

Report No 6:2002

European unions in the wake of flexible production

Papers presented at the Tenth European
Congress on Work and Organizational
Psychology in Prague 2001

Edited by:

Magnus Sverke

Katharina Näswall

Johnny Hellgren

Antonio Chirumbolo

Hans De Witte

Sjoerd Goslinga



SAL TSA – JOINT PROGRAMME
FOR WORKING LIFE RESEARCH IN EUROPE
The National Institute for Working Life and The Swedish Trade Unions in Co-operation

SALTSA is a collaboration programme for occupational research in Europe. The National Institute for Working Life in Sweden and the Swedish confederations of trade unions SACO (the Swedish Confederation of Professional Associations), LO (the Swedish Trade Union Confederation) and TCO (the Swedish Confederation of Professional Employees) take part in the programme. Many problems and issues relating to working life are common to most European countries, and the purpose of the programme is to pave the way for joint research on these matters from a European perspective.

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Contact SALTSA

Labour Market Programme

Lars Magnusson, National Institute for Working Life, Tel: +46 8 619 67 18,

e-mail: lars.magnusson@niwl.se

Torbjörn Strandberg, LO, Tel: +46 8 796 25 63, e-mail: torbjorn.strandberg@lo.se

Work Organisation Programme

Peter Docherty, National Institute for Working Life, Tel: +46 8 730 96 03,

e-mail: peter.docherty@niwl.se

Mats Essemyr, TCO, Tel: +46 8 782 92 72, e-mail: mats.essemyr@tco.se

Programme for Work Environment and Health

Per Malmberg, National Institute for Working Life, Tel: +46 8 619 67 10,

e-mail: per.malmberg@niwl.se

Anders Schaerström, SACO, Tel: +46 8 613 48 74,

e-mail: anders.schaerstrom@saco.se

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SE-112 79 Stockholm, Sweden

Tel: (+46) 8-619 67 00, fax: (+46) 8-656 30 25

Web: www.niwl.se/saltsa

Printed at Elanders Gotab

ISSN: 1404-790X

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Acknowledgements

This European project (“European unions in the wake of flexible production: How can the negative consequences of job insecurity for employee attitudes and well-being be mitigated?”) is financed by a grant to Magnus Sverke from the Swedish National Institute for Working Life through the Joint Programme for Working Life Research in Europe (SALTSA). Data collections in the participating countries were made possible through financial support as follows: Belgium: the Christian Labour Union (ACV) and the Hoger Instituut voor De Arbeid (HIVA) - KU Leuven; the Netherlands: the National Christian Trade Union Federation (CNV); Italy: CGIL-Nazionale; Sweden: the Swedish Council for Work Life Research, the KF Group, the Salaried Employees’ Union, and the Cooperative Employees Association.

Participants in the project are: Magnus Sverke, Johnny Hellgren, and Katharina Näswall, Department of Psychology, Stockholm University, Sweden; Antonio Chirumbolo, Department of Social and Developmental Psychology, University of Rome “La Sapienza”, Italy; Hans De Witte, Department of Work and Organizational Psychology, Catholic University of Leuven, Belgium; Sjoerd Goslinga, Department of Social Psychology, Free University, the Netherlands.

The papers included in the present publication were all presented at the Tenth European Congress on Work and Organizational Psychology, Prague, Czech Republic, 16-19 May, 2001.

Correspondence concerning this report should be addressed to Magnus Sverke, Department of Psychology, Stockholm University, 106 91 Stockholm, Sweden; mse@psychology.su.se.

Introduction

Magnus Sverke

Katharina Näswall

Johnny Hellgren

Antonio Chirumbolo

Hans De Witte

Sjoerd Goslinga

A background to the project

During the last two decades working life has undergone changes. One dramatic change has been the transformation of traditionally secure jobs into insecure ones. More frequent use of downsizing as a means to reduce costs, and the use of temporary employment contracts both contribute to feelings of job insecurity. Job insecurity refers to a “powerlessness to maintain desired continuity in a threatened job situation” (Greenhalgh & Rosenblatt, 1984, p. 438). It reflects a fundamental and involuntary change concerning the continuity and security within the employing organization. Job insecurity is a subjective phenomenon based on the individual’s appraisal of uncertainties in the immediate work environment. This implies that that the feeling of job insecurity may differ between individuals even if they are exposed to the same objective situation (Greenhalgh & Rosenblatt, 1984; Hartley et al., 1991; Sverke, Hellgren & Näswall, 2002).

Changes on the labor market clearly have negative consequences, such as job loss. However, a growing body of literature emphasizes that those who remain in organizations that have downsized also suffer from the negative effects (Latack & Dozier, 1986). It seems intuitive to expect alternative work arrangements and feelings of job insecurity to have a strong psychological impact on those affected. This can be attributed to the risk of losing economic and other highly valued aspects of life (Ashford, Lee, & Bobko, 1989). Indeed, consistent with the central proposition of stress research – that anticipation of a stressful event represents an equally important, or perhaps even greater, source of anxiety than the actual event (Lazarus & Folkman, 1984) – research suggests that job insecurity may have as detrimental consequences as job loss itself (Latack & Dozier, 1986). Job insecurity is expected to have an impact not only on the well-being of individuals, but also on their work attitudes and behavior, and, in the long run, for the vitality of the organization (Sverke & Hellgren, 2001).

Research has repeatedly found job insecurity and contingent work to associate with impaired employee well-being; it appears that physical health complaints,

mental distress, and work to leisure carry-over increase proportionately with the level of employment uncertainty (e.g., Ashford et al., 1989; Barling & Kelloway, 1996; Hellgren, Sverke, & Isaksson, 1999; Lim, 1996; Noer, 1993). A number of studies have also found feelings of uncertain employment conditions to be related with reduced levels of work attitudes such as job satisfaction (e.g., Ashford et al., 1989; Davy, Kinicki, & Scheck, 1997; Rosenblatt & Ruvio, 1996). In a similar vein, like any stressor, a perceived insecurity concerning one's future role in the organization appears to make employees less inclined to remain with the organization (e.g., Arnold & Feldman, 1982; Brockner, 1988; Dekker & Schaufeli, 1995 for an overview, see Sverke et al., 2002).

Obviously, the increased use of flexible production faces labor unions with a number of threats and challenges. Unions have to deal with new issues in the modern working life, in order to represent and protect their members. The success of the unions in achieving this is reflected among the members. From a psychological perspective, important factors in this respect concern how the individual member perceives her union, evaluates the support provided, the attitudes she holds toward her union, and the degree to which she herself participates in union activity (Sverke & Hellgren, 2001).

General aim of the project

The overall aim of the project is to investigate the role played by labor unions in relation to consequences of the unpredictable and flexible nature of the labor market, well documented by previous research. Our research is guided by the general model presented in Figure 1. More specifically, the aim of the project is to investigate:

- the relation between flexibility factors (job insecurity and contingent work) and their postulated outcomes (e.g., well-being, work attitudes, union participation);
- the relation between experiences of the union (e.g., union support, attitudes towards the union) and these outcomes;
- differences between various demographic groups in the experiences of job insecurity;
- if the negative consequences of flexible employment conditions and job insecurity on individuals' well-being, work related attitudes, and union participation are mitigated by union-related attitudes and experiences, and;
- the extent to which the results generalize over countries.

These issues are investigated in four European countries based on secondary analysis of existing questionnaire data.

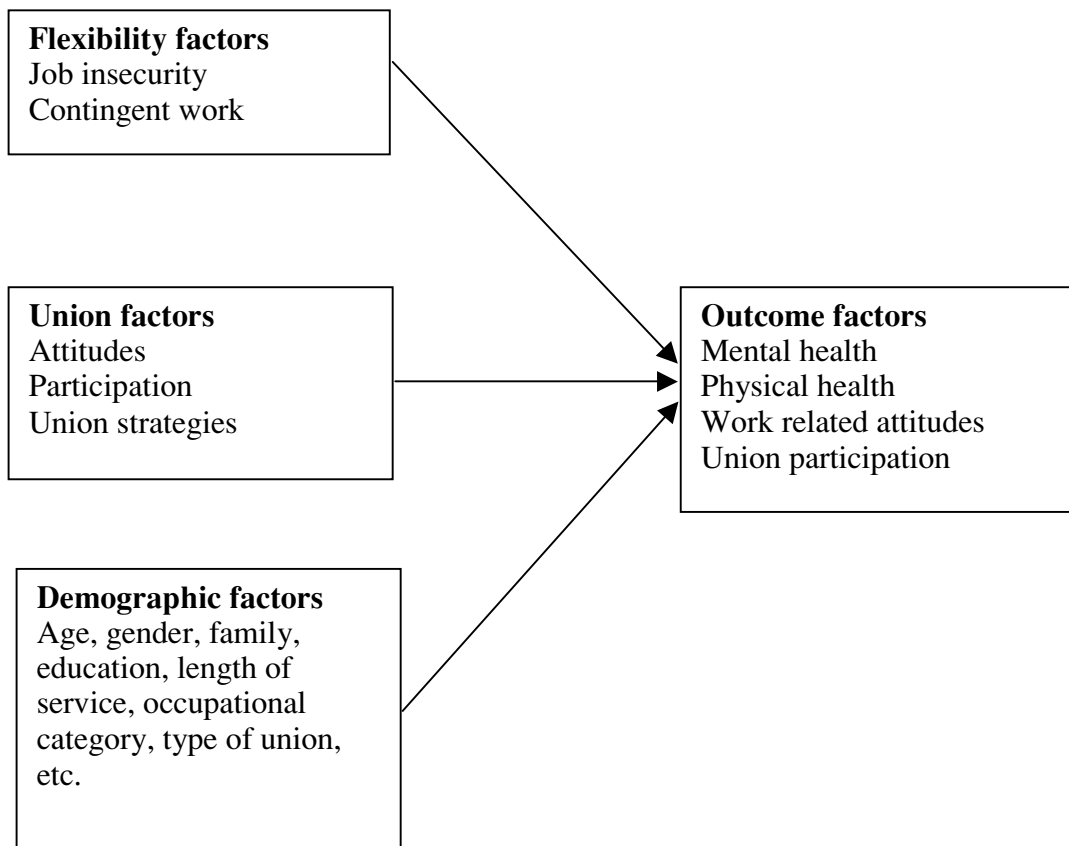


Figure 1. Research model.

Participating countries

The project includes researchers from four European countries: Belgium, Italy, the Netherlands, and Sweden. All participants are psychologists and carry out research concerning downsizing and job insecurity, as well as union member attitudes toward, and participation in, the union. Some comparable data existed prior to the start of the project, whereas other data were collected during the time of cooperation. Altogether eight samples are used to address the research questions of the project. A summary of the sample characteristics is presented in Table 1.

Table 1. Summary of sample characteristics.

	Bel1	Bel2	Hol1	Hol2	Ita1	Swe1	Swe2	Swe3
Sample	3,003	13,358	1,736	1,590	865	2,455	786	2,564
N	1,120	1,487	896	799	476	1,501	554	1923
Resp rate %	37	11	52	50	55	61	71	75
Year collected	1998	1998	1998	1999	2000	1998	1995	2000
% members	49	58	100	100	63	92	-	100
Age (years)	36.9	38.5	46.1	47.5	38.8	42.7	49.4	45.3
% females	34.7	42.0	24.7	25.2	32.5	82.7	55.9	78.4
Blue-collar %	36.6	34.0	-	46.9	29.3	30.7	0	-
White-collar %	35.6	36.7	-	7.9	46.2	51.7	79.3	-
Professional/Manager %	27.8	29.3	-	45.3	24.5	17.5	20.7	-
Permanent workers (%)	94.0	91.8	-	89.5	89.1	82.5	-	92.6

- Information not available

The project collaborator in Belgium is Hans de Witte of the Catholic University of Leuven. Two Belgian samples are included in the project data set. The first sample is from a postal survey in the period of November-December 1998 in the three parts of Belgium (Flanders, Brussels, Wallonia; so two languages were used: Flemish and French). A large amount of companies (439) with 5 or more employees from a representative range of sector and size were contacted for potential participation. The second sample originates from a telephone survey conducted in the period April-July 1998 in the three parts of Belgium. The sampling was focused on employed wage-earners working in 'larger' plants in the private sector.

The main collaborator in the Netherlands is Sjoerd Goslinga from the Department of Social Psychology, Free University (VU), Amsterdam. From the Netherlands we used two samples, both collected within a longitudinal panel-survey among members of the largest trade unions affiliated with the National

Christian Trade Union Federation, the CNV. The first data collection occurred in the fall of 1998, the second in the summer of 1999.

The Italian participant in the project is Antonio Chirumbolo, at the University of Rome-La Sapienza. There is one sample from Italy included in the project, and the data collection could be tailored to suit the project. Data were collected between May and July 2000, among employees throughout Italy.

Participating from Sweden are Magnus Sverke, Johnny Hellgren, and Katharina Näswall, Department of Psychology, Stockholm University. There are three Swedish samples included in the data set for the project. The first sample includes staff from two emergency hospitals in the Stockholm area undergoing organizational changes in terms of cost-reduction, organizational restructuring, outsourcing, and layoffs, collected during 1998. The second sample was collected in 1995 in a large Swedish retail-chain company undergoing major organizational restructuring. This sample comprises surviving administrative white-collar workers at the company headquarters. Data for the third Swedish sample were taken from a national sample of blue-collar workers from the Swedish Municipal Workers Union (Kommunal) affiliated with the Swedish Trade Union Confederation (LO). These data were collected in 2000, and thus tailored to suit the project.

The samples from the different countries and data collections contained items which were the same, or very similar. For most of the constructs we formed indices containing three items or more, using established measurement scales. For elaborate information on the different measures used in the project, please refer to our technical report (Sverke et al., 2001).

The papers presented in Prague

The Tenth European Congress on Work and Organizational Psychology, organized by the European Association of Work and Organizational Psychology (EAWOP), was held in Prague, Czech Republic, 16-19 May 2001. A total of six papers from the SALTSA project “European Unions in the Wake of Flexible Production” were presented at this congress. These papers deal with the nature of job insecurity by analyzing the differences between subjective (perceived job insecurity) and objective (temporary work) aspects of employment uncertainty, discussing the measurement of job insecurity, exploring the predictors of job insecurity, and investigating the consequences of employment uncertainty for the individual, the company, and the union.

In the paper “Consequences of temporary work in four European Countries: Does job insecurity mitigate the relationship between temporary work and various outcome variables?”, Hans De Witte *et al.* deal with the differences between subjective and objective definitions of employment uncertainty, that is,

between perceived job insecurity and temporary work. This contribution analyzes whether temporary work and (the subjective perception of) job insecurity are associated with a reduction in job satisfaction and organizational commitment, as proposed in the literature. An interaction between temporary work and job insecurity is also tested. Data from the four European countries included in the project (Belgium, the Netherlands, Italy, and Sweden) are used to test the robustness of the hypotheses. The results show that temporary work is not associated with a reduction in job satisfaction and organizational commitment. Job insecurity, however, is associated with a lower score on both outcome variables, as hypothesized. In two countries, an interaction is found: job insecurity is only associated with a reduction in job satisfaction and organizational commitment among workers with a permanent contract. These results suggest a violation of the psychological contract for this specific category of workers.

