accountants. *Issues in Accounting Education*, 10, 65-82.
- Armstrong-Stassen, M. (1993). Production workers' reactions to a plant closing: The role of transfer, stress and support. *Anxiety, Stress and Coping*, 6, 201-214.
- Arnetz, B., Brenner, S-O., Levi, L., Hjelm, R., Petterson, I-L., Wasserman, J., Petrini, B., Eneroth, P., Kallner, A., Kvetnansky, R. & Vigas, M. (1991). Neuroendocrine and immunologic effects of unemployment and job insecurity. *Psychotherapy and Psychosomatics*, 55, 76-80.
- Aryee, S. (1992). Antecedents and outcomes of work-family conflicts among married professional women: Evidence from Singapore. *Human Relations*, 45, 813-837.
- Aryee, S., Luk, V. & Stone, R. (1998). Family-responsive variables and retention-relevant outcomes among employed parents. *Human Relations*, 51, 73-87.
- Ashford, S., Lee, C. & Bobko, P. (1989). Content, causes and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal*, 32, 803-829.
- Barnett, R. C. (1993). Multiple roles, gender, and psychological distress. In L. Goldberg and S. Breznitz (Eds.), *Handbook of Stress: Theoretical and Clinical Aspects* (pp. 427-445). USA, New York: The Free Press.
- Barnett, R. C. (1997). How paradigms shape stories we tell: Paradigm shift in gender and health. *Journal of Social Issues*, 53, 351-368.
- Barnett, R. C. & Brennan, R. T. (1997). Change in job conditions, change in psychological distress, and gender: a longitudinal study of dual-earner couples. *Journal of Organizational Behavior*, 18, 253-274.
- Barnett, R. C. & Shen, Y-C. (1997). Gender, high- and low-schedule-control housework tasks, and psychological distress: A study of dual-earner couples. *Journal of Family Issues*, 18, 403-428.
- Barling, J. (1990). *Employment, Stress and family functioning*. Chichester: John Wiley & Sons.
- Barling, J. (1994). Work and family: In search of more effective workplace interventions. *Trends in Organizational Behavior*, 1, 63-73.
- Barling, J., Dupre, K. E. & Hepburn, C. G. (1998). Effects of parents job insecurity on children's work beliefs and attitudes. *Journal of Applied Psychology*, 83, 112-118.
- Barling, J. & Kelloway, E. K. (1996). Job insecurity and health: the moderating role of workplace control. *Stress Medicine*, 12, 253-259.
- Barling, J. & MacEwen, K. (1992). Linking work experiences to facets of marital functioning. *Journal of Organizational Behavior*, 13, 573-583.

- Barling, J., Zacharatos, A., & Hepburn, C. G. (1999). Parents' job insecurity affects children's academic performance through cognitive difficulties. *Journal of Applied Psychology*, 84, 437-444.
- Bird, C. E. & Ross, C. E. (1993). Houseworkers and paid workers: Qualities of the work and effects on personal control. *Journal of Marriage and the Family*, 55, 913-925.
- Bjoenberg, U. (1998). Well-being among Swedish employed mothers with preschool children. In K. Orth-Gomer and M. Chesney et al. (Eds.) Women, Stress and Heart Disease (pp. 133-149). Mahwah, NJ, USA: Lawrence Erlbaum Associates, Inc.
- Bolger, N., Delongis, A., Kessler, R. C. & Wethington, E. (1989). The contagion of stress across multiple roles. *Journal of Marriage and Family*, 51, 175-184.
- Bonney, N. (1988). Dual earning couples: trends of change in Great Britain. *Work, Employment and Society*, 2, 89-102.
- Borg, I. & Elizur, D. (1992). Job insecurity: Correlates, moderators and measurement. *International Journal of Manpower*, 13, 13-26.
- Bowen, G. L. (1998). Effects of leader support in the work unit on the relationship between work spillover and family adaptation. *Journal of Family and Economic Issues*, 19, 25-52.
- Burke, R., Weir, T. & DuWors, R. E. (1980). Work demands on administrators and spouse well-being. *Human Relations*, 33, 253-278.
- Büssing, A. (1997). Can control at work and social support moderate psychological consequences of job insecurity? Results from a quasi-experimental study in the steel industry. European Journal of Work and Organizational Psychology, 8, 219-243.
- Campbell, J. L. & Snow, B. M. (1992). Gender role conflict and family environment as predictors of men's marital satisfaction. *Journal of Family Psychology*, 6, 84-87.
- Capel, S. A. (1991). A longitudinal study of burnout in teachers. *British Journal of Educational Psychology*, 61, 36-45.
- Caplan, R. D. (1985). Psychosocial stress at work. *Management and Labour Studies*, 10, 63-76.
- Caplan, R. D., Cobb, S., French, J. R. P. Jr., van Harrison, R. V. & Pinneau, S. R. (1980). *Job demands and worker health: Main effects and occupational differences*. Ann Arbor, Michigan: Survey Research Center, Institute of Social Research, University of Michigan.
- Cohen, A. (1997). Personal and organizational responses to work-nonwork interface as related to organizational commitment. *Journal of Applied Social Psychology*, 27, 1085-1114.
- Cooper, C. L. & Marshall, J. (1976). Occupational sources of stress, a review of the literature relating to coronary heart disease and mental ill health. *Journal of Occupational Psychology*, 49, 11-28.
- Cooper, C. L., & Payne, P. (1993). Personality and Stress. Individual differences in the stress process. Chichester: Wiley.
- Coverman, S. (1989). Role overload, role conflict, and stress: Addressing consequences of multiple role demands. *Social Forces*, 67, 965-982.
- Cox, T. (1983). Stress. London: MacMillan.

- Crnic, K. A. & Greenberg, M. T. (1990). Minor parenting stresses with young children. *Child Development*, 61, 1628-1637.
- Crouter, A. C. (1984). Spillover from family to work: The neglected side of the work-family interference. *Human Relations*, 37, 425-442.
- Crouter, A. C. & Manke, B. (1996). Development of a typology of dual-earner families: A window into differences between and within families in relationship, roles and activities. *Journal of Family Psychology*, 11, 62-75.
- Davy, J. A., Kinicki, A. J. & Scheck, C. L. (1997). A test of job insecurity's direct and mediated effects on withdrawal cognitions. *Journal of Organizational Behavior*, 18, 323-349.
- Deater-Decard, K. & Scarr, S. (1996). Parenting stress among dual-earner mothers and fathers: Are there gender differences? *Journal of Family Psychology*, 10, 45-59.
- Dekard, G., Meterko, M. & Field, D. (1994). Physicians burnout: an examination of personal, professional and organizational relationship. *Medical Care*, 32, 745-754.
- Dekker, S. W. A. & Schaufeli, W. B. (1995). The effects of job insecurity on psychological health and withdrawal: A longitudinal study. *Australian Psychologist*, 30, 57-63.
- De Witte, H. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, 8, 155-179.
- Doherty, W. J., Kouneski, E. F. & Erickson, M. F. (1998). Responsible fathering: An overview and conceptual framework. *Journal of Marriage and the Family*, 60, 277-292.
- Dohrenwend, B. S., Krasnoff, L., Askenasy, A. B. & Dohrenwend, B. P. (1978). Exemplification of a method for scaling life events: The PERI Life Events Scale. *Journal of Health and Social Behavior*, 19, 205-229.
- Duckett, E. & Richards, M. H. (1995). Maternal employment and the quality of daily experience for young adolescents of single mothers. *Journal of Family Psychology*, 9, 418-432.
- Duxbury, L. & Higgins, C. (1991). Gender differences in work-family conflict. *Journal of Applied Psychology*, 76, 60-74.
- Duxbury, L., Higgins, C. & Lee, C. (1994). Work-family conflict. A comparison by gender, family type and perceived control. *Journal of Family Issues*, 15, 449-466.
- Duxbury, L., E., Higgins, C. A. & Thomas, D. R. (1996). Work and family environments and the adoption of computer-supported supplemental work-at-home. *Journal of Vocational Behavior*, 49, 1-23.
- Eagle, B. W., Miles, E. W. & Icenogle, M. L. (1997). Interrole conflicts and the permeability of work and family domains: Are there gender differences? *Journal of Vocational Behavior*, 50, 168-184.
- Earnshaw, A. R., Amundson, N. & Borgen, W. A. (1990). The experience of job insecurity for professional women. *Journal of Employment Counseling*, 27, 2-18.
- Employment in Europe (1996). Europen Comission. Directorate-General for Employment, Industrial Relations and Social Affairs. Belgium: Office for Official Publications of the European Communities.

- *Employment Outlook (1996).* Paris: Head of Publications Service, Organization for Economic Cooperation and Social Affairs. Belgium, Brussel.
- Farrell, A. D. (1994). Structural equation modeling with longitudinal data: Strategies for examining group differences and reciprocal relationships. *Journal of Consulting and Clinical Psychology*, 62, 477-487.
- Feldt, T., Kinnunen, U. & Mauno, S. (in press). The mediational model of sense of coherence in the work context: A one-year follow-up study. *Journal of Organizational Behavior*.
- Ferrie, J. E. (1997). Labour market status, insecurity and health. *Journal of Health Psychology*, 2, 373-397.
- Ferrie, J., Shipley, M. J., Marmot, M. G., Stansfeld, S. & Smith, G. D. (1998). The health effects of major organizational change and job insecurity. *Social Science and Medicine*, 46, 243-254.
- French, J. R. P., Caplan, R. D. & Harrison, R. V. (1982). *The Mechanism of Job Stress and Strain*. Chichester, UK: Wiley.
- Friedman, H. S. & DiMatteo, M. R. (1989). *Health Psychology*. USA: Englewood Cliffs, NJ, Prentice-Hall, Inc.
- Frone, M. R., Russell, M. & Barnes G.M. (1996). Work-family conflict, gender, and health-related outcomes: A study of employed parents in two community samples. *Journal of Occupational Health Psychology*, 1, 57-69.
- Frone, M. R., Russell, M. & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77, 65-78.
- Frone, M. R., Russell, M. & Cooper, M. L. (1994). Relationship between job and family satisfaction: Causal or noncausal covariation? *Journal of Management*, 20, 565-579.
- Frone, M. R., Yardley, J. K. & Markel, K. S. (1997a). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, 50, 145-167.
- Frone, M. R., Russell, M. & Cooper, M. L. (1997b). Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational and Organizational Psychology*, 70, 325-335.
- Gaillard, A. W. K. & Wientjes, C. J. E. (1994). Mental work load and work stress as two types of energy mobilation. Special Issue: A healthier work environment. *Work and Stress*, 8, 141-152.
- Galinsky, E., Bond, J. T. & Friedman, D. E. (1996). The role of employers in addressing the needs of employed parents. *Journal of Social Issues*, 52, 111-136.
- Gignac, M. A., Kelloway, E. K. & Gottlieb, B. H. (1996). The impact of caregiving on employment: A mediational model of work-family conflict. *Canadian Journal of Aging*, 15, 525-542.
- Greenhalgh, L. (1982). Maintaining organizational effectiveness during organizational rerenchment. Journal of Applied Behavioral Science, 18, 155-170.
- Greenhalgh, L. & Rosenblatt, Z. (1984). Job insecurity: Towards conceptual clarity. *Academy of Management Review*, 9, 438-448.
- Greenhaus, J. H. & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10, 76-88.