The following paper – “A cross-cultural validation of a job insecurity measure” – elaborates on the measurement of perceived job insecurity. Johnny Hellgren *et al.* note that over the past decades job insecurity has emerged as an important stressor in modern working life, and perceptions of job insecurity have consequently been found to correlate negatively with job and organizational attitudes as well as mental and physical health. However, even if measures of the construct are available, measurement properties in terms of reliability, factor structure, and predictive validity are far from clear. The purpose of this paper is to address this issue by validating a five-item job insecurity measure developed within the project using data from all four countries. The results of multi-group confirmatory factor analysis reveal that the estimated measurement model holds up in all participating countries. The scale exhibits satisfactory reliability in all samples. The results also show that the job insecurity measure predicts mental health complaints in three out of four countries, and that it evidences discriminant validity against job dissatisfaction. The results stress the importance of developing valid measurement scales in order to satisfactorily estimate the relationships between job insecurity and its postulated outcomes.

The third paper included in the present volume – “Who feels job insecurity?: What characterizes insecure workers in Europe?” – is written by Katharina Näswall *et al.* The authors note that along with the increased flexibilization of the labor market in Europe there has been a change in the permanence and security of employment. Employees report a feeling of job insecurity, which is constituted by a subjectively experienced threat of having to give up one’s job sooner than one would like. The experience of job insecurity has been linked to decreasing well-being, negative attitudes towards one’s job and organization, and reluctance to stay with the organization. However, the authors note that whereas there is a growing body of literature on the consequences of job insecurity, very little is

known of its predictors. The paper investigates what groups are more likely to experience job insecurity than others. Data from the four countries included in the project are used to determine what characterizes individuals who experience high levels of job insecurity. Although there were some inconsistencies in findings across samples, the results show that contingent workers and employees in jobs characterized by manual labor experience higher levels of job insecurity. Identifying variables that consistently predict job insecurity, the paper concludes, would be beneficial for both employees and organizations, and would contribute to a better working life.

The following paper – “Consequences of job insecurity for the organization and the individual: A European study” – focuses on the consequences of job insecurity for the individual and the organization. Antonio Chirumbolo *et al.* base their study on the observation that the transformations in the economy and job market in recent years have changed the nature of work. The stress literature suggests that the fear of losing one’s job could be as detrimental as losing the job itself, and numerous studies indicate that job insecurity may indeed have important consequences for both the individual and the organization. However, the effects of job insecurity on short-term consequences are typically larger than those on long-term consequences. Therefore, the aim of this paper is to investigate if short-term consequences (work related attitudes) mediate the impact of job insecurity on long-term outcomes (mental health complaints and the intention to quit from the organization). Survey data from the four European countries confirm previous research about detrimental effects of job insecurity, but the model proposed in this paper receives only partial empirical support. The study shows that the effect of job insecurity on long-term organizational consequences (such as turnover intention) is mediated by organizational commitment and job satisfaction. In contrast, it appears that job insecurity has only a direct effect on individual consequences such as mental health complaints.

The fifth contribution in the present report – “How does job insecurity affect union members? Exit, voice, and loyalty reactions in four European countries” – investigates the consequences of job insecurity for labor unions and companies. Magnus Sverke *et al.* note that although job insecurity has received growing recognition in connection with the transformation of working life, little is known about how unionization affects its consequences. This study addresses how unionized workers cope with job insecurity and examines the extent to which they respond with exit, voice, and loyalty reactions. Of special interest is such reactions tend to affect primarily the employer or the union. The results suggest that job insecurity is primarily related to exit and loyalty reactions, but not to voice. The results replicate previous findings of adverse effects of job insecurity on organizational loyalty and employees’ propensity to turnover from the job. Although the findings are less consistent across countries with respect to union-

related outcomes, the study suggests that job insecurity may lead to reduced union loyalty and withdrawal from union membership.

The final paper included in the present publication – “Contingent work and labor union membership turnover: A study among union members in four European countries” – is written by Sjoerd Goslinga *et al.* Using data from three of the countries in the project (Sweden, Italy, and the Netherlands), this paper compares full-time and part-time as well as permanent and temporary employed trade union members on several union attitudes (union commitment, union support, union trust, union instrumentality and union satisfaction) and union turnover intention. Trade unions in most industrialized countries have for a long time opposed the growth of atypical employment. Consequently, the authors note, unions have largely ignored the needs of this segment of the labor force. Moreover, union density is much lower among atypical workers, which is caused by both lower entry rates and higher exit rates. Hence, the paper hypothesizes that union attitudes would be less positive, and union turnover intentions would be higher among atypical employed members as compared to traditionally employed members. However, the study finds only few differences between full-timers and part-timers and between permanent and temporary workers, and the differences that emerge are not consistent across samples. Moreover, the results reveal no differences between permanent and temporary workers in union turnover intention in any of the three samples, but a higher turnover intention rate among full-timers than among part-timers in two samples. In view of these findings, the paper discusses some of the practical and research implications.

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Is temporary work a problem? Analysis of its consequences in Belgium, the Netherlands, Italy and Sweden

Hans DeWitte

Katharina Näswall

Antonio Chirumbolo

Sjoerd Goslinga

Johnny Hellgren

Magnus Sverke

Introduction

During recent years, research on the causes and consequences of job insecurity has been “on the rise”. In the beginning of the nineties, researchers deplored the relative lack of research on job insecurity (e.g. Roskies & Louis-Guerin, 1990; Hartley et al., 1991). A decade later, many studies on this issue have been published (e.g. Klandermans & Van Vuuren, 1999a; Sverke et al., 2002). In their introduction to a special issue on the subject, Klandermans & Van Vuuren discussed various aspects of this research tradition (Klandermans & Van Vuuren, 1999b). One of them concerns the conceptualisation of job insecurity: should we conceptualise it as an objective or a subjective phenomenon? Psychological research favours the study of job insecurity as the employees’ *subjective* perception (for an overview: Sverke and Hellgren, 2002). However, Büssing (1999) pleads for the inclusion of an *objective* operationalisation of job insecurity in research, since it offers the possibility to contrast its consequences with that of a subjective operationalisation. According to Büssing, the anticipation of unemployment, created by the threat of job loss, is the core element of an objective conceptualisation. Such a threat may originate in an imminent bankruptcy or in the temporary nature of the job in question. A temporary job has a limited time span by definition, thus jeopardising employment continuity (e.g. Pearce, 1998).

This contribution will analyse the consequences of both an objective and a subjective conceptualisation of job insecurity. We will concentrate on the effects of temporary employment (‘objective definition’) and the perception of job insecurity (‘subjective definition’) on employees’ job satisfaction and organisational commitment¹. These two outcome variables make up crucial

¹ The term ‘temporary employment’ will be used when we refer to the objective operationalisation of job insecurity. The term ‘job insecurity’ refers to the subjective operationalisation, unless stated otherwise.

dimensions within industrial and organisational psychology, relevant to individual employees as well as the company employing them (e.g. see Spector, 1997; Meyer & Allen, 1997). Analysing two different operationalisations of job insecurity not only allows for a comparison of the consequences of both types, but also offers the possibility of examining the association and the interaction between both operationalisations (see below).

‘Objective’ versus ‘subjective’ job insecurity

Temporary employment as an indicator of ‘objective’ job insecurity

In literature, temporary employment is often defined as (an aspect of) ‘a-typical’ work (e.g. Malfait, 2001), ‘precarious’ employment (e.g. Letourneux, 1998), ‘non-standard employment’ (e.g. Jenkins, 1998) or ‘contingent work’ (e.g. Sverke et al., 2000). Within the European context, temporary employment is mainly studied as one of the aspects of ‘flexibility’ (e.g. Reilly, 1998b). According to many authors, it is a form of quantitative (or numerical) external flexibility, since it concerns the fluctuation of the number of employees who do not actually belong to the company (cf. De Jonge & Geurts, 1997; Klein Hesselink & Van Vuuren, 1999). This can be done in various ways. A fixed term contract, a contract for temporary work and a temporary agency contract are perhaps the most frequent (Reilly, 1998b), although the relevant literature distinguishes even further (e.g. Aronsson, 1999, Sverke et al., 2000). What these ‘contract flexibility’ types have in common, is the expression of a temporary employment relationship. Pearce thus considers them to be *objective* forms of job insecurity, characterised by “an independently determined probability that workers will have the same job in the foreseeable future” (Pearce, 1998: 34).

Contractual flexibility is dominantly driven by economic considerations (Beard & Edwards, 1995; Purcell & Purcell, 1998). Increased global competition forces companies to reduce costs and to increase production as regards quantity and quality. This prompts them to increasingly opt for temporary employment relations with their employees, in an effort to deploy the available employees as efficiently as possible. Companies also try to absorb the sudden fluctuations in the demand for their products by increasing the number of temporary employees. It thus comes as no surprise that in the European Union the percentage of employees with a temporary contract increased by about fifty percent between 1985 and 1998: from 8.4% to 12.8% (Nätti, 2000). In 1996, no less than 49% of European employees with a length of service of less than one year, were working on a temporary contract (Letourneux, 1998). Surveys and case-studies on an organisational level also suggest that the use of contractual flexibility occurs within the overwhelming majority of companies under investigation (Brewster & Tregaskis, 1997; Goudswaard & de Nanteuil, 2000).

Contractual flexibility thus meets the particular needs of the business community. This raises the question as to the effects of this 'objective' form of job insecurity on employees. In the literature, these effects are mainly viewed as problematic (e.g. Reilly, 1998b). As a rule, temporary employment is assumed to have negative consequences on individual employees' well-being, work attitudes and organisational commitment (e.g. Berkhoff & Schabracq, 1992; Beard & Edwards, 1995).

One of the reasons for this assumption relates to deprivation and (the effects of) social comparison processes. In their '*flexible firm*' model, Atkinson and Meager (1986) state that a modern, flexible company is characterised by a schism between a stable group of employees forming the company's core group, and 'peripheral' groups who are particularly flexible in the numerical sense. Contractually flexible employees thus belong to the company's peripheral group. This thesis may be linked to *segmentation theory*, which distinguishes between the primary and secondary segment in the labour market (e.g. Steijn & Kraan, 1997). The primary segment contains the 'core functions' of the Atkinson and Meager model, characterised by high wages and good labour quality. The secondary segment contains the peripheral group of employees. Their functions are characterised by lower wages and a less favourable quality of work. Bringing both theoretical frameworks together leads to the assumption that temporary employees are not generally considered 'part of the corporate family', resulting in the danger of social exclusion (Sverke et al., 2000; Reilly, 1998a). According to Beard and Edwards (1995), processes of social comparison with core employees will lead to the perception of a disadvantaged position amongst temporary employees. This in turn will lead to feelings of deprivation and inequity. In addition, Beard and Edwards refer to research showing that such feelings result in lower job satisfaction and reduced organisational commitment.

Also according to '*psychological contract*' theory, a negative impact is expected of temporary employment (Beard & Edwards, 1995). The 'psychological contract' contains (often implicit) mutual expectancies between employers and employees regarding obligations between both parties (Rousseau, 1995; Schalk & Freese, 1993). Various psychological contracts can be distinguished. Transactional contracts refer to an exchange relationship based exclusively on job extrinsic aspects (such as wages) and reflect a short term perspective (Rousseau, 1989). In relational contracts, intrinsic as well as extrinsic job aspects are included in the exchange relationship, which involves a longer time perspective. Symmetrical contracts refer to an equal balance of power between employer and employee (Parks & Kidder, 1994). Asymmetrical contracts are characterised by an unequal power balance. Beard and Edwards (1995) suppose that asymmetrical and transactional psychological contracts typify temporary employees. After all, the employer provides no long-term

perspective within the organisation, and takes most decisions concerning the use of temporary employees' and their tasks unilaterally. Transactional and asymmetrical psychological contracts are considered less favourably in literature, as expressed in reduced job satisfaction and organisational commitment (e.g. Rousseau & Parks, 1993). The reason for this is that the idea of balance is central to the psychological contract. The employee has to feel that what the employer has to offer is counter-balanced by what he or she brings into the relationship. When the employee perceives a disequilibrium, job satisfaction and organisational commitment will be reduced in an attempt to restore the (unequal) balance (Schalk & Freese, 1993).

Finally, the negative effects of temporary employment on the individual can also be motivated according to '*job stress*' theory (e.g. Sverke et al., 2000). According to this view, temporary employment holds more aggravating job characteristics ('stressors'), that lead to stress reactions or 'strains'. This view is connected to the above-mentioned 'flexible firm' model and to segmentation theory, which also states that the quality of the work of temporary employees is of a lesser quality. In the literature, four categories of work stressors are distinguished (e.g. Kompier & Marcelissen, 1990; Leblanc et al., 2000): job content, working conditions, employment conditions and social relations at work. Temporary employment contains specific stressors with regard to each of these categories.

With respect to *job content*, temporary employment could involve greater role ambiguity, as temporary employees are (mostly) new to the organisation, and thus still need to find their 'role and place' (Sverke et al., 2000). A secondary analysis of the Dublin 'Second European Survey on Working Conditions' from 1996, involving more than 12,000 respondents from the 15 member states of the European Union, also shows that temporary employees have less autonomy in their work (Letourneux, 1998). This research equally shows that the jobs of temporary employees are more monotonous, and offer fewer possibilities of developing individual skills². According to job stress research, role ambiguity and limited job decision latitude (autonomy and skill utilisation) are 'classic' stressors which reduce job satisfaction and organisational commitment (e.g. Karasek & Theorell, 1990; Warr, 1987).

The *employment conditions* of temporary employees also contain specific stressors. According to Letourneux's (1998) secondary analysis of the European Dublin survey, temporary employees are more often obliged to work in painful and tiring positions, exposed to intense noise, and required to perform repetitive movements or short repetitive tasks. Temporary employees also report having

² Note however, that the workload of temporary workers was *lower* than that of permanent workers, suggesting that temporary work does not always include more stressors.

received less information about these aspects, and lack information about the extent to which their physical safety on the job may be improved (Aronsson, 1999).

The *employment conditions* refer to issues such as remuneration (wages), job security and the possibilities offered for training and career development. Research shows that temporary employees earn less than permanent workers and get fewer additional benefits, such as a bonus or insurance policy (e.g. Sels et al., 2001). The fact that temporary work also implies job insecurity has already been pointed out above. We will return to this issue. Temporary employees receive less training on the job (Letourneux, 1998) and more often feel deprived as regards training opportunities (Aronsson, 1999).

Finally, the '*social relations*' aspect refers to social relations on the job and to the possibility of influencing the employment relationship by means of participation and 'having a say' (voice). The literature hypothesises social support from colleagues and superiors to be inferior for temporary employees, because the latter do not belong to the core group of employees within the organisation (Berkhoff & Schabracq, 1992; Sverke et al., 2000). No research could be found regarding the extent of social support from colleagues. Recent research however suggests that temporary employees do not receive less social support from superiors (Van Breukelen & Allegro, 2000). Studies do show that temporary employees are given fewer possibilities of participation. Temporary employees indicate that they are not consulted to the same extent and that it is more difficult to raise criticism and to get their viewpoints heard, resulting in the fact that they play less of a part in the company's decision-making process (Letourneux, 1998; Aronsson, 1999).

The three theoretical perspectives mentioned above (deprivation, psychological contract and job stress) all lead to the hypothesis that temporary employment has a negative effect on employees' job satisfaction and organisational commitment. Research into job satisfaction and organisational commitment of temporary workers partly confirms this assumption.

With regard to *job satisfaction*, Letourneux has indeed found in her secondary analysis that, by comparison with permanent workers, there is greater dissatisfaction amongst temporary employees (Letourneux, 1998). Other researchers have arrived at similar conclusions (e.g. De Witte & Lagrou, 1990; Steijn & Kraan, 1997; Van Breukelen & Allegro, 2000). A recent review of the literature on work quality in the European Union also suggests that the transition from temporary to permanent work is accompanied by an increase in job satisfaction (European Commission, 2000). The results of research are not always unequivocal, however, when a broader concept of well-being at work is used. Quinlan and colleagues (2000) reviewed 24 studies on temporary employees from the point of view of their occupational health and safety. A

negative association was found in 14 out of 24 studies. The association was unclear in eight studies, whereas two studies were able to report a positive association. More general indicators of psychological well-being usually produce few differences between temporary and permanent workers (Sverke et al., 2000) and sometimes even more positive results for temporary employees (Letourneux, 1998).

As a rule, results regarding *organisational commitment* are less univocal as those concerning job satisfaction. In line with the above-mentioned theoretical assumptions, various researchers indeed found a reduction in organisational commitment amongst temporary employees by comparison with employees under permanent contract (e.g. Lee & Johnson, 1991; Van Dyne & Ang, 1998; Sverke et al., 2000). A recent small-scale, qualitative research also suggests that temporary employees do not feel affectively committed to the (smaller) department in which they work, which in part may be attributed to their more limited seniority in that particular department (Torca & van Riemsdijk, 2001). However, various other studies found no differences between temporary and permanent workers (e.g. Pearce, 1993; Van Breukelen & Allegro, 2000).

To put it sharply, our first hypothesis reads: temporary employment will be associated with lower job satisfaction (hypothesis 1a) and a reduction in organisational commitment (hypothesis 1b), once relevant demographic variables have been controlled for³.

Job insecurity as 'subjective perception'

The psychological concept of 'job insecurity' refers to concerns regarding the continuation of the job (Hartley et al., 1991; Sverke & Hellgren, 2002). It thus refers to a *subjective* perception of employees, based (amongst other things) on interpretations of events within the company in which they work (e.g. Sverke & Hellgren, 2002). The emphasis on the subjective aspect of this conceptualisation implies that a given, 'objective' situation (e.g. the employment contract) can be interpreted in various ways: some will have feelings of uncertainty which are unfounded from an 'objective' point of view, whereas others, on the contrary, will feel that their job is secure, even though they may be dismissed in the near future.

Typical for this subjective conceptualisation of job insecurity is that it concerns a feeling of *insecurity* about the *future*: it is uncertain (and unknown) for the employees in question whether they will retain or lose their present job (Van Vuuren, 1990). This perception contrasts with the certainty of dismissal. In the latter situation, it is clear that people will become unemployed, allowing

3 We will control for relevant demographic variables (such as age and gender) in order to draw an univocal conclusion concerning the association between the dependent and the independent variables.

employees to take concrete action (e.g. to look for another job). Employees who feel uncertain cannot prepare adequately for the future – because of a lack of clarity about a future turn of events, it is unclear to them how to respond. When defining job insecurity, scholars also refer to feelings of *powerlessness* in retaining desired job continuity (e.g. Greenhalgh & Rosenblatt, 1984) and to the *involuntary* nature of job insecurity (Sverke & Hellgren, 2002).

The subjective conceptualisation of job insecurity can also be operationalised in various ways. Recently, a distinction was made between ‘quantitative’ and ‘qualitative’ job insecurity (see e.g. Hellgren et al., 1999). *Quantitative* job insecurity refers to the retention (or loss) of the job itself: people are uncertain about whether they will be able to keep the job or become unemployed. *Qualitative* job insecurity refers to uncertainty about the potential loss of (valued) aspects of the job, such as wages, working hours or the content of the job. In this article, we will concentrate on ‘quantitative’ job insecurity, since the main concern of an analysis of (the consequences of) temporary employment is the continuation of the job itself (job retention), rather than the continuation of its quality.

Various authors have analysed the *antecedents* of job insecurity (e.g. Jacobson & Hartley, 1991). They highlight radical transformations on an economic level, such as large-scale restructuring processes, fusions, downsizing, company closures and privatisations, in the hope of reducing costs and increasing the organisation’s efficiency. These interventions are usually accompanied by massive staff dismissals (Kozlowski et al. 1993). These evolutions, and the increase in the number of temporary employees (see above) may have resulted in heightened feelings of job insecurity (OECD, 1997).

Note, however, that job insecurity does not necessarily lead to job loss or unemployment. This implies that the job-insecure population probably outnumbered the amount of employees who effectively lose their job. *Estimations* of the *amount* of job-insecure employees vary between the different European countries. According to a recent OECD study, in 1996 approximately 38% of the employees in one of the OECD member states found that their company offered less job security than most other companies in the same sector (OECD, 1997: 134-135). Within the European countries of the OECD, this percentage fluctuates between 23% and 46% (median: 38%). When the question is narrowed down to the individual job, percentages tend to decline as a rule. In Belgium, between 5% and 20% of the employees thought they stood a chance of losing their job (cognitive, ‘probability’) or feared (affective, ‘worry’) that they could lose their job (De Witte, 2000).

An extensive research tradition over the last few decades documents the negative *consequences* of job insecurity for individual employees (e.g. Hartley et al., 1991; Klandermans & Van Vuuren, 1999a). This research shows that job

insecurity has a negative impact on employees' health and well-being (for an overview, see e.g.: De Witte, 1999; Nolan et al., 2000; Sverke & Hellgren, 2002; see Sverke et al., 2002 for meta-analysis results). Job insecurity is consistently negatively associated with job satisfaction (e.g. Ashford et al., 1989; Davey, et al., 1997; Hellgren et al., 1999; Hartley et al, 1991; Lim, 1997; Rosenblatt et al., 1999; Rosenblatt & Ruvio, 1996). Parallel to this, higher burnout scores are reported among job-insecure employees (e.g. Dekker & Schaufeli, 1995; Landsbergis, 1988), whereas their general sense of psychological well-being is lower too (e.g. Büssing, 1999; Hellgren et al., 1999; Lim, 1997). Longitudinal studies confirm that job insecurity has a causal influence on these indicators, and not the other way around (e.g. Van Vuuren, 1990; Burchell, 1994; Iversen & Sabroe, 1988; Ferrie et al., 1995).

Job insecurity also influences employees' organisational attitudes, thus also affecting the organisation as such. The perception of job insecurity is often linked to reduced *organisational commitment* (e.g. Ashford et al., 1989; Brockner et al., 1992; Davey et al., 1997; Hellgren et al., 1999; Hom & Griffeth, 1991; Lord & Hartley, 1998; Rosenblatt et al., 1999), and mistrust with regards to company management (Ashford et al., 1989).

In an effort to *explain* the negative effects of job insecurity, different perspectives can again be quoted. Quantitative job insecurity involves the perception that people may lose their present job. The fact that this reduces job satisfaction and well being is hardly surprising. In our society, employment constitutes the key to social participation and recognition. This is central to the '*latent deprivation model*' developed by Jahoda (1982). This model maps the needs that are satisfied by working, such as earning an income, establishing social contacts outside the family, the structuring of time and the possibility of individual and social development. The threat of unemployment implies the frustration of these needs, and hardly presents an attractive future perspective.

In addition, factors crucial to the study of work stress may also play a role. Furda and Meijman (1992) highlight two such factors: predictability and controllability. Job insecurity first of all implies *unpredictability*: it is unclear to the persons concerned what their future holds. This makes it difficult to react adequately, because it is unclear *if* one should undertake anything or not. Warr (1987) distinguishes nine job characteristics in his 'vitamin'-model, that influence psychological well-being. 'Environmental clarity' refers to the predictability aspect. This aspect includes lack of clarity about the future and about the expectations and behaviours that the employee should adopt. Warr shows that a lack of 'environmental clarity' (and thus unpredictability) is detrimental to psychological well-being (Warr, 1987).

Besides unpredictability, *uncontrollability* also plays a part. Various authors consider this lack of control or the experience of powerlessness to deal with the

threat, as being the core dimension of job insecurity (Greenhalgh & Rosenblatt, 1984; Dekker & Schaufeli, 1995). This aspect is also included in Warr's 'vitamin'-model, and has an important impact on psychological well-being (Warr, 1987). Stress research has shown that frequent confrontation with small, yet uncontrollable work stressors (such as machine failures) have a more serious effect on psychological well-being, than radical but one-off events (Furda & Meijman, 1992).

The finding that job insecurity also affects *organisational commitment*, can equally be interpreted in various ways (Van Vuuren, 1990). Firstly, it may be indicative of resentment on the part of the employee. Certainty about the future of one's job constitutes one of the components of the 'psychological contract' between employer and employee. When this certainty is affected, the employee may try to restore the imbalance by showing less interest, motivation and commitment (Schalk & Freese, 1993). Less commitment to the organisation may also be interpreted as a (passive) coping strategy. By withdrawing psychologically from the organisation, people reduce the aggravating nature of eventual job loss in advance ('disinvolvement syndrome', see: Dekker & Schaufeli, 1995).

Hypothesis 2 reads as follows: (the subjective perception of) job insecurity will be associated with reduced job satisfaction (hypothesis 2a) and reduced organisational commitment (hypothesis 2b), once relevant demographic variables have been controlled for.

The association between both types of insecurity

Given the preceding discussion, it seems obvious that temporary employment ('objective' job insecurity) will be *associated* with the subjective perception of being uncertain about the future of one's job. First of all, various authors have explicitly linked both concepts. Pearce (1998) regards the possibility of losing one's present job as the crucial aspect of temporary employment. Beard and Edwards (1995) consider the job's expected discontinuity as distinctive of 'contingent' (here: temporary) employment. Next to this, many empirical studies have also shown that temporary employees are more uncertain about the future of their job (e.g. Letourneux, 1998; Klein Hesselink & Van Vuuren, 1999; Sverke et al., 2000; Vandoorne & De Witte, 2002). This association is stable after controlling for demographic characteristics (e.g. Vandoorne & De Witte, 2002). According to the study of Kinnunen and Nätti (1994), the temporary nature of the employment relationship is even the second most important antecedent of feelings of job insecurity (previous experience with job insecurity being the most important predictor). The association between temporary employment and job insecurity can also be witnessed on an aggregate, plant level: the percentage of job insecurity increased in more than two thirds of the companies in which

numerical forms of flexibility were introduced (Goudswaard & De Nanteuil, 2000). The association between temporary employment and job insecurity is not perfect, however. According to Letourneux's European study, about a quarter of the temporary employees considered their job to be 'secure', as opposed to between 66% and 76% who perceived it as uncertain (Letourneux, 1998). This once again illustrates the partly subjective nature of job insecurity.

Hypothesis 3 thus reads as follows: employees on a fixed term contract will feel more insecure about their jobs compared to permanent workers, once relevant demographic variables have been controlled for.

The finding that the association between both operationalisations of 'job insecurity' is not maximal, offers the possibility to clarify some of the ambiguities mentioned above. In reviewing the literature, it was shown that temporary employment ('objective' job insecurity) is not always associated with the expected reduction in job satisfaction and organisational commitment. The 'subjective' perception of job insecurity, on the contrary, is consistently associated with lower scores on both outcome variables. We hypothesise that this 'inconsistency' relates to the fact that the subjective variant of job insecurity is 'hidden beneath' its 'objective' counterpart: the negative effects mentioned above will *only* appear if temporary employment gives rise to feelings of job insecurity (cf. Klandermans & Van Vuuren, 1999b). There are two ways of testing this assumption.

The *first* possibility is the most explicit. Here, we propose that *only* the *subjective* variant of job insecurity is associated with job satisfaction and organisational commitment, once both types of job insecurity have been statistically controlled for each other.

This leads to hypothesis 4: after controlling for demographic variables and temporary employment, only the subjective perception of job insecurity will be linked to reduced job satisfaction (hypothesis 4a) and reduced organisational commitment (hypothesis 4b). The 'objective' operationalisation of job insecurity ('temporary work') will no longer be associated to both outcome variables.

The *second* possibility refers to the likelihood of an *interaction* or *moderator*-effect. It is possible that both types of job insecurity strengthen each other in a multiplicative way, as is often the case in job stress research (see e.g. Koslowsky, 1998). This implies that the combined effect of the two stressors leads to an even lower score as regards job satisfaction and organisational commitment, than the 'simple' addition of the negative effect of both stressors taken separately. The lowest score is expected from employees who are temporarily employed *and* who feel insecure about their job. This hypothesis is called the '*intensification hypothesis*'.

An alternative interaction hypothesis is also possible. It is possible that job insecurity has a different effect on permanent contractors than on temporary

employees. To develop this hypothesis, we once again appeal to the notion of the psychological contract (Rousseau, 1995; Schalk & Freese, 1993). We already discussed that the idea of balance is crucial to the psychological contract: the employee should perceive a balance between his/her input and that of the employer. However, there may be a difference between temporary and permanent co-workers regarding the expectancy that the psychological contract implies job security. We can suppose that especially permanent employees expect their employer to provide job security. The contract offered by their employer was, after all, of indefinite duration. Once confronted with job insecurity, particularly this category of employees may experience it as a one-sided violation of the psychological contract, which as a consequence will have negative effects on their job satisfaction and organisational commitment. Temporary employees' expectation of job security may to a lesser extent belong to their psychological contract. They were, after all, only offered a fixed-term contract by their employer. Perhaps they do not (or less strongly) experience the perception of job insecurity as a violation of the psychological contract, because it did not provide for job security in the first place. According to this view, the most negative effect is expected from permanent employees who feel insecure about their job. The effect of job insecurity may be less negative (or even non-existent) among temporary workers. This hypothesis will be called the '*violation hypothesis*'.

Hypothesis 5 thus reads that an interaction effect will occur between temporary employment and the subjective perception of job insecurity with regard to their job satisfaction (hypothesis 5a) and organisational commitment (hypothesis 5b). For exploratory reasons, we will not hypothesise about the exact nature of this interaction. Two options are possible. The '*intensification*' hypothesis assumes that employees who are temporarily employed *and* who feel insecure about their job will show the lowest score on both outcome variables. The '*violation*' hypothesis states that the most negative score on both outcome variables is expected from permanent employees who feel insecure about their job.

Method

Design

The data being analysed in this contribution are part of a broader European study comparing the effects of job insecurity (for more information, see: Sverke et al., 2001). Four European countries were involved in the project: Belgium, Italy, the Netherlands and Sweden. In these countries, similar datasets were collected (Italy) or composed (the three remaining countries). Our analysis thus partially involves secondary data analyses of previously collected data. We are primarily interested in the robustness of our hypotheses: the comparison of the four

countries serves to determine to what extent the results regarding our hypotheses may be generalised. The main aim is not to analyse country specific results, even though we will reflect upon such differences in the discussion.

Samples

The *Belgian* data were collected in the autumn of 1998 via a postal survey in the country's three regions. The survey was aimed at employees from the private sector, employed by companies with at least 5 employees. A total of 3,003 questionnaires were distributed at random amongst a representative sample of 116 companies, and the sample was proportional to the size of the companies. In total 1,120 employees returned their completed questionnaires. This represents an adequate response of more or less 37.3%. The average age was 36.8 years and 65.3% of them were men. Only 5.9% of the respondents were working on a temporary contract, and 9% were part-time employees. The sample was heterogeneously compiled with regard to educational level. About 35% of the respondents were blue-collar workers, and 28% were professionals or managers (the others worked as white-collar workers).