- Guelzow, M. C., Bird, G. W. & Kobal, E. H. (1991). An exploratory path analysis of the stress process for dual-career men and women. *Journal of Marriage and the Family*, 53, 151-164.
- Gutek, B. A., Repetti, R. L. & Silver, D. L. (1988). Nonwork roles and stress at work. In C. L. Cooper & R. Payne (Eds.), *Causes, coping and consequences of stress at work* (pp. 141-173). Chichester: John Wiley & Sons.
- Gutek, B. A., Searle, S. & Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. *Journal of Applied Psychology*, 76, 560-568.
- Haavio-Mannila, E. (1992). Work, Family and Well-Being in Five North- and East-European Capitals. Suomalaisen tiedeakatemian toimituksia sarja B, nide 225. Jyväskylä: Gummerus.
- Haavio-Mannila, E., Jallinoja, R. & Strandell, H. (1984). *Perhe, työ ja tunteet*. Helsinki: WSOY.
- Hackman, J. R. & Oldham, G. R. (1980). Work redesign. USA: Addison-Wesley.
- Hantrais, L. & Letablier, M-T. (1996). Families and Family Policies in Europe. England: Addison Wesley Logmann.
- Happonen, M., Mauno, S., Nätti, J. & Kinnunen, U. (1998). Koettu työn epävarmuus: Pitkittäistutkimus kolmessa organisaatiossa. *Janus*, 6, 279-299.
- Happonen, M., Mauno, S., Kinnunen, U., Nätti, J. & Koivunen, T (1996). *Työn epävarmuuden muutos ja hyvinvointi. Seurantatutkimus neljässä organisaatiossa.* Jyväskylän yliopiston yhteiskuntapolitiikan työpapereita. No. 98.
- Hartley, J., Jacobson, D., Klandermans, B. & van Vuuren, T. (1991). *Job insecurity. Coping with jobs at risk*. London: Sage.
- Hays, R. D., Marshall, G. R., Wang, E. Y. & Sherbourne, C. D. (1994). Four-year cross-lagged associations between physical and mental health in the medical outcomes study. Special section: Structural equation modeling in clinical research. *Journal of Consulting and Clinical Psychology*, 62, 441-449.
- Heaney, C., Israel, B. A. & House, J. S. (1994). Chronic job insecurity among automobile workers: Effect on job satisfaction and health. *Social Science and Medicine*, 38, 1431-1437.
- Heikkilä, T. (1998). Muutosmyrsky. Pankkifuusio työntekijöiden kokemuksena. HUT Industrial Management and Work and Organizational Psychology. Report No 7. Helsinki: Teknillinen korkeakoulu.
- Hellgren, J., Sverke, M. & Isaksson, K. (1999). A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. *European Journal of Work and Organizational psychology*, 8, 179-197.
- Hertz, R. & Charlton, J. (1989). Making family under a shiftwork schedule: Air force security guards and their wives. *Social Problems*, 36, 491-507.
- Higginbottom, S. F., Barling, J. & Kelloway, E. K. (1993). Linking retirement experiences and marital satisfaction: A mediational model. *Psychology and Aging*, 8, 508-516
- Higgins, C. A. & Duxbury, L. E. (1992). Work-family conflict: A comparison of dual-career men. *Journal of Organizational Behavior*, 13, 389-411.
- Himle, D. P., Jayaratne, S. & Thyness, P. (1989). The effect of emotional support on burnout, work stress and mental health among Norwegian and American social workers. *Journal of Social Service Research*, 13, 27-45.

- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-523.
- Hobfoll, S. E. & Spielberg, S. D. (1992). Family stress: Integrating theory and measurement. *Journal of Family Psychology*, 6, 99-112.
- Holmes, T. H. & Rahe, R.H. (1967). The social readjustement rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Hoppock, R. (1935). Job satisfaction. New York: Harper & Row.
- Houtman, I. L. D., Bongers, P. M., Smulders, P. G. W. & Kompier, M. A. J. (1994). Psychosocial stressors at work and musculoskeletal problems. *Scandinavian Journal Of Work, Environment & Health*, 20, 139-145.
- Hughes, D. & Galinsky, E. (1994). Work experiences and marital interactions: elaborating the complexity of work. *Journal of Organizational Behavior*, 15, 423-438.
- Hughes, D., Galinsky, E. & Morris, A. (1992). The effects of job characteristics on marital quality: Specifying linking mechanism. *Journal of Marriage and the Family*, 54, 31-42.
- Hurrell, J.J. & Murphy, L. R. (1992). An overview of occupational stress and health. In W. M. Rom (Ed.), *Environmental and Occupational Medicine* (pp. 675-684). USA, Boston: Little Brown.
- Huttunen, J. (1994). Isyys ja miehisyys perhepsykologisessa tutkimuksessa. Teoksessa J. Virkki (toim.), *Ydinperheestä yksilöllistyviin perheisiin* (ss. 46-66). Porvoo: WSOY.
- Izraeli, D. N. (1989). Burning out in medicine. A comparison of husbands and wives in dual-career couples. In E. B. Goldsmith (Ed.) *Work and Family: Theory, Research and Applications* (pp. 329-349). California: SAGE Publications.
- Jackson, S. E., Zedeck, S. & Summers, E. (1985). Family life disruptions: Effects of job-induced structural and emotional interference. Academy of Management Journal, 28, 574-586.
- Jacobson, D. (1991a). The conceptual approach to job insecurity. In J. Hartley et al., (Eds.), *Job insecurity. Coping with jobs at risk* (pp. 23-39). London: SAGE Publications.
- Jacobson, D. (1991b). Toward theoretical distinction between the stress components of the job insecurity and job loss experiences. *Research In the Sociology of Organizations*, 9, 1-19.
- Johnson, C. D., Messe, L. A. & Crano, W. D. (1984). Predicting job performance of low income workers: the work opinion questionnaire. *Personnel Psychology*, 37, 291-299.
- Joelson, M. & Wahlquist, L. (1987). The psychological meaning of job insecurity and job loss: The results of a longitudinal study. *Social Science and Medicine*, 25, 179-182.
- Jones, F. & Fletcher, B. (1993). An empirical study of occupational stress transmission in working couples. *Human Relations*, 46, 881-903.
- Jones, F. & Fletcher, B. (1996). Taking work home: A study of daily fluctuations in the work stressors' effects on moods and impacts on marital partners. *Journal of Occupational and Organizational Psychology*, 69, 89-106.

- Jones-Johnson, G. & Johnson, W. R. (1992). Subjective underemployment and psychosocial stress: The role of perceived social and supervisor support. *Journal of Social Psychology*, 132, 11-21.
- Judge, T. A., Bourdeau, J. W. & Bretz, R. D. (1994). Job and life attitudes of male executives. *Journal of Applied Psychology*, 79, 767-782.
- Julkunen, R., & Nätti, J. (1997). *Työn jakaminen. Moraali, talous, politiikka*. Tampere: Vastapaino.
- Kandolin, I. (1997). Gender, Worklife and Family Responsibilities in Finland and Estonia Effects on Economic and Mental Well-Being. Finnish Institute of Occupational Health. Research Reports 15. Helsinki: Hakapaino Oy.
- Karasek, R. (1979). Job demands. Job decision latitude and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285-308.
- Karasek, R. & Theorell, T. (1990). Healthy work. New York: Basic books.
- Kasl, S. V. (1983). Pursuing the link between stressful life experiences and disease: A time for reappraisal. In C. L. Cooper (Ed.), Stress research. Issues for the eighties (pp. 79-102). Chichester: John Wiley & Sons.
- Kauppinen, K. & Gordon, T. (1997). *Unresolved dilemmas. Women, work and the family in the United States, Europe and the former Soviet Union*. USA: Ashgate Publishing Company.
- Kauppinen-Toropainen, K. & Kandolin, I. (1991). Työn ja kodin vaatimusten yhdistäminen. *Työ ja Ihminen*, 5, 295-312.
- Kauppinen-Toropainen, K., Kandolin, I., Haavio-Mannila, E. (1988). Sex segregation of work and the quality of women's work. *Journal of Organizational Behavior*, 9, 15-27.
- Kelloway, E. K. & Barling, J. (1995). Stress, control, well-being, and marital functioning: A causal correlational analysis. In G. P. Keita and J. J. Hurrell (Eds.), Job stress in changing workforce. Washington, USA: American Psychological Association (pp. 241-251).
- Kinnunen, M. & Korvajärvi, P. (1996). *Työelämän sukupuolistavat käytännöt*. Jyväskylä: Gummerus Oy.
- Kinnunen, U., Koivunen, T. & Mauno, S. (1997). Työn ja perheen vuorovaikutus puolisoiden kokemana. *Psykologia*, 32, 105-116.
- Kinnunen, U., & Leskinen, E. (1986). Teacher stress during a school year: Covariance and mean structure analyses. *Journal of Occupational Psychology*, 62, 111-122.
- Kinnunen, U., Loikkanen, E. & Mauno, S. (1995). Työn ja perheen vuorovaikutus: ongelmien yleisyys, syyt ja seuraukset. Jyväskylän yliopiston Perhetutkimusyksikön julkaisuja 5/1995.
- Kinnunen, U., Mauno, S., Nätti, J. & Happonen, M. (1999). Perceived job insecurity: A longitudinal study among Finnish employees. *European Journal of Work and Organizational Psychology*, 8, 243-259.
- Kinnunen, U., Mauno, S., Nätti, J. & Happonen, M. (in press). Organizational antecedents and outcomes of job insecurity: A longitudinal study in three organizations in Finland. *Journal of Organizational Behavior*.
- Kinnunen, U. & Nätti, J (1994). Job insecurity in Finland. European Work and Organizational Psychologist, 4, 297-321.

- Kinnunen, U. & Pulkkinen, L. (1998). Linking economic stress to marital quality among Finnish marital couples: mediator effects. *Journal of Family Issues*, 19, 705-724.
- Kinnunen, U., & Pulkkinen, L. (1999). Linking job characteristics to parenting behavior via job-related affect. In J. Gerris (Ed.), *Dynamics of parenting*. Submitted for publication.
- Kirchmeyer, C. (1992). Perceptions of nonwork-to-work spillover: Challenging the common view of conflict-ridden domain relationships. *Basic and Applied Social Psychology*, 13, 231-249.
- Kivimäki, M (1996). Stress and personality factors: Specifications of the role of test anxiety, private self-consciousness, type A behavior pattern, and self-esteem in the relationship between stressors and stress reactions. Finnish Institute of Occupational Health. People and Work, Research Reports, 9. Helsinki: Hakapaino Oy.
- Kivimäki, M., Vahtera, J., Thomson, L., Griffiths, A., Cox, T. & Pentti, J. (1997). Psychosocial factors predicting employee sickness absence during economic decline. *Journal of Applied Psychology*, 82, 858-827.
- Klandermans, B. & van Vuuren, T. (1999). Job insecurity: Introduction. *European Journal of Work and Organizational Psychology*, 8, 145-155.
- Kling, K. C., Hyde J. S., Showers, J. & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, 125, 470-500.
- Koistinen, P. & Suikkanen, A. (1990) (toim). *Edessä pysyvä tilapäisyys*. Joensuun yliopisto. Karjalan tutkimuslaitoksen monisteita No. 2.
- Kolu, T. (1991). Työelämän laatu 1977 1990. *Hyvinvoinnin koettuja muutoksia työssä. Työolokomitean mietinnön liiteselvitys*. Komiteamietintö 38. Tutkimuksia 188. Helsinki: Valtion painatuskeskus.
- Kossek, E. E. & Ozeki, C. (1998). Work-family conflict, policies and the job-life satisfaction relationship: A review and directions for organizational behavior-human resources research. *Journal of Applied Psychology*, 83, 139-149.
- Kushnir, T., Malkinson, R. & Kasan, R. (1996). Reducing work/home conflicts in employed couples: A proposed program to balance job and family demands. *Contemporary Family Therapy*, 18, 147-160
- Lambert, S. J. (1990). Processes linking work and family: A critical review and research agenda. *Human Relations*, 45, 239-257.
- Lambert, S. J. (1991). The combined effects of job and family characteristics on the job satisfaction, job involvement, and intrinsic motivation of men and women workers. *Journal of Organizational Behavior*, 12, 341-363.
- Lammi-Taskula, J. (1998a). *Kymmenen työpaikkaa. Työ- ja perhe-kyselytutkimuksen jakaumia*. Työelämän ja perhe-elämän yhteensovittaminen, työpapereita 2/1998.
- Lammi-Taskula, J. (1998b). Työelämää ja perhe-elämää sovitetaan yhteen koko elinikä. *Dialogi*, 3-4, 32-33.
- Larson, J. H., Wilson, S. M. & Beley, R. (1994). The impact of job insecurity on marital and family relationship. *Family Relations*, 43, 138-143.
- Lavee, Y., McCubbin, H. I. & Patterson, J. M (1985). The double ABCX model of family stress and adpatation: An empirical test by analysis of structural equations with latent variables. *Journal of Marriage and the Family*, 47, 811-825.

- Lazarus, R. & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer. Lee, R. T. & Ashford, B. E. (1993). A longitudinal study of burnout among supervisors and managers: Comparisons between Leiter and Maslach (1988) and Golembievski et al. (1986) models. Organizational Behavior and Human Decision Processes, 54, 369-398.
- Lefkowitz, J. (1994). Sex-related differences in job attitudes and dispositional variables: Now you see them. *Academy of Management Journal*, 37, 323-349.
- Lehto, A-M. (1991). *Työelämän laatu ja tasa-arvo*. Työolokomitean liiteselvitys. Komiteamietintö 1991:39. Tilastokeskus. Tutkimuksia 189. Helsinki: Valtion painatuskeskus.
- Lehto, A-M. & Sutela, H. (1998). *Tehokas, tehokkaampi, uupunut*. *Työolotutkimuksen tuloksia* 1977-1997. Tilastokeskus. Työmarkkinat 1998:12. Vantaa: Tummavuoren Kirjapaino Oy.
- Leiter, M. P. & Durup, M. J. (1996). Work, home, and in-between: A longitudinal study of spillover. *Journal of Applied Behavioral Science*, 32, 29-47
- Lennon, M. C. & Rosenfield, S. (1992). Women and mental health: The interaction of job and family conditions. *Journal of Health and Social Behavior*, 33, 316-327.
- Lewis, S. & Cooper, C. L. (1996). Balancing the work/family interface. A European perspective. *Human Resource Management Review*, 5, 289-305.
- Lim, V. K. G. (1996). Job insecurity and its outcomes: Moderating effects of work-based and nonwork-based social support. *Human Relations*, 49, 171-194.
- Loerch, K. J., Russell, J. E. & Rush, M. C. (1989). The relationship among family domain variables and work-family conflict for men and women. *Journal of Vocational Behavior*, 35, 288-308.
- Lundberg, U. (1996). Influence of paid and unpaid work on psychophysiological stress responses of men and women. *Journal of Occupational Health Psychology*, 1, 117-130.
- Lundberg, U. & Frankenhaeuser, M. (1999). Stress and workload of men and women in high-ranking positions. *Journal of Occupational Health Psychology*, 4, 142-151.
- Lundberg, U., Mårdberg, B. & Frankenhaeuser, M. (1994). The total workload of parents employed in white-collar jobs: Construction of a questionnaire and a scoring system. *Scandinavian Journal of Psychology*, 32, 233-239.
- MacDermid, S. M. & Williams, M. L. (1997). A within-industry comparison of employed mothers' experiences in small and large workplaces. *Journal of Family Issues*, 18, 545-566.
- MacEwen, K. E. & Barling, J. (1988). Interrole conflict, family support and marital adjustment of employed mothers: A short-term longitudinal study. *Journal of Organizational Behavior*, 9, 241-250.
- MacEwen, K. E. & Barling, J. (1994). Daily consequences of work interference with family and family interference with work. *Work and Stress*, 8, 244-254.
- Marshall, J. & Cooper, C. (1979). Work experiences of middle and senior managers: The pressure of satisfaction. *International Management Review*, 19, 81-96.
- Maslach, C. & Jackson, S. E. (1981). The measurement of burnout. *Journal of Occupational Behavior*, 2, 99-113.