In *Italy*, the data were specifically collected for this study in 2000 via a postal survey. A total of 476 employees returned a completed questionnaire (response percentage: 55%). The average age was 38.3 years, and 68% of the respondents were men. Approximately 10% of the respondents were temporarily employed, and 6% worked part-time. In Italy the sample survey was also heterogeneous as regards educational level, whereas in this case respondents from the public sector were also present (77,5% were working in the private sector; the rest in the public sector). About 24% of the respondents were blue-collar workers, and 22% were professionals or managers.

In the *Netherlands* the data were collected as part of the longitudinal panel organised among members of the Christian Union (CNV). Only union members were thus involved in this telephone survey. The data used in this article were collected in the summer of 1999 ('wave 13', response percentage: 50%). A total of 799 members participated in the survey. Their average age was 42.8 years, and 72.5% of them were men. Approximately 10.5% of the respondents were temporarily employed, and 20% were employed part-time. The sample was heterogeneously composed with regard to the level of education. About 24% of the respondents were blue-collar workers, and 23% were professionals or managers.

Finally, in *Sweden*, the data were collected by means of a postal survey in two large hospitals undergoing organisational changes and restructuring. All employees received a questionnaire at home, and 1,501 of them returned a completed form (response percentage: 61%). On average the respondents were 42.6 years old, and 82% of them were women. Of the respondents, 16.7% were

working on a temporary contract, and 38% were working part-time. The questionnaire did not register their educational level. The sample was heterogeneously composed according to occupational position: 26% of the respondents were blue-collar workers, and 16% were professionals or managers.

The composition of the samples is thus not identical. This is rather an advantage than a disadvantage for the purpose of this study, since the aim of this study is not to conduct a cross country comparison. Instead, we aim to test the robustness of our hypotheses in various contexts. Using partially different samples increases this possibility. More information on the samples and procedures can be found in the technical report of this research project (see: Sverke et al., 2001).

Measures

A number of *demographic variables*, such as gender and age, are registered in all questionnaires. However, certain demographic variables are not recorded in every survey (e.g. level of education and occupational position). The concepts of job insecurity and organisational commitment were operationalised with several items. All items were evaluated on a 5-point scale ('1' = 'disagree' and '5' = 'agree'). For each concept, a factor analysis was performed per country to determine whether the various items refer to the same dimension (for detailed information, see: Sverke et al., 2001). Consequently, scales were computed. The descriptive characteristics of these scales are listed in Appendix 1. These characteristics (mean, standard deviation, Cronbach alpha and the inter-correlations between the scales) are reproduced per country.

In all countries, the concept of '*(subjective) job insecurity*' was measured with three items based on Ashford et al (Ashford et al., 1989) and De Witte (De Witte, 2000). These items refer to two dimensions of job insecurity (compare: Borg, 1992): a cognitive one (e.g. "*I am sure I can keep my job*"), and an affective one (e.g. "*I'm afraid I will get fired*"). A higher score on the scale indicates stronger feelings of job insecurity. The scales obtained from Belgium, the Netherlands and Sweden were sufficiently reliable (Cronbach Alpha varied between .77 and .82; see Appendix 1). In Italy, the scale's reliability is somewhat lower (Cronbach alpha = .67). It appears from Appendix 1 that respondents in the various countries feel rather secure about their jobs (scores between 1.79 and 2.45 on a 5-point scale).

Only one item was used to measure the concept of '*job satisfaction*' in the four countries. The respondents had to evaluate the item 'I am satisfied with my job' on a 5-point scale ('1' = 'disagree' and '5' = 'agree'). A high score thus indicates higher satisfaction. A recent meta-analysis of job satisfaction research suggests that one can adequately measure this concept with only one item (Wanous et al., 1997). According to Appendix 1, respondents in the various countries are

generally satisfied with their job (averages between 3.53 and 3.86 on a 5-point scale).

In the four countries, the concept of organisational commitment was measured with the same four items (examples of items: “*I feel a strong sense of belonging to my organisation*” and “*This organisation has a great deal of personal meaning to me*”). We thus selected the concept of ‘affective commitment’. The items were taken from the scale of Meyer and Allen (1997). Reliable scales were found in three countries (Cronbach alpha between .70 and .84), with a somewhat weaker scale in Sweden (Cronbach alpha = .65). A high score indicates stronger (affective) organisational commitment. Appendix 1 shows that organisational commitment is rather low in Sweden (average = 2.70), which may be attributed to the specific context of data collection (restructuring). In the three remaining countries, the respondents scored on the positive side of the scale (scores between 3.22 and 3.58).

Analyses

Most hypotheses were tested by means of (Pearson) correlations and regression analysis. Hypothesis 3, on the association between temporary work and job insecurity, will be tested by means of an analysis of variance, after which a multiple classification analysis will be performed (Nie et al., 1975: 410-418). This method allows to recalculate the mean scores for job insecurity for the permanent versus temporary workers, after controlling for the possible influence of the demographic variables. Respondents with missing scores on one or more variables were excluded from all the analyses (‘listwise deletion’). This resulted in a slight reduction of the size of the various samples⁴. When testing our hypotheses, four demographic variables (gender, age, occupational position and full-time versus part-time employment) are statistically controlled for. These demographic variables and the temporary nature of the employment (versus permanent workers) were introduced into the analyses as dummy variables. We chose to limit the ‘control variables’ to those present in all four datasets, in order to increase the comparability of the results. Controlling for e.g. the educational level in one dataset and not in another makes the results difficult to compare, thus hampering the test of our hypotheses.

In carrying out the regression analyses we followed the procedures suggested by Aiken and West (1991). The various predictor variables (e.g. demographics and job insecurity) were first of all centred (i.e., put in deviation score form so that their means are zero). Multiplying the two centred predictor variables (‘temporary employment’ and ‘job insecurity’) then formed the regression analysis’ interaction term. This procedure was conducted separately within each

⁴ N = 1058 in Belgium, 435 in Italy, 611 in the Netherlands and 1356 in Sweden.

country. For each country, two regression analyses were run: one with job satisfaction and one with organisational commitment as outcome variable. The four demographic variables, temporary employment, job insecurity and the interaction term between the last two variables, were always introduced simultaneously as predictors.

Results

Because the analyses relate to three different outcome variables ([subjective] job insecurity, job satisfaction and organisational commitment respectively), we will discuss the results according to each outcome variable separately. This means that we will discuss the results in a slightly different sequence, than the one in which the hypotheses are introduced above.

Subjective job insecurity as outcome variable

Hypothesis 3 states that (once relevant demographic variables have been controlled for) employees on a temporary contract feel less secure about their job than employees with a permanent contract. Appendix 1 shows that the initial ('zero-order') correlations between temporary employment and job insecurity are significantly positive in all four countries (correlations between .11 (.05>P>.01) and .33 (P<.001)). An analysis of variance was performed with job insecurity as dependent variable, and temporary versus permanent work and the four demographics as independent variables. Then, a multiple classification analysis was performed, and the means of the temporary versus permanent workers were recalculated, after controlling for the demographics. The age of the respondents was recoded into three categories of equal size. Table 1 shows the results of these analyses.

Table 1. Differences in job insecurity between temporary and permanent workers in four European countries. Results of a multiple classification analysis after performing an ANOVA.

	Belgium	The Netherlands	Italy	Sweden
Mean score for job insecurity ^o				
- permanent workers	2.18	1.81	2.40	1.62
- temporary workers	2.66	2.43	2.70	2.57
Bêta	.12***	.26***	.09(*)	.33***
F-value	16.31***	20.05***	3.40(*)	139.37***
Degrees of freedom	(1,1046)	(1,309)	(1,385)	(1,1212)

(*) : $.10 > P > .05$; *** : $P < .001$

^o 5-point scale (1 = disagree; 5 = agree). The means were recalculated and the influence of age, gender, social class and working parttime (versus fulltime) was eliminated from the averages by means of a multiple classification analysis.

The variable ‘permanent versus temporary workers’ is still significantly associated with job insecurity in three out of four countries, after controlling for the demographics. This association is even rather strong in Sweden and Italy (bêta’s respectively .33 and .26; P always $< .001$). This association is marginally significant in Italy, however ($P = .066$). The means for job insecurity in Table 1 also show that temporary workers feel more insecure about their job than employees with a permanent contract in all countries. This difference is only marginally significant in Italy. We can conclude that hypothesis 3 is corroborated in three out of four countries.

Job satisfaction as outcome variable

Table 2 contains the results of the regression analysis with job satisfaction as outcome variable.

Hypothesis 1a reads that temporary employment is associated with reduced job satisfaction, once the various demographic variables are controlled for. Appendix 1 shows that the initial (‘zero order’) correlations between temporary employment and job satisfaction are not significant in three of the countries (Belgium, the Netherlands and Sweden), whereas the correlation is positive (although rather low) in Italy ($r = .12$; $.05 > P > .01$). The latter contrasts with hypothesis 1a, because we expect to find the opposite, i.e. a negative correlation. After regression analysis - and after controlling for relevant demographic variables - the association between temporary employment and job satisfaction is

not significant in Belgium. In Italy, the association remains positive ($B\hat{e}ta = .11$; $.05 > P > .01$). In the two other countries, the coefficients become significantly positive ($B\hat{e}ta .10$ in the Netherlands and $.06$ in Sweden; in each case $.05 > P > .01$). This surprising finding cannot be attributed to the introduction of the demographics into the analysis. A separate regression analysis, in which only the demographics and temporary work were included, produced no significant coefficient for temporary employment in the Netherlands and Sweden. On the basis of these analyses, we must reject hypothesis 1a. Temporary employment is not associated with reduced job satisfaction in any of the four countries. After regression analysis, the reverse was even found in three of the countries: job satisfaction was higher among temporary employees.

Table 2. Results of the regression analyses concerning job satisfaction (Bêta-coefficients).

Predictors	Belgium	The Netherlands	Italy	Sweden
Age	.07*	-.02	-.10*	.15***
Gender ^o	.01	.00	.04	.09**
Blue-collar workers ^o	.10**	.03	.03	-.03
Professionals/managers ^o	.02	.05	.12*	.08**
Parttime ^o	.02	-.09	-.14**	-.04
Temporary workers ^o	.00	.10*	.11*	.06*
Job Insecurity	-.30***	-.14**	-.33***	-.19***
Interaction Job insecurity –Temporary workers	.07*	.00	.07	.09**
R	.32	.18	.41	.26
R ²	.10	.03	.17	.07
F-value	14.83***	2,65**	11,14***	12,14***
Degrees of freedom	(8,1065)	(8,602)	(8,434)	(8,1365)

^o Dummies. A higher score reflects women, blue collar-workers, professionals/managers, part-time workers and temporary contracts respectively.

*: $.05 > P > .01$; **: $.01 > P > .001$; ***: $P < .001$; n.s.: not significant.

Hypothesis 2a states that (subjective) job insecurity is associated with reduced job satisfaction, once the various demographic variables are controlled for. We can already conclude from Appendix 1 that the zero-order correlations between job insecurity and job satisfaction are significantly negative in all four countries (correlations between $-.12$ ($.01 > P > .001$) and $-.32$ ($P < .001$)). These correlations are in line with our hypothesis. Table 2 shows that these associations remain virtually identical after regression analysis. Thus, hypothesis 2a cannot be

rejected for any of the countries. As expected, job insecurity is accompanied by reduced job satisfaction in each country, even after controlling for demographics.

At the same time, we can draw a conclusion regarding hypothesis 4a. This hypothesis states that *only* subjective job insecurity is associated with reduced job satisfaction after controlling for demographics and temporary employment. The results of the regression analyses show that only (subjective) job insecurity is associated negatively with job satisfaction. This applies to the four countries under investigation. Concerning this aspect, hypothesis 4a cannot be rejected. As mentioned above, however, after regression analysis, a temporary job (as an 'objective' operationalisation of insecurity) continued to display a significantly positive relation to job satisfaction (Italy) or was shown to do so for the first time (the Netherlands and Sweden). This is contrary to hypothesis 4a.

Finally, hypothesis 5a states that, when analysing job satisfaction, an interaction effect will occur between temporary employment and job insecurity. To test this hypothesis, an interaction term was added to the regression analysis. This interaction term is significant in Belgium ($B\hat{e}ta = .07; .05 > P > .01$) and in Sweden ($B\hat{e}ta = .09; .01 > P > .001$), but not in the two remaining countries. Hypothesis 5a is thus only partially confirmed. To determine whether the interaction between temporary employment and job insecurity is in keeping with the 'intensification hypothesis' or the 'violation hypothesis', the 'job insecurity' variable was dichotomised (medium split in both countries separately). These dichotomised variables were then cross tabulated with performing a temporary job (or not), after which the average job satisfaction score was calculated for each combination. These scores are shown in Figure 1 for Belgium and Figure 2 for Sweden.

The results for Belgium (Figure 1) are in line with the 'violation hypothesis'. Among employees with a temporary contract, the difference between those who feel insecure about their job (average: 3.77) and those who feel secure (average: 3.85) is not statistically significant ($t\text{-value} = 0.29; df = 61; n.s.$). There are, however, significant differences between the two groups of employees with a permanent contract: those who feel insecure about their job score significantly lower regarding job satisfaction than those who feel secure (respective scores: 3.61 and 4.07; $t\text{-value} = 8.03; df = 1015; P < .001$). We can conclude that job insecurity is only associated with a reduction in job satisfaction amongst permanent workers in Belgium.

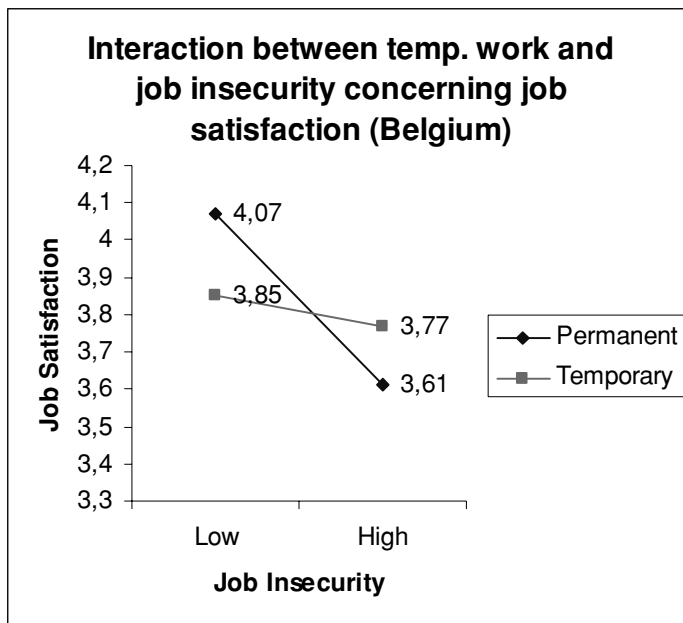


Figure 1 Interaction between temporary work and job insecurity concerning job satisfaction in Belgium

The results for Sweden (Figure 2) are similar to the results for Belgium. These results equally confirm the ‘violation hypothesis’. Again, no statistically significant difference in job satisfaction is found between temporary employees who feel secure or insecure about their job (respective averages: 3.68 and 3.78; t-value = -0,69; df = 226; n.s.). However, there is a marked difference between the job-secure and the job-insecure group amongst employees with a permanent contract, which is in line with the violation hypothesis: permanent workers are less satisfied with their jobs when they feel insecure (average 3.57 versus 4.0 amongst permanent workers who feel secure about their job; t-value = 7,17; df = 1144; P < .001).