- Matthews, L. S., Conger, R. D. & Wickrama, K. A. S. (1996). Work-family conflict and marital quality: Mediating processes. *Social Psychology Quarterly*, 59, 62-79.
- Mauno, S. & Kinnunen, U. (1999). The stability and construct validity of job and family involvement scales: Applying the multi-wave, multi-variable technique in longitudinal data. Submitted for publication.
- McCubbin, H. I. & Patterson, J. M. (1983). The family stress process: The double ABCX model of adjustment. *Marriage and Family Review*, 6, 7-37.
- McGrath, J. (1970). A conceptual formulation for research on stress. In J. McGrath (Ed.), *Social and psychological factors in stress* (pp. 10-21). New York: Holt, Rinehart & Winston.
- McKegney, F. P., Aronson, M. K. & Ooi, W. L. (1988). Identifying depression in the old. *Psychosomatics*, 29, 175-181.
- Melkas, T. (1998). *Tasa-arvobarometri*. Tilastokeskus. Elinolot 1/1998: Sukupuolten tasa-arvo. Helsinki: Tummavuoren Kirjapaino Oy.
- Menaghan, E. G. & Parcel, T. L. (1990). Parental employment and family life: Research in the 1980s. *Journal of Marriage and the Family*, 52, 1079-1098.
- Milkie, M. A. & Peltola, P. (1999). Playing all the roles: Gender and the workfamily balancing act. *Journal of Marriage and the Family*, 61, 476-490.
- Milliken, F. J., Martins, L. L. & Morgan, H. (1998). Explaining organizational responsiveness to work-family issues: The role of human resource executives as issue interpreters. *Academy of Management Journal*, 41, 580-592.
- Murphy, L. R. (1995). Occupational stress management: Current status and future directions. In C. L. Cooper & D. N. Rousseau (Eds.), *Trends in Organizational Behavior*, vol 2 (pp. 1-14). Chichester: John Wiley & Sons.
- Netermeyer, R. G., Boles, J. S. & McMurrian, R. (1996). Development and validation of work-family and family-work conflict scales. *Journal of Applied Psychology*, 81, 4, 400-410.
- Niemi, I. (1994). Perheiden ajankäyttö. Teoksessa *Suomalainen Perhe* (ss. 161-165). Helsinki: Tilastokeskus.
- Noor, N. M (1997). Work and family roles in relation to women's well-being: The role of negative affectivity. *Personality and Individual Differences*, 23, 487-499.
- Nätti, J., Kinnunen, U., Happonen, M., & Mauno, S. (1998). Työn epävarmuuden kokeminen Suomessa. Työpoliittinen Aikakauskirja, 2, 11-20.
- Nätti, J., Kinnunen, U., Mäkinen, P., Loikkanen, E., Mauno, S. & Virolainen, M. (1995). Työn epävarmuus ja hyvinvointi. Työn epävarmuuden kokemisen yleisyys, syyt, seuraukset ja käsittely erilaisissa työorganisaatioissa. Jyväskylän yliopiston yhteiskuntapolitiikan työpapereita No. 92.
- OECD (1997). Is job insecurity on the increase in OECD countries? In *OECD Employment Outlook*, Paris.
- O'Quin, K., & LoTempio, S. (1998). Job satisfaction and turnover in human service agencies perceived as stable or nonstable. *Perceptual and Motor Skills*, 86, 339-344.
- Parasuraman, S., Greenhaus, J. H. & Granrose, C. S. (1992). Role stressors, social support, and well-being among two-career couples. *Journal of Organizational Behavior*, 13, 339-356.

- Parasuraman, S., Purohit, Y. S., Godshalk, M., & Beutell, N. J. (1996). Work and family variables, entrepreneurial career success, and psychological wellbeing. *Journal of Vocational Behavior*, 48, 275-300.
- Parjanne, M-L. (1998). Määräaikaiset työntekijät joustava työvoimapuskuri. Työpoliittinen aikakauskirja, 2, 3-11. Helsinki: Työministeriö.
- Parsons, T. (1959). The social structure of the family. In R. N. Emshen (Ed.) *The Family: Its function and destiny* (pp. 241-274). New York: Harper & Row.
- Pearce, J. L. (1998). Job insecurity is important, but not for the reason you might think: The example of contigent workers. In C. L. Cooper and D. M Rousseau, et al. (Eds.), *Trends in Organizational Behavior*, vol 5 (pp. 31-46). Chichester, UK: American Ethnological Press.
- Perry-Jenkins, M. & Folk, K. (1994). Class, couples, and conflict: Effects of the division of labor on assessments of marriage in dual-earner families. *Journal of Marriage and the Family*, 56, 165-180.
- Pittman, J. E., Solheim, C. A. & Blanchard, D. (1996). Stress as a driver of the allocation of housework. *Journal of Marriage and the Family*, 58, 456-458.
- Poulin, J. & Walter, C. (1993). Social worker burnout: A longitudinal study. *Social Work Research and Abstracts*, 29, 5-11.
- Repetti, R. L. (1989). Effects of daily workload on subsequent behavior during marital interaction: The roles of social withdrawal and spouse support. *Journal of Personality and Social Psychology*, 57, 651-659.
- Repetti, R. L. (1993). The effects of workload and the social environment at work on health. In L. Goldberg and S. Breznitz (Eds.), *Handbook of Stress: Theoretical and Clinical Aspects* (pp. 368-385). USA, New York: The Free Press.
- Repetti, R. L. & Wood, J. (1997). Effects of daily stress at work on mothers' interactions with preschoolers. *Journal of Family Psychology*, 11, 90-108.
- Richards, M. H. & Duckett, E. (1994). Maternal employment and young adolescents' daily experience with and without parents. *Child Development*, 65, 225-236.
- Robertson, I. & Callinan, M. (1998). Personality and work behaviour. *European Journal of Work and Organizational Psychology*, 7, 321-341.
- Rodd, J. (1993). Maternal stress: A comparative study of Australian and Singaporean mothers of young children. *Early Child Development and Care*, 91, 41-50.
- Rook, K., Dooley, D. & Catalano, R. (1991). Stress transmission: The effects of husbands' job stressors on the emotional health of their wives. *Journal of Marriage and the Family*, 53, 165-177.
- Rosenblatt, Z. & Ruvio, A. (1996). A test of multidimensional model of job insecurity: The case of Israeli teachers. *Journal of Organizational Behavior*, 17, 587-605.
- Rosenblatt, Z., Talmud, I., & Ruvio, A. (1999). A gender-based framework of the experience of job insecurity and its effects on work attitudes. *European Journal of Work and Organizational Psychology*, 8, 197-219.
- Roskies, E. & Louis-Guerin, C. (1990). Job insecurity in managers. Antecedents and consequences. *Journal of Organizational Behavior*, 11, 345-359.

- Rydstedt, L. W. & Johansson, G. (1998). A longitudinal study of workload, health and well-being among male and female urban bus drivers. *Journal of Occupational and Organizational Psychology*, 71, 35-45.
- Salmi, M. (1996). Työelämän ja perhe-elämän yhdistämisen palapelit. Teoksessa M., Kinnunen and P. Korvajärvi (toim.), *Työelämän Sukupuolistavat Käytännöt* (ss. 211-233). Jyväskylä: Vastapaino.
- Salmi, M. (1998). Combining work and family life: The challenge of extending the perspective and widening the agenda. Presentation in The World Congeress of Sociology, in Montreal.
- Salmi, M., Huttunen, J. & Yli-Pietilä, P. (1997). *Lapset ja Lama*. Stakes. Raportteja No. 197. Jyväskylä: Gummerus.
- Sanders, M. M., Lengnick-Hall, M. L., Lengnick-Hall, C. A. & Steele-Clapp, L. (1998). Love and work: Career-family attitudes of new entrants into the labor force. *Journal of Organizational Behavior*, 19, 603-619.
- Sarafino, E. P. (1990). *Health Psychology: Biopsychosocial interactions*. New York, USA: John Wiley & Sons.
- Scandura, T. A. & Lankau, M. J. (1997). Relationships of gender, family responsibility and flexible work hours to organizational commitment and job satisfaction. *Journal of Organizational Behavior*, 18, 377-391.
- Schmidt, S. R. & Svorny, S. V. (1998). Recent trends in job security and stability. *Journal of Labour Research*, 19, 647-668.
- Simon, R. (1992). Parental role strains, salience of parental identity and gender differences in psychological distress. *Journal of Health and Social Behavior*, 33, 25-35.
- Small, S. & Riley, D. (1990). Toward a multidimensional assessment of work spillover into family life. *Journal of Marriage and the Family*, 52, 51-61.
- Staines, G. L. (1980). Spillover versus compensation: A review of the literature on the relationship between work and nonwork. *Human Relations*, 33, 11-124.
- Staines, G. L. & Pleck, J. H. (1984). Nonstandard work schedules and family life. *Journal of Applied Psychology*, 69, 515-523.
- Steel, R. P., & Rentsch, J. R. (1997). The dispositional model of job attitudes revisited: Findings of a 10-year study. *Journal of Applied Psychology*, 82, 873-879.
- Stewart, W. & Barling, J. (1996). Fathers' work experiences effect children's behaviors via job-related affect and parenting behaviors. *Journal of Organizational Behavior*, 17, 221-232.
- Spitze, G. (1988). Women's employment and family relations. A review. *Journal of Marriage and the Family*, 50, 595-618.
- Stephens, G. K. & Sommer, S. M. (1996). The measurement of work to family conflict. *Educational and Psychological Measurement*, 56, 475-486.
- Swanson, J. L. (1992). Vocational behavior, 1989-1991: Life-span career development and reciprocal interaction of work and nonwork. *Journal of Vocational Psychology*, 41, 101-161.
- Taylor, R. D., Roberts, D. & Jacobson, L. (1997). Stressful life events, psychological well-being and parenting in African American mothers. *Journal of Family Psychology*, 11, 436-446.