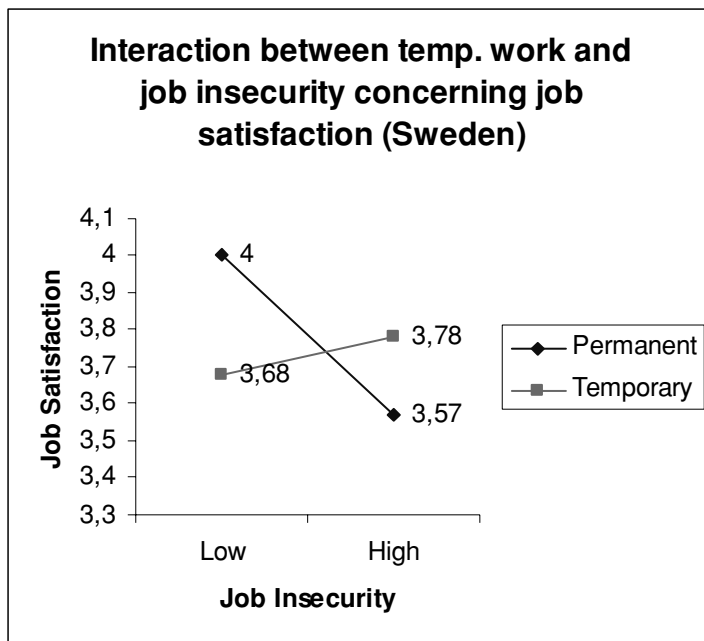


Figure 2 Interaction between temporary work and job insecurity concerning job satisfaction in Sweden

Organisational commitment as outcome variable

We will follow the same sequence as for the discussion of the job satisfaction results. Table 3 contains the regression analysis results with organisational commitment as outcome variable.

Hypothesis 1b states that temporary workers will score lower on organisational commitment than permanent workers, after controlling for demographic variables. The initial (zero order) correlations between temporary employment and organisational commitment are shown in Appendix 1. A weak negative correlation is found in two countries, in line with hypothesis 1b (Belgium: $r = -.06$ (.05 > P > .01) and Sweden: $r = -.09$ (.01 > P > .001)). In the two remaining countries, the correlation is not significant. After regression analysis, the association between organisational commitment and temporary employment disappears in Belgium and Sweden. In Italy this association remains insignificant. As in the case of job satisfaction analysis (see Table 2), the association between temporary employment and organisational commitment becomes significantly positive in the Netherlands, when the other variables are kept under statistical control. The results of a separate regression analysis show that this result cannot be attributed to the inclusion of the demographic variables in the analysis. A separate regression analysis with only the demographics and temporary work (results not shown in Table 2) shows no significant coefficient for the variable 'temporary work'. Taken as a whole, our results lead to a

rejection of hypothesis 1b. In one country (the Netherlands) we even found the reverse: after regression analysis, temporary employees score higher concerning organisational commitment.

Table 3. Results of the regression analyses concerning organisational commitment (Beta-coefficients).

Predictors	Belgium	The Netherlands	Italy	Sweden
Age	.18***	.11**	.05	.29***
Gender ^o	-.05	.13**	-.16**	-.01
Blue-collar workers ^o	.06	.10*	-.03	.02
Professionals/managers ^o	.15	.11**	-.01	.06*
Parttime ^o	.02	-.14**	-.07	-.08**
Temporary workers ^o	-.04	.10*	.06	.00
Job Insecurity	-.19***	-.19***	-.20***	-.05 ^(*)
Interaction Job insecurity – Temporary workers	.08*	-.05	.08	.09**
R	.33	.27	.29	.32
R ²	.11	.07	.08	.11
F-value	16,46***	5,99***	5,00***	10,39***
Degrees of freedom	(8,1049)	(8,602)	(8,430)	(8,1351)

^o Dummies. A higher score reflects women, blue collar-workers, professionals/managers, parttime workers and temporary contracts respectively.

(*): .10>P>.05; *: .05>P>.01; **: .01>P>.001; ***: P<.001; n.s.: not significant.

Hypothesis 2b states that (subjective) job insecurity is associated negatively with organisational commitment. In three of the four countries, the initial (zero order) correlations are indeed in keeping with this hypothesis (correlations between -.18 and -.21; P always < .001; see Appendix 1). In Sweden, no significant correlation is found (r = -.04; n.s.). These associations are only slightly modified after regression analysis: in Belgium, Italy and the Netherlands, hypothesis 2b cannot be rejected. In these countries, job insecure employees indeed show reduced organisational commitment. Sweden proves to be the exception: in this country, no significant association is found between the two variables. The coefficient in this country is marginally significant, however (P = .07).

Hypothesis 4b states that only subjective job insecurity is associated negatively with organisational commitment, once temporary employment ('objective insecurity') and demographics are controlled for. The preceding results of the regression analyses already indicate that this hypothesis can only be

partially confirmed. In two countries (Belgium and Italy) only subjective job insecurity is indeed associated negatively with organisational commitment. In Sweden, none of the two types of insecurity are associated with organisational commitment. In the Netherlands, a negative coefficient with job insecurity is indeed found. In this country, however, temporary employment is associated positively with organisational commitment, which contradicts our expectations.

Finally, the interaction term between job insecurity and temporary employment was tested (hypothesis 5b). The results in Table 3 show that this interaction is only significant in two countries (Belgium and Sweden), even though these coefficients are rather weak (Bêta is .08 in Belgium ($.05 > P > .01$) and .09 ($.01 > P > .001$) in Sweden). We must conclude that hypothesis 5 is only partially confirmed regarding organisational commitment as well. Job insecurity was once again dichotomised (medium split in the two countries separately), and cross tabulated with temporary employment versus permanent work, after which the mean for organisational commitment was calculated for each condition. These scores are shown in Figure 3 for Belgium and Figure 4 for Sweden.

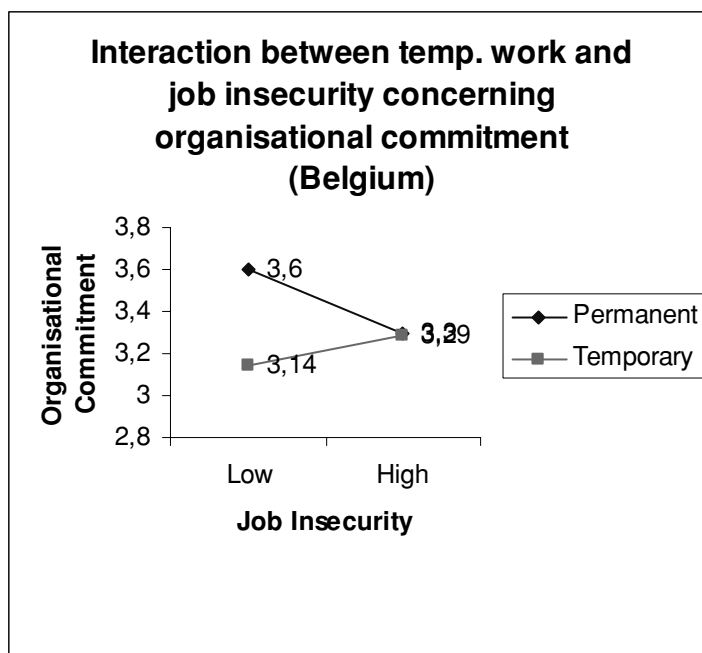


Figure 3 Interaction between temporary work and job insecurity concerning organisational commitment in Belgium

The results for Belgium (Figure 3) are again in line with the ‘violation hypothesis’. The only significant difference between job secure and job insecure respondents is found among employees with a permanent contract: the insecure

respondents score significantly lower on organisational commitment compared to the job secure (average score respectively 3.6 and 3.30; t -value = 5,88; df = 1000; P < .001). Among the employees with a temporary contract, no significant difference between the job secure and the job insecure employees occurs (average score respectively: 3.14 and 3.29; t -value = -0,63, df = 60; n.s.). Job insecurity thus only seems associated with lower organisational commitment among permanent employees.

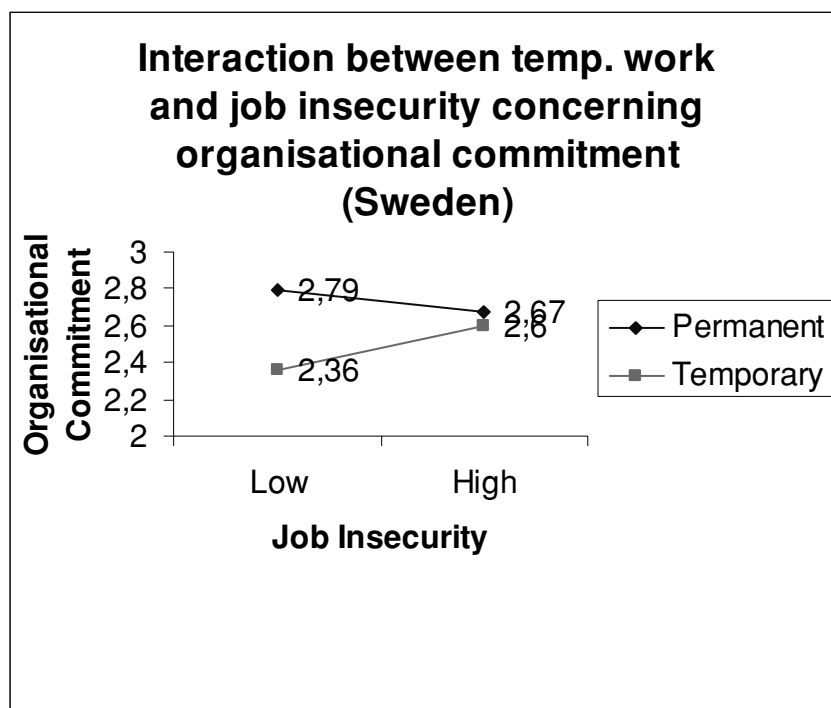


Figure 4 Interaction between temporary work and job insecurity concerning organisational commitment in Sweden

The results for Sweden are largely in line with the results found in Belgium. Again, a significant difference occurs among the employees with a permanent contract (average score: 2.79 for job secure employees and 2.67 for the job insecure; t -value = 2,16, df = 1132; P = .03): the insecure are less committed to their organisation than the secure. This is in line with the ‘violation’ hypothesis, even though the difference is rather small. Among the employees in temporary service, however, an almost significant difference is found between both categories. This time, the secure employees within this category score lower concerning organisational commitment (average score for job secure employees: 2.36 as opposed to 2.6 for job insecure employees; t -value = -1,89, df = 224; P = .06). This marginal significant result conflicts with the ‘intensification

hypothesis', because the latter suggests that the job insecure group will show the lowest organisational commitment.

Summary and discussion

This article examined the consequences of two job insecurity operationalisations: temporary employment (the 'objective' variant) and the subjective perception of being uncertain about the future of one's job. In order to test the strength of the various hypotheses, secondary analyses were performed on data collected in four different European countries. The results section was grouped in sub-sections according to the dependent variables. In this section, we will discuss the results according to the different hypotheses.

On the basis of three theoretical perspectives, the hypothesis was put forward that, as an objective operationalisation of job insecurity (cf. Büssing, 1999; Pearce, 1998), temporary employment would involve reduced job satisfaction and reduced organisational commitment (hypothesis 1). These perspectives referred to deprivation (e.g. Reilly, 1998a), the psychological contract (Beard & Edwards, 1995) and job stress (Sverke et al, 2000). This hypothesis could not be confirmed in any of the four countries: in none of the samples did temporary employees show significantly lower job satisfaction and lower organisational commitment than employees with permanent contracts. Once the possible influence of demographic variables had been controlled for, the opposite was in fact found in four of the eight tests: temporary employees achieved 'better' scores than the permanent ones. Two conclusions can be drawn on the basis of these findings.

First, these results conflict with the idea that temporary employment is problematic in itself. The different theoretical perspectives from which this hypothesis was deduced, should thus be refined: do temporary employees really feel deprived and are they only/mainly exposed to stressors at work? The theoretical frameworks used are possibly incomplete, and should be supplemented in follow-up research. The questionnaires used, for example, did not take into account whether temporary employment was voluntary or not. This variable emerged in various studies as a relevant moderator: only respondents who were involuntary temporary employees, experienced temporary employment in a negative way (e.g. Aronsson & Göransson, 1999; Isaksson & Bellagh, 2002). Not keeping this variable under control could have influenced our results. In this study, no distinction could be made between different types of temporary employment. Studies show the relevance of a further differentiation between temporary contracts (e.g. Bernard & Sverke, in review): the expected negative results do not occur to the same extent in each category. Finally, it must be noted that our theoretical insights as such could not be operationalised, since the data

had been collected previously. So, no direct test of the theories could be performed. This is needed in follow-up research, since this is the only way of determining to what extent these theoretical frameworks are effectively refuted, and of researching the causes of our unexpected findings. Follow-up research is of course also needed to replicate our findings.

A second conclusion concerns the '*positive*' effects of temporary work, as found in a number of countries. It is striking that these positive associations with outcome variables mostly emerge after multivariate analysis. Separate (unreported) regression analyses, exclusively using background characteristics *and* temporary employment as dependent variables, showed that these positive associations did not result from controlling for demographic variables. Additional (unreported) regression analyses showed that the effect of temporary employment was only found once (subjective) job insecurity had been introduced into the analyses. Once the subjective perception of job insecurity had been controlled for, temporary employment was associated with increased job satisfaction and organisational commitment in various countries. This suggests that it is job insecurity that aggravates temporary employment, as hypothesised in the literature (e.g. Klandermans & Van Vuuren, 1999b: 146). Our results also suggest that - once job insecurity has been controlled for - temporary employment could involve a number of positive job characteristics. Further research is needed to determine these aspects. The finding that temporary employment is associated with increased job satisfaction and organisational commitment, has not been reported previously in the literature. Most of the times, a negative association is reported (e.g. Van Breukelen & Allegro, 2000; Sverke et al, 2000). However, in most studies, the perception of job insecurity was not controlled for, which could account for this difference in findings.

The second hypothesis refers to the association between the subjective perception of job insecurity and the variables of job satisfaction and organisational commitment. On the basis of earlier research (e.g. Hartley et al., 1991; De Witte, 1999; Sverke & Hellgren, 2002; Sverke et al., 2002) *and* on the basis of theoretical considerations (including the frustration of needs (Jahoda, 1982) and the violation of the psychological contract (Van Vuuren, 1990) we hypothesised that job insecurity would be associated with a reduction in job satisfaction and organisational commitment. This hypothesis was largely confirmed. In all countries, job insecurity showed a negative association with job satisfaction, once demographic variables had been controlled for. Regarding organisational commitment, the same was found in three out of four countries. In the fourth country (Sweden) the association was only marginally significant. The specific circumstances of data gathering in Sweden could be responsible for this result: these data were collected in two organisations in the midst of a restructuring process. This may have resulted in the lower organisational

commitment score in Sweden than in the remaining countries. This specific context could have reduced the association between job insecurity and organisational commitment. Overall, our second hypothesis is thus confirmed. It once again suggests that job insecurity constitutes a problematic experience (cf. De Witte, 1999; Sverke & Hellgren, 2002). Job insecurity also seems to transcend the significance of temporary employment.

Various authors assume that temporary employment is associated with job insecurity (e.g. Pearce, 1998; Beard & Edwards, 1995). In the literature, both variables are sometimes even considered as operationalisations of the same, global concept of 'job insecurity'. This hypothesis (hypothesis 3) was confirmed in three of the four countries. This hypothesis could not be confirmed in Italy, even though a marginally significant association was observed. It is not clear why this hypothesis was refuted in Italy. However, we can conclude that our hypothesis has (mostly) been confirmed: temporary employment is indeed associated with job insecurity, even though these associations are also rather small in magnitude. One reason for these small associations could be the lack of information regarding promises made to the respondent by the employer. It is possible that a number of temporary workers were offered the prospect of permanent future employment. These respondents thus perceived their job - rightly - as 'secure'. Since our datasets contained no information about such promises, this aspect could not be analysed. It should be included in follow-up research. The presumption that the prospect of a permanent contract was offered to some temporary employees, suggests that it might be problematic to consider the anticipation of unemployment as the core element of an 'objective' operationalisation of job insecurity, as assumed by some authors (e.g. Büssing, 1999). After all, temporary employment does not by definition lead to unemployment. This also suggests that it might be problematic to consider temporary employment as an ('objective') indicator of job insecurity at all. Our results show that it is more important to assess the perception of the contract, when we want to analyse the associations between a given contract and outcome variables, such as satisfaction and organisational commitment.

In the fourth hypothesis, both operationalisations of 'insecurity' were contrasted with each other. We proposed that only the subjective perception of job insecurity would be associated with reduced job satisfaction and organisational commitment, once demographic variables as well as the temporary contract had been controlled for. The results regarding this hypothesis have already been discussed in part above. The results from the different regression analyses indeed show that it is the subjective operationalisation that is associated with reduced job satisfaction and organisational commitment. The association with organisational commitment was non-significant in only one country (Sweden). The first part of the hypothesis is thus predominantly confirmed:

employees feel dissatisfied with their job and feel less involved in their company when they feel that their job is insecure. The second part of hypothesis 4 was not confirmed in any country. In some countries, having a temporary contract even produced positive associations (see above). Overall, our results thus suggest that (subjective) job insecurity is more of a problem for job satisfaction and organisational commitment than its 'objective' variant: having a temporary contract (see also Klandermans & Van Vuuren, 1999b: 146). It is not so much the contract 'as such' which is problematic, but rather the perception of it.

The last hypothesis (hypothesis 5) relates to an interaction effect between temporary employment and (the subjective perception of) job insecurity when determining job satisfaction and organisational commitment. Two contrasting hypotheses were suggested. The intensification hypothesis implies that both operationalisations of job insecurity strengthen each other multiplicatively, since both variables are considered as stressors. A similar interaction effect is often mentioned in job stress research (e.g. Koslowsky, 1998) The violation hypothesis builds on the theory of the psychological contract (e.g. Rousseau, 1995). It assumes that the negative consequences of job insecurity occur especially amongst permanent workers. Especially these employees assume that their contract provides job security, and experience a violation of this assumption as a one-sided violation by the employer of their psychological contract. Employees on a fixed-term contract probably do not experience job security as part of their psychological contract (or to a lesser extent), because their contract is only of limited duration.

The hypothesis of an interaction between temporary employment and job insecurity is only partially supported by our results: this hypothesis was only confirmed in two out of four countries. In Italy and the Netherlands, temporary employment did not interact with job insecurity. In Belgium and Sweden, such an interaction was indeed found. A striking finding is that the results consistently pointed in the direction of the violation hypothesis: job insecurity was only problematic for employees on a permanent contract. Apparently, especially this category experienced a violation of their psychological contract. Note, however, that the respondents' psychological contract was not operationalised in this study, and as a consequence, the hypothesis of a violation was not tested directly. It is recommended to do so in future research. The finding that the violation hypothesis is confirmed, has not been reported before in the literature. It thus opens new research perspectives. This finding substantiates the conclusion that the theories for studying (the consequences of) temporary employment should be supplemented by additional variables, in order to fully analyse the consequences of this kind of contracts. In this study, job insecurity appears to be such a supplementary variable. As a consequence, this variable deserves more attention in future research on the consequences of temporary employment.

To conclude, it is remarkable that the interaction effects only emerged in Belgium and Sweden. Both countries are countries with a strong union movement, and a very high percentage of employees belongs to a union in both countries (e.g. Visser, 1995). It is possible that the strong position of the union movement in both countries played a role in the development of this moderator effect. In countries with a strong union movement, employees are possibly offered greater protection regarding their contract (e.g. by settling more conclusive agreements when negotiating collective labour agreements, and by enforcing them to a larger degree). This possibly creates stronger feelings of security amongst employees with a permanent contract. When the latter are confronted with job insecurity, this might lead more easily to the perception of a violation of the psychological contract. Future research should try to test this hypothesis.

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Appendix 1

Table A1. Means, standard deviations, Cronbach alpha and intercorrelations between the variables for Belgium (n=1058).

	Mea n	SD	Alpha	1	2	3	4	5	6	7	8	9
1. Age	36.8 0	9.39	-	/	-.12***	-.02 ^{n.s}	.22***	.02 ^{n.s}	-	.04 ^{n.s}	.06 ^{n.s}	.20***
2. Gender ^o	0.35	0.48	-	/	/	-.25***	-.11**	.35***	.07*	.13***	-.05 ^{n.s}	-.13***
3. Blue-collar ^o	0.35	0.48	-	-	/	/	-	-.17***	-.08**	.05 ^{n.s}	.07*	-.00 ^{n.s}
4. Professional/manager ^o	0.28	0.45	-	-	/	/	/	-.08**	-.05 ^{n.s}	-.15***	.03 ^{n.s}	.18***
5. Parttime ^o	0.09	0.29	-	-	/	/	/	/	.06 ^{n.s}	.01 ^{n.s}	.00 ^{n.s}	-.02 ^{n.s}
6. Temporary ^o	0.06	0.23	-	-	/	/	/	/	/	.13***	-.02 ^{n.s}	-.06*
7. Job insecurity ^{oo}	2.20	0.89	.79	-	-	-	-	-	-	-	-.28***	-.21***
8. Job satisfaction ^{oo}	3.86	0.94	-	-	-	-	-	-	-	-	/	.60***
9. Org. Comm. ^{oo}	3.45	0.83	.82	-	-	-	-	-	-	-	-	/

*: .05>P>.01; **: .01>P>.001; ***: P<.001; n.s.: not significant

^o Dummies. A higher score reflects women, blue collar-workers, professionals/managers, parttime workers and temporary contracts respectively.

^{oo} 5-point scales (1 = disagree; 5 = agree).

Table A2. Means, standard deviations, Cronbach alpha and intercorrelations between the variables for the Netherlands (n=611).

	Mean	SD	Alpha	1	2	3	4	5	6	7	8	9
1. Age	42.84	10.20	-	/	-.11**	-.06 ^{n.s.}	.16***	.06 ^{n.s.}	-.28***	-.01 ^{n.s.}	-.05 ^{n.s.}	.08*
2. Gender ^o	0.27	0.45	-	/	/	.03 ^{n.s.}	-.08*	.51***	.04 ^{n.s.}	.02 ^{n.s.}	-.05 ^{n.s.}	.03 ^{n.s.}
3. Blue-collar ^o	0.24	0.43	-	/	/	/	-.31***	.03 ^{n.s.}	.03 ^{n.s.}	.09*	.00 ^{n.s.}	.04 ^{n.s.}
4. Professional/manager ^o	0.23	0.42	-	/	/	-.05 ^{n.s.}	/	-.07 ^{n.s.}	-.07 ^{n.s.}	-.06 ^{n.s.}	.04 ^{n.s.}	.10*
5. Parttime ^o	0.20	0.40	-	/	/	/	.11**	/	.11**	.01 ^{n.s.}	-.09*	-.06 ^{n.s.}
6. Temporary ^o	0.10	0.31	-	/	/	/	/	/	.24***	.06 ^{n.s.}	-.01 ^{n.s.}	-.01 ^{n.s.}
7. Job insecurity ^{oo}	1.86	0.68	.82	/	/	/	/	/	/	-.12**	-.18***	-.18***
8. Job satisfaction ^{oo}	3.85	0.80	-	/	/	/	/	/	/	/	.44***	.44***
9. Org. Comm. ^{oo}	3.58	0.63	.70	/	/	/	/	/	/	/	/	/

*: .05>P>.01; **: .01>P>.001; ***: P<.001; n.s.: not significant

^o Dummies. A higher score reflects women, blue collar-workers, professionals/managers, parttime workers and temporary contracts respectively.

^{oo} 5-point scales (1 = disagree; 5 = agree).

Table A3. Means, standard deviations, Cronbach alpha and intercorrelations between the variables for Italy (n=435).

	Mean	SD	Alpha	1	2	3	4	5	6	7	8	9
1. Age	38.29	8.87	-	/	-.07 ^{n.s.}	-.02 ^{n.s.}	.06 ^{n.s.}	-.07 ^{n.s.}	-.22 ^{***}	.04 ^{n.s.}	-.13 ^{**}	.04 ^{n.s.}
2. Gender ^o	0.32	0.47	-	/	/	-.27 ^{***}	-.29 ^{***}	.16 ^{**}	-.06 ^{n.s.}	.07 ^{n.s.}	-.04 ^{n.s.}	-.17 ^{***}
3. Blue-collar ^o	0.24	0.43	-	/	/	/	-.30 ^{***}	.02 ^{n.s.}	.01 ^{n.s.}	.11 [*]	-.07 ^{n.s.}	-.01 ^{n.s.}
4. Professional/manager ^o	0.22	0.41	-	/	/	/	/	-.06 ^{n.s.}	.08 ^{n.s.}	-.09 ^{n.s.}	.14 ^{**}	.07 ^{n.s.}
5. Parttime ^o	0.06	0.24	-	/	/	/	/	/	.21 ^{***}	.17 ^{***}	-.16 ^{**}	-.12 [*]
6. Temporary ^o	0.10	0.30	-	/	/	/	/	/	/	.11 [*]	.12 [*]	.06 ^{n.s.}
7. Job insecurity ^{oo}	2.45	0.92	.67	/	/	/	/	/	/	/	-.32 ^{**}	-.21 ^{***}
8. Job satisfaction ^{oo}	3.53	1.17	-	/	/	/	/	/	/	/	/	.56 ^{***}
9. Org. Comm. ^{oo}	3.22	1.01	.84	/	/	/	/	/	/	/	/	/

*: .05>P>.01; **: .01>P>.001; ***: P<.001; n.s.: not significant

^o Dummies. A higher score reflects women, blue collar-workers, professionals/managers, parttime workers and temporary contracts respectively.

^{oo} 5-point scales (1 = disagree; 5 = agree).

Table A4. Means, standard deviations, Cronbach alpha and intercorrelations between the variables for Sweden (n=1356).

	Mean	SD	Alpha	1	2	3	4	5	6	7	8	9
1. Age	42.61	10.33	-	/	-.04 ^{n.s.}	-.01 ^{n.s.}	.09**	-.06*	-.35***	-.09**	.16***	.30***
2. Gender ^o	0.82	0.38	-	/	/	.08**	-.32***	.16***	-.06*	-.02 ^{n.s.}	.07**	-.03 ^{n.s.}
3. Blue-collar ^o	0.26	0.44	-	/	/	/	-.26***	.12***	-.08**	.12***	-.07**	-.01 ^{n.s.}
4. Professional/manager ^o	0.16	0.36	-	/	/	/	-.21***	.03 ^{n.s.}	-.06*	-.06*	.09**	.11***
5. Parttime ^o	0.38	0.49	-	/	/	/	/	.05 ^{n.s.}	.04 ^{n.s.}	.04 ^{n.s.}	-.05*	-.11***
6. Temporary ^o	0.17	0.37	-	/	/	/	/	/	.33***	-.02 ^{n.s.}	-.02 ^{n.s.}	-.09**
7. Job insecurity ^{oo}	1.79	1.01	.77	/	/	/	/	/	-.15***	-.04 ^{n.s.}	-.04 ^{n.s.}	-.04 ^{n.s.}
8. Job satisfaction ^{oo}	3.81	1.05	-	/	/	/	/	/	/	/	/	.52***
9. Org. Comm. ^{oo}	2.70	0.88	.65	/	/	/	/	/	/	/	/	/

*: .05>P>.01; **: .01>P>.001; ***: P<.001; n.s.: not significant

^o Dummies. A higher score reflects women, blue collar-workers, professionals/managers, parttime workers and temporary contracts respectively.

^{oo} 5-point scales (1 = disagree; 5 = agree)

A cross-cultural validation of a job insecurity measure

*Johnny Hellgren
Antonio Chirumbolo
Hans De Witte
Sjoerd Goslinga
Katharina Näswall
Magnus Sverke*

Introduction

Rapid economic fluctuations and trade cycles along with an intensified global and domestic competition have placed both external and internal pressures on organizations (Burke & Cooper, 2000; Burke & Nelson, 1998). Organizations have reacted with various strategies (e.g., downsizing, mergers, privatizations and acquisitions as well as offers of early retirement) in order to adapt and stay competitive. Although the organizational strategies differ they seem to have at least one thing in common – they all involve uncertainty regarding the continuity of the present employment (Sverke & Hellgren, 2002). The fact that many of these reorganizational strategies involve workforce reductions has highlighted the theoretical concept of job insecurity as well as its empirical consequences. These issues have been reviewed and discussed in previous work (e.g., De Witte, 1999; Hartley, Jacobson, Klandermans & van Vuuren, 1991; Sverke & Hellgren, 2002; Sverke, Hellgren & Näswall, 2002). However, although several attempts have been made in order to develop theoretically derived measures of job insecurity (e.g., Ashford, Lee & Bobko, 1989; Kuhnert, Sims & Lahey, 1989), there is no generally agreed-on measure of the concept. Rather, a large variety of measures are being used, mostly with unknown measurement properties (Sverke et al., 2002).

The purpose of this study is to validate a five-item scale reflecting the employee's overall concern regarding the future and continuity of the present employment. This global job insecurity measure was developed within a European project and is evaluated using data from four European countries (Belgium, Italy, the Netherlands and, Sweden). We rely on covariance structures and latent regression models to estimate the construct validity of the job insecurity measure.