- Theorell, T. & Karasek, R. (1996). Current issues relating to psychosocial job strain and cardiovascular disease research. *Journal of Occupational Health Psychology*, 1, 9-26.
- Thomas, L. T. & Ganster, D. C. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology*, 80, 6-15.
- Turnipseed, D. L. (1994). An analysis of the influence of work environment variables and moderators on the burnout syndrome. *Journal of Applied Social Psychology*, 24, 782-800.
- Vahtera, J. & Bäckman, G. (1995). Voimavarat, lama ja työntekijän terveys. *Työelämän tutkimus*, 6, 12-17.
- Viinamäki, L. (1991). Muuttaako vai ei...Irtisanotun perheellisen henkilöstön elämän muuttuminen Rautavaaran kaivoksen sulkemisen jälkeen. Lapin yliopiston yhteiskuntatieteellisiä julkaisuja B. Tutkimusraportteja ja selvityksiä 12. Rovaniemi: Lapin yliopiston monistuskeskus.
- Voydanoff, P. (1988). Work role characteristics, family structure demands, and work/family conflict. *Journal of Marriage and the Family*, 50, 749-761.
- van Vuuren, T. (1990). Met ontslag bedreigd: werknemers in onzekerheid over hun arbeidsplaats bij veranderingen in de organisatie. Dissertatie. Amstredam: VU Boekhandel/Uitgeverij.
- van Vuuren, T., Klandermans, B., Jacobson, D. & Hartley, J. (1991a). Employees' reaction to job insecurity. In J. Hartley et al., (Eds.), *Job insecurity*. *Coping with job at risk* (pp. 79-103). London: Sage.
- van Vuuren, T., Klandermans, B., Jacobson, D. & Hartley, J. (1991b). Predicting employees' perceptions of job insecurity. In J. Hartley et al., (Eds.), *Job insecurity*. Coping with job at risk (pp. 65-78). London: Sage.
- Waldron, I., Weiss, C. C., & Hughes, M. E. (1998). Integrating effects of multiple roles in women's health. *Journal of Health and Social Behavior*, 39, 216-236.
- Warr, P. (1987). Unemployment and mental health. New York: Oxford University
- Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63, 193-210.
- Westman, M. & Etzion, D. (1995). Crossover of stress, strain and resources from one spouse to another. *Journal of Organizational Behavior*, 16, 169-181.
- Westman, M. & Vinokur, A. D. (1998). Unraveling the relationship of distress levels within couples: Common stressors, empathic reactions, or crossover via social interaction? *Human Relations*, 51, 137-156.
- Wharton, A. (1997). Women, work and emotion, managing jobs and family life. In K. Kauppinen and T. Gordon (Eds.), *Unresolved dilemmas*. *Women, work and the family in the United States, Europe and the former Soviet Union*. USA: Ashgate Publishing Company (pp. 57-81).
- Wickrama, K., Conger, R. D., Lorenz, F. O. & Matthews, L. (1995). Role identity, role satisfaction, and perceived physical health. *Social Psychology Quarterly*, 58, 270-283.
- Windle, M., & Dumenci, L. (1997). Parental and occupational stress as predictors of depressive symptoms among dual-income couples. *Journal of Marriage and the Family*, 59, 625-634.

- Witz, A. (1990). Patriarchy and professions: The gendered politics of occupational closure. *Sociology*, 24, 675-690
- Zapf, D., Dorman, C., & Frese, M (1996). Longitudinal studies in organizational stress research: A review of the literature with references to methodological issues. *Journal of Occupational Health Psychology*, 1, 145-169.
- Zedeck, S., Maslach, C., Mosier, K. & Skitka, L. (1989). Affective response to work and quality of family life: Employee and spouse perspectives. In E. B. Goldsmith (Ed.), *Work and family: Theory, research, and applications* (pp.135-157). California: Sage Publications.
- Zedeck, S. & Mosier, K. (1990). Work in the family and employing organization. *American Psychologist*, 45, 240-252.
- Ylöstalo, P., Kauppinen, T. & Heikkilä, A. (1996). *Työlobarometri: marraskuu 1995*. Työpoliittinen tutkimus. Helsinki: Työministeriö.
- Ylöstalo, P. & Rahikainen, O. (1998). *Työolobarometri: lokakuu 1997*. Helsinki: Työministeriö.

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### II

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### IV

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