Job insecurity

In the psychological literature job insecurity has typically been defined as the individual's "expectations about continuity in a job situation" (Davy, Kinicki &

Scheck, 1997, p. 323), “overall concern about the future existence of the job” (Rosenblatt & Ruvio, 1996, p. 587), and “perception of a potential threat to continuity in his or her current job” (Heaney, Israel & House, 1994, p. 1431). One central characteristic of the different definitions is that they describe job insecurity as a subjective phenomenon reflecting the individual’s perception of a threat to the current employment. Most definitions also build on the assumption of involuntariness, that is, job insecurity refers to an undesired change from a secure employment situation to an insecure one (Greenhalgh & Rosenblatt, 1984). Given that job insecurity is a subjective phenomenon based on individual interpretations of the immediate work environment, different individuals can perceive different levels of job insecurity despite the fact that they are exposed to the same objective situation (Sverke & Hellgren, 2002). These subjective definitions differ from more objective ones, which instead build upon the assumption of job insecurity as independently determined without referring to the individual’s perceptions (e.g., Pearce, 1998), and more or less divide organizations into secure and insecure workplaces (e.g., Büssing, 1999). The subjective and involuntary aspects, however, are at the heart of most psychological definitions of the construct and thus also in this study.

Originally, job insecurity was assessed in its reversed form – job security – in broader job satisfaction and work climate inventories (e.g., Hackman & Oldham, 1975; Ivancevich, 1974; Rizzo, House & Lirtzman, 1970) where respondents typically indicated their satisfaction with the present job security. In these studies job security was seen as one of several motivators but did not receive specific theoretical attention. One of the first studies that addressed the issue of job insecurity as an important predictor of outcome factors was Caplan, Cobb, French, Van Harrison and Pinneau (1975). In this study a multi-item measure of job insecurity was used and the construct was interpreted as a stressor rather than as a motivator. The Caplan et al. (1975) study was also one of the first to use a multiple-item scale to capture job insecurity, in contrast to previous studies that mainly relied on single item measures of the phenomenon.

However, it was not until Greenhalgh and Rosenblatt’s (1984) seminal work that systematic research on job insecurity started to emerge, and more theoretically elaborated measures based on multiple indicators were developed. There is, however, still no consensus on how to measure job insecurity, and many researchers use single item indicators or develop their own scales (Sverke & Hellgren, 2002; Sverke et al., 2002).

One of the more popular measures in usage is the Ashford et al. (1989) multidimensional scale. The scale consists of 57 items divided into five dimensions, and a multiplicative formula is used in order to assess the individual’s level of perceived overall job insecurity. There are also scholars that use only one or more of the Ashford et al. (1989) different sub-scales (e.g.,

Kinnunen, Mauno, Nätti & Happonen, 1999; Mauno, Leskinen, & Kinnunen, 2001; Sverke, Gallagher & Hellgren, 2000; Sverke & Hellgren, 2001). Still, many researchers prefer to rely on home-grown scales (e.g., Barling & Kelloway, 1996; Hellgren, Sverke & Isaksson, 1999; Roskies & Louis-Guerin, 1990; see also Sverke & Hellgren, 2002, for a review of the different measures used in the job insecurity literature).

Another distinction which can be made is the one between global job insecurity scales, developed to capture an overall concern about the future job in general, and multidimensional measures of job insecurity, designed to reflect threats against important job features such as deteriorated employment conditions and career opportunities in addition to threats of job loss (Ashford, et al. 1989; Greenhalgh & Rosenblatt, 1984; Hartley & Klandermans, 1986; Hellgren et al. 1999; Roskies & Louis-Guerin, 1990).

From this brief review it can be concluded that job insecurity is often measured in an ad hoc manner. Despite this, however, most operationalizations of the construct reflect a general feeling of fear or worry about the future existence of the present job, or the perceived likelihood of job loss in the foreseeable future.

Construct validity

Construct validity refers to the correspondence between a theoretical concept and its operationalized measurement and thereby gives an estimate of the similarities between theoretical and empirical levels of the phenomenon in question (Bagozzi, 1978; Cook & Campbell, 1979). Several methods have been suggested in order to assess the construct validity of a certain measurement scale (e.g., Angoff, 1988; Bagozzi, Yi, & Phillips, 1991; Cook & Campbell, 1979; Campell & Fiske, 1959; Cronbach & Meehl, 1955; Messick, 1975; Standards for Educational and Psychological Testing, 1985).

Any measure of a given construct can be viewed as just one of an infinite set of potential indicators of the construct (Cronbach & Meehl, 1955). Convergent empirical results, which demonstrate the communality of such measures, can be interpreted as support for the construct and rule out plausible alternative hypotheses (Messick, 1995). When a given measure is derived from theoretically based assumptions, it is possible to test the fit of the hypothesized factor structure by using theory-based confirmatory approaches (Bollen, 1989; Nunnally, 1978). Therefore we will test whether the job insecurity scale reflects a single dimension in all participating countries. Moreover, we also make the conservative expectation that the measurement properties of the scale are stable across contexts, which would indicate that the measure captures job insecurity in exactly the same way irrespective of cultural context (cf. Mulaik, 1988).

Therefore we postulate that the factor model parameters are the same in all four samples.

Hypothesis 1. (a) All five job insecurity items measure one dimension of job insecurity in all countries, and (b) the measurement model parameters are invariant across countries.

Another key aspect is the issue of internal structure of the items intended to capture a postulated construct (Cronbach & Meehl, 1955). The question of adequate internal consistency is vital for the assessment of validity since less reliable measures inflate the empirical results and thereby make the relationships under study spurious (Campbell & Fiske, 1959; Sjöberg & Sverke, 2001). To evaluate the internal consistency of the proposed job insecurity measure we computed Cronbach's α (Cronbach, 1951).

Hypothesis 2. The measure of job insecurity demonstrates adequate reliability estimates in all four countries.

Job insecurity can be regarded as a classic work stressor (Barling & Kelloway, 1996; Mauno et al., 2001) and has been found to relate to mental health complaints (e.g., Barling & Kelloway, 1996; Hartley et al, 1991; Hellgren et al, 1999; Jick, 1985). This implies that a measure of job insecurity should predict mental health complaints in order to establish the predictive or concurrent validity of the scale (cf. Anastasi & Urbina, 1997; Carmines & Zeller, 1979). Even if the effect sizes have varied across studies – from weak or moderate positive relationships in some studies to strong positive associations in other studies, – meta-analysis results indicate that the population effect size of job insecurity on mental health complaints is at a medium level (.24; Sverke et al., 2002). However, similar effect sizes across countries would support the assumption that the job insecurity measure behaves in a similar manner across settings. Therefore, the effect size of job insecurity on mental health complaints is expected to be equal across countries.

Moreover, it should be possible to empirically differentiate a given construct from any other construct that may be similar (Bollen, 1989; Messick, 1995). Therefore, the job insecurity measure is postulated to be distinct from other commonly examined correlates of mental health complaints such as job dissatisfaction, in order to demonstrate discriminant validity. Not only should the measures be empirically distinct in factor analysis, but the predictive effects of job insecurity and job dissatisfaction should also be different.

Hypothesis 3. (a) The job insecurity measure is positively related to mental health complaints; (b) the effect sizes are equal across countries, and in addition; (c) the job insecurity measure exhibits discriminant validity from a measure of job dissatisfaction.

Method

Subjects and procedure

The samples used in this study were collected among employees in four European countries: Belgium, Italy, the Netherlands, and Sweden (see Sverke et al. 2001, for details about the samples and data collection procedures in each country).

Belgium. Data were collected by a postal survey during November-December 1998. In total 3,003 questionnaires were sent to a representative sample of companies in Belgium. The company personnel managers distributed the questionnaires randomly among all employees in the company. In total 1,120 usable questionnaires were returned (37.3%). The mean age of the respondents was 37 years (SD =9) and the average company tenure was 14 years (SD=10) with the majority of the respondents being male (65.3%).

Italy. The Italian data were collected from May to July 2000. A total of 865 questionnaires were distributed to the respondents' workplaces and 476 usable questionnaires were returned for a response rate of 55%. The respondents' mean age was 39 years (SD=9) and the company tenure was, on average, 13 years (SD=10). The majority of the respondents were male (68%).

The Netherlands. In the Netherlands, data were collected through telephone interviews conducted during the summer of 1999. A total of 799 of the 1,590 in the original sample completed the survey for a response rate of 50%. The mean age of the respondents was 48 years (SD=13), and 75% of the respondents were men. Company tenure was not assessed for this sample.

Sweden. Data were collected from a national sample of blue-collar workers in spring 2000. A total of 2,564 questionnaires were sent to the participants' home addresses, and 1,923 usable questionnaires were returned for a response rate of 75%. The average age of the respondents was 45 years (SD=11). Their average length of service in the organization was 14 years (SD=8), and 78% of the sample was female.

After list-wise deletion for internal attrition in the study variables, the analysis are based on 1,038 individuals in Belgium, 428 in Italy, 698 in the Netherlands, and 1,731 in the Swedish sample.

Measures

Job insecurity was measured with five items reflecting employees' overall concern about the continuity of the present employment. The scale has been developed within the European project "European unions in the wake of flexible

production” (Sverke et al. 2001) and is based on items developed by Ashford et al. (1989), Hellgren et al. (1999), and De Witte (2000). All responses on the job insecurity items were assessed using a 5-point Likert scale anchored by 1 (strongly disagree) and 5 (strongly agree).

Job dissatisfaction was tapped with a three-item scale designed to capture employees’ overall satisfaction with the job situation. The scale, scored on a 5-point Likert scale, was based on Brayfield and Rothe (1951) and slightly modified by Hellgren, Sjöberg and Sverke (1997). The Cronbachs alpha reliability estimate showed satisfactory internal consistency in all four samples, with alpha levels ranging from .82 to .96.

Mental health complaints were assessed using the 12-item version of the General Health Questionnaire (GHQ; Goldberg; 1979). Participants indicated their mental health complaints using a 1 (never) to 4 (always) response format. The internal consistency was satisfactory in all samples as reflected in a range of Cronbach’s alpha from .74 to .84.

Methods of analysis

The postulated one-factor solution of the job insecurity scale (hypothesis 1) in the four samples was empirically tested using the multi-group confirmatory factor analysis procedure (maximum likelihood estimation) of Lisrel 8 (Jöreskog & Sörbom, 1993). In order to test for factor invariance we first constrained the model to have equal factor variances across sample. In the next step the restriction of invariant factor loadings were added to the model. Finally, the factor variance, the factor loadings, and the error variances were constrained to be invariant over samples. In addition to the chi-square test for assessing model fit we also relied on Browne and Cudeck’s (1993) root-mean square error of approximation (RMSEA). This fit indicator is, in contrast to the chi-square test, sensitive to degrees of freedom of a model, and gives an indication of close rather than exact fit of the model to the population covariance matrix. Browne and Cudeck argue that RMSEA values of .08 or less indicate a reasonable fit of model to data. For descriptive purposes we also present the standardized root mean square residual (SRMR; Jöreskog & Sörbom, 1986). Differences between nested models were evaluated using the chi-square difference test and the Akaike measure (AIC; Akaike, 1987), for which lower values indicate a better fit of model to data.

Hypothesis 2, which referred to the internal consistency of the job insecurity measure, was investigated by computing Cronbach α (Cronbach, 1951). It has been argued (Carmines & Zeller, 1979) that “reliabilities should not be below .80 for widely used scales” (p. 51). However, Nunnally (1978; p.245) suggested that a level of .70 is adequate in early stages of research and tests of hypothesized

measures of a construct. Since this is a validation of a fairly new measure of job insecurity we use the criterion of .70 for establishing sufficient reliability.

To test the third hypothesis – that job insecurity is positively related to mental health complaints and that the magnitude of the relationship is equal in all samples and, finally, that job insecurity is distinct from a measure of job dissatisfaction – we relied on confirmatory factor analysis and latent regression models. First, however, we computed a two-factor confirmative factor analysis in order to establish that job insecurity and job dissatisfaction represent two different constructs in all samples. In the regression model we tested for equality of effect sizes across countries as well as between predictors (job insecurity and job dissatisfaction).

In the regression analyses, the 12-item measure of mental health complaints was collapsed into three indicators in order to reduce the number of manifest variables. First, we computed a confirmatory factor analysis and specified one factor based on all twelve items comprising the scale. Thereafter, the item with the highest and lowest factor loadings were assigned to the first indicator, the item with the second highest and second lowest factor loadings to the second indicator, and finally, the third highest and the third lowest was assigned to the third indicator. This procedure continued until all items were assigned to one of the three indicators (for further details about the procedure, see Brooke, Russell & Price, 1988).

Results

Standardized factor loadings for the five job insecurity items in the respective countries are displayed in Table 1. All factor loadings were significant ($p < .05$). The magnitude of the factor loadings ranged from .72 to .86 (Belgium), from .43 to .81 (Italy), from .67 to .90 (the Netherlands), and from .52 to .92 (Sweden).

Fit statistics for the different steps in the confirmatory factor analysis are presented in Table 2. Although the chi-square test was significant for all models, the additional fit indices indicate that the uni-factor model with freely estimated parameters (Model 1) fitted the data best. The RMSEA value indicate a reasonable error of approximation (RMSEA = .07), and also the other fit indices show reasonable estimations (SRMR = .02, AIC = 209.67). However, the model fit decreased substantially for Model 2 (equal factor variances) and Model 3 (equal factor variances and loadings) – and dramatically for Model 4 (with all measurement model parameters constrained to be equal). These results thus provide support for Hypothesis 1a in that the five items capture one dimension of job insecurity in all samples, but not for Hypothesis 1b which postulated invariant measurement parameters across countries.

Table 1. Freely estimated factor loadings (standardized) for job insecurity items in all countries and factor variances (unstandardized)

Item	Belgium	Italy	The Netherlands	Sweden
I am afraid I will get fired	.79	.67	.90	.85
I worry about keeping my job	.84	.43	.84	.90
I fear I will loose my job	.86	.81	.89	.92
I think I might get fired in the near future	.77	.65	.84	.73
I am sure I can keep my job	.72	.57	.67	.52
(R)				
Factor variance	.88	.69	.56	1.21

All factor loadings significant at .05 level.

Table 2. Test for equality of factor structure of the job insecurity measure across countries.

Factor model	df	χ^2	Δ df	$\Delta \chi^2$	RMSEA	SRMR	AIC
1. Null model	40	15605.57	-	-	.62	.52	15645.57
2. Freely estimated	20	129.67	20	15475.9	.07	.02	209.67
3. Eq factor variance	23	218.90	3	89.23	.09	.12	292.90
4. Eq factor variance and loadings	35	335.18	12	116.28	.09	.16	385.18
5. Eq factor variance, loadings and errors	50	2244.05	15	1908.87	.21	.18	2264.05

All chi-square values significant at .05 level. Dashes indicate not applicable.

Table 3 shows Cronbach alpha reliability estimates for the job insecurity measure in each country. Estimates of internal consistency reliability exceeded the .70 criterion in all four countries (and exceeded .80 in three countries). These satisfactory reliability estimates support Hypothesis 2.

Table 3. Chronbach alpha reliability estimates for the job insecurity measure.

Country	Alpha
Belgium	.90
Italy	.76
The Netherlands	.91
Sweden	.89

Prior to testing Hypothesis 3 (discriminant validity of job insecurity from job dissatisfaction) we subjected the two measures to confirmatory factor analysis to examine if they were empirically distinct. The results of the confirmatory factor analyses reveal that the two-factor model provided a better fit to data than the one-factor solution. The one-factor model generated a bad fit of the model to data ($\chi^2=3665.70$ [df=80]; RMSEA = .21; SRMR = .16; AIC = 3793.70) in comparison with the two-factor solution ($\chi^2=590.39$ [df=76]; RMSEA = .08; SRMR = .08; AIC = 726.39). The chi-square difference between the two models represented a significant improvement of model fit for the two-factor solution ($\Delta \chi^2=3075.31$, $p<.05$).

Table 4 presents the results pertaining to Hypothesis 3a, b, and c. Job insecurity was positively related to mental health complaints in all countries except the Netherlands (for Belgium, $\beta= .11$, $p<.05$; Italy, $\beta=.18$, $p<.05$; the Netherlands, $\beta= .07$, $p>.05$; Sweden, $\beta= .18$, $p<.05$). These results provide partial support for Hypothesis 3a that job insecurity is related to mental health complaints in that the relations was significant in three of the four countries. However, the chi-square test for equality of effect sizes across counties was significant and, consequently, Hypothesis 3b is not supported. Finally, the chi-square test for differences in effects sizes between job insecurity and job dissatisfaction on mental health complaints was significant in all countries. This result gives support for Hypothesis 3c, that job insecurity and job dissatisfaction are two distinct constructs with different effects on mental health complaints. In addition, the results also show that job insecurity and job dissatisfaction together accounted for a significant proportion of variance in mental health complaints, with squared multiple correlations ranging from .20 to .35.

Table 4. Latent regression effects of job insecurity and job dissatisfaction on mental health complaints (standardized maximum likelihood effects).

Predictor	Belgium	Italy	The Netherlands	Sweden	χ^2 (df = 3) ^a
Job insecurity	.11*	.18*	.07	.18*	12.48*
Job dissatisfaction	.47*	.51*	.43*	.40*	
SMC	.26*	.35*	.20*	.20*	
$(\chi^2$ (df = 1)) ^b	39.61*	7.44*	26.57*	49.39*	

*p<.05.

^aTest for equality of effect sizes across countries.

^bTest for equality of effect sizes job insecurity/ job dissatisfaction within country.

Discussion

Job insecurity has emerged as an important stressor in modern working life (De Witte, 1999; Sverke & Hellgren, 2002; Sverke et al., 2002). Despite this, there are surprisingly few studies that have developed and evaluated measures of the phenomenon – in comparison with other frequently examined stressors and correlates of employee health (e.g., role characteristics, leadership, and job and organizational attitudes). The purpose of this study was to validate a five-item job insecurity measure by using samples from four European countries. The measure was validated using confirmatory factor analysis and latent regression models.

The factor structure of the measure provided supportive evidence for one underlying dimension of job insecurity in all samples. All items loaded significantly on the factor, and the model with freely estimated parameters provided an acceptable fit to data. However, when the factor variances were constrained to be equal in all samples the fit of the model deteriorated substantially. The same pattern of impaired model fit also emerged when the factor loadings and the error terms were specified to be of equal magnitude over samples. Postulating that factor variance, loadings and error terms should be of equal magnitude is a conservative test, and it may be very difficult to obtain a reasonable model fit in multi-sample analysis including many countries. Hence, although our findings were not supportive of absolute similarity of the measurement model parameters across samples, the results indicate that the measure assesses a single dimension in all countries.

Further, the internal consistency reliability estimates for the different samples were of satisfactory standards in all participating countries. Although the alpha level of the Italian sample did not exceed .80, the obtained reliability estimates

were all above .70, which is good for scales under development (Nunnally, 1978). This implies that the job insecurity scale can be used to reliably assess the same phenomenon in different countries.

Previous research has found job insecurity to correlate with health complaints, and especially mental health complaints (for an overview, see Burchell, 1994; De Witte, 1999; Hartley et al., 1991; Sverke et al., 2002). Given these empirical findings, a new measure of job insecurity should be able to predict mental health complaints in order to be a valid representation of the construct. The results revealed that job insecurity predicted mental health complaints in three of the participating countries (Belgium, Italy, and Sweden) but failed to reach significance in the Netherlands. Although most studies have reported a significant relationship between job insecurity and mental health complaints, some studies have not uncovered a significant relationship between the variables (e.g., Fox & Chancey, 1998; Landsbergis, 1988). Obviously, a large amount of factors may influence the postulated relationship between job insecurity and mental health complaints (e.g., labor market characteristics, employability, individual characteristics, family responsibility, age, gender) and thereby account for a non-relationship in some contexts (Sverke & Hellgren, 2001; see also Zapf, Dormann & Frese, 1996, for a review). This, however, does not necessarily imply that the measures used are invalid or lack predictive validity. The fact that job insecurity did predict mental health complaints in three of the four samples give some support for reasonable measurement properties of the job insecurity scale.

The above reasoning could also to some degree explain the lack of correspondence between the effect sizes since data originate from different samples and different countries with their own specific contextual characteristics. These country specificities may also have an influence on the magnitude of relationship between stressor and strain. A plausible explanation is that the dependent variable, subjective mental health complaints, are under influence of contextual, and specifically, cultural variables (Diener, Suh, Lucas & Smith, 1999). Aspects that have been found to systematically influence individuals' subjective well-being are, for example, individualism-collectivism (Triandis, 1989) and independent-interdependent concept of the self (Markus & Kitayama, 1991). Given this, it may be hard, or even impossible, to establish equal relationships between stressors and outcomes in cross-cultural research.

The results also show that the effect sizes for job insecurity and job dissatisfaction differed across countries, implying that job insecurity evidence discriminant validity from other variables reflecting negative perceptions. However, more empirical research is needed in order to validate job insecurity against other frequently examined stressors (e.g., role stressors). We also stress the importance of further test of the predictive validity of the job insecurity

measure by investigating how it relates to other types of strain (e.g., physical health complaints, job attitudes, organizational attitudes, and employee behavior).

Although we did not find support for all hypotheses postulated in this study, we believe the job insecurity measure under scrutiny can be used to reliably and validly assess job insecurity in a variety of settings. Moreover, the fact that the results were fairly similar across the four countries indicates that the job insecurity measure behaves in similar ways in all countries. Even if construct validity is a continual process – which can never be proven (Cronbach & Meehl, 1955) – our study suggests that the job insecurity measure validated in this study can be used to capture job insecurity and to assess how this stressor relates to its postulated consequences. A commonly agreed-on measure of job insecurity would also give possibilities to better compare results between different studies.

Still, some limitations of the study need to be addressed. First, all the samples were of cross-sectional nature, thereby limiting the conclusions of predictive validity. Second, all study variables were measured through self reports which opens the possibility that mono-method bias may have influenced the results (Campbell & Fiske, 1959). Clearly, even if our results to a large extent correspond with theoretical predictions, longitudinal studies using various operationalizations of outcomes are needed to investigate the stability of measurement properties over time as well as over context, and to examine the prospective effects of job insecurity. However, the results in this study are in line with results obtained in meta-analysis, with effect sizes similar to the population effects sizes between job insecurity and mental health complaints (see Sverke et al., 2002).

Despite the limitations, we believe that this validation study takes a step in the direction of developing valid measurement scales in order to adequately investigate the relations between job insecurity and its postulated outcomes. Given that job insecurity is a phenomenon that will characterize working life also in the future, research developing and validating theoretically based job insecurity scales are important for research to arrive at more agreed-on measures with known psychometric properties (Sverke et al., 2002). Hopefully, the present study can be beneficial in future research efforts capturing the effects of job insecurity in a gradually more flexible labor market.

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Who feels job insecurity? What characterizes insecure workers in Europe?

Katharina Näswall

Hans DeWitte

Antonio Chirumbolo

Sjoerd Goslinga

Johnny Hellgren

Magnus Sverke

Introduction

Along with the intensified global competition, employment has become more unstable and less secure. Increased demands for flexible organizations, with less expenses and higher gains lead to the use of downsizing and temporary contracts to ensure competitiveness. Organizations have had to decrease the size of their workforce, or conduct large reorganizations, in order to stay on the market (Kozlowski, Chao, Smith & Hedlund, 1993). This decreases the predictability for the employees. They can no longer expect to remain in the organization as long as they would prefer. The result of this is insecure employment and feelings of job insecurity among the employees (Hartley, Jacobson, Klandermans & van Vuuren, 1991). Job insecurity has been an increasing concern for researchers during the last decades, as it may have detrimental consequences for both the individual and the organization (Ashford, Lee & Bobko, 1989; Hartley et al., 1991; Hellgren, Sverke & Isaksson, 1999).

This study aims at expanding the previous understanding of job insecurity by investigating whether background variables can help us predict who will experience high levels of job insecurity. Few studies have concentrated on this issue (one exception is van Vuuren, Klandermans, Jacobson, & Hartley, 1991). Even if many studies include relationships between job insecurity and one or two demographic variables in the descriptive part of their study, the focus in these studies is almost always on some other research question. This is a pity since the knowledge of possible predictors of job insecurity has the potential to help us alleviate the negative consequences for those who are hardest hit by job insecurity. To identify how negative consequences can be lessened is important not only from a theoretical point of view, but also for the practical consequences that job insecurity has been documented to have. By identifying groups that are more vulnerable to job insecurity, it may be possible to at least partly prevent the strong insecure feeling in the future.

In this study, background variables such as age, gender, family situation, work status, employment status, and union membership will be used to predict level of insecurity. Data from four different European countries are used, in order to widen the picture of who is more likely to experience heightened levels of job insecurity in Europe. The use of data from four different countries provides us with the opportunity to investigate how findings generalize across countries. We do not attempt to explain differences between countries in this; rather, the aim is to broaden our understanding of what factors influence the level of job insecurity experienced.

Job insecurity

Job insecurity can be defined as the worry a person feels about the future of her or his employment situation (Davy, Kinicki & Sheck, 1997). It has also been defined as the sense of threat to the continuation of his or her employment an employee feels (Heaney, Israel & House, 1994). The feeling of job insecurity is a subjective experience, differing among employees in the same objective work situation (Greenhalgh & Rosenblatt, 1984; Hartley et al., 1991; Sverke & Hellgren, in press). It is also important to note that job insecurity is defined as the experience of a threat of *involuntary* job loss (Greenhalgh & Rosenblatt, 1984); a person who does not particularly care about the job loss will, by this definition, not experience job insecurity, nor suffer its consequences.

The experience of job insecurity has been linked to several different negative outcomes. The mere anticipation of the possible occurrence of a stressful event may become a stressor (Lazarus & Folkman, 1984). A situation becomes stressful (a stressor) when the individual perceives that handling the situation would demand more resources than she feels she has available (Jacobson, 1991; Lazarus & Folkman, 1984). Job insecurity has been described as such a stressor, where the individual feels that she does not possess the necessary abilities or powers to make sure that her job is not terminated against her wishes. The tension caused by job insecurity may induce the feeling of stress (Klandermans, van Vuuren & Jacobson, 1991).

A stressor, in this case job insecurity, may affect the individual negatively because she will react to it and try to deal with it. However, the usual coping techniques may be difficult to employ, since the individual does not know for sure what is to come. Lazarus and Folkman (1984) point out that the uncertainty of the situation leaves the individual considering different possibilities, and trying to reconcile with them, without knowing which one will become reality. The confusion about the occurrence of an event will, according to Lazarus and Folkman, lead to heightened anxiety and a decrease in well-being and other negative outcomes. Because of this, job insecurity is expected to negatively

affect the individual in that it prompts the individual to try responding to it without knowing exactly what will happen (Jacobson, 1991).

Prolonged stress, i.e. a lingering feeling of job insecurity, is expected to have negative effects on well-being, both physical and mental, something which has been both theoretically suggested and empirically shown in previous research (Ashford et al., 1989; Hartley et al., 1991; Sverke & Hellgren, in press; Heaney, Israel & House, 1994; Hellgren et al., 1999). Studies have repeatedly shown that job insecurity also is related to deteriorating work related attitudes such as job satisfaction (e.g., Arnold & Feldman, 1982; Davy et al., 1997), as well as commitment to the organization and job involvement, which also decreases as job insecurity is more frequent (e.g., Arnold & Feldman, 1982; Ashford et al., 1989; Kuhnert & Vance, 1992). The organizations should also be concerned about decreases in the intention to stay with the organization, which has been shown to be lower when job insecurity is high (Brockner, 1988; Dekker & Shaufeli, 1995). These negative consequences may lead to loss of core employees, as those who have the possibility leave the company for employment that is less uncertain. Also, if the company has a reputation of being an uncertain workplace there may be difficulties recruiting new employees (Greenhalgh, 1991).

Individual differences

Given that the phenomenon of job insecurity is a subjective experience, two employees in the same objective situation may experience different levels of job insecurity, since they may have different perceptions or interpretations of the same situation (Jacobson, 1991). People who differ in their experience of job insecurity may differ in how severe they experience the threat to be, i.e., how likely they feel it is that they will lose their job. Those who feel more insecure probably feel the threat to be stronger, than those reporting lower levels of job insecurity. This may be related to the perception of control the individual perceives herself to have over the situation (Barling & Kelloway, 1996). Those who perceive that they have more control, or trust their own ability to counteract the threat (Ganster & Murphy, 2000; Lazarus & Folkman, 1984), will not feel the threat to be as severe. Another factor which influences the experienced level of threat, according to this reasoning, is the perceived severity associated with the realization of the threat (i.e. job loss). Those who perceive it to be a very serious event to lose their job will feel more vulnerable towards that event, and experience more insecurity (Jacobson, 1991). This may be traced to differences in the individual's perceptions of their own vulnerability (Lazarus & Folkman, 1984). Some individuals perceive themselves to be more vulnerable in the sense that they are not confident they possess those resources that are necessary to deal with the consequences.

These explanations of job insecurity, where the level experienced depends on the individual's perception of vulnerability and own resources to work against the threat, raises the question whether there are differences in the level of job insecurity experienced between demographic groups. Different groups may not necessarily have the same perceptions of resources available to them (Frese, 1985), which results in different levels of job insecurity. To further raise our curiosity, there is also evidence of differing reactions to job insecurity. A meta-analysis has shown that the strength of the relation between job insecurity and its outcomes differs, sometimes a lot, between demographic groups (Näswall, Sverke & Hellgren, 2001). We will now turn to a closer look at a few common demographic variables that may give rise to different levels of vulnerability and, thus, job insecurity.

Two of the most common demographic variables collected in research are age and gender. In a study by Mohr (2000) a strong positive correlation was found between the level of insecurity reported and age, implying that those older experience higher levels of job insecurity. Hartley et al. (1991) have also found that older employees experienced more job insecurity than younger workers. We hypothesize that older employees will feel more job insecurity than those who are younger.

A recent study (Näswall et al., 2001) has shown that men exhibit a stronger relation between the stress of insecure employment and its negative outcomes than women. This may be attributable to the traditional role of men as family supporters, financially, and because of this men will feel more strain when facing the threat of losing their job (Warr, 1987). This may be a sign of higher levels of job insecurity among men, something which has been empirically demonstrated by Kinnunen, Mauno, Nätti, and Happonen (1999). This higher level of job insecurity can be seen among women as well, when they are the only person bringing in an income in the family (DeWitte, 1999). Hence it is our hypothesis that men will experience higher levels of job insecurity than women, respectively.

However, employees with a partner may be expected to be less dependent on their income, since their partner may be able to provide for them in the event of job loss. It has been suggested that those living with someone may also benefit from the social support provided by their family, or partner, which buffers against the experience of job insecurity (Lim, 1996). Thus the family situation of the employees will affect how much job insecurity the employee experiences. One indicator whether someone is relying on the person's income is whether the employee has children living at home. We hypothesize that those with family responsibility, operationalized as those with children at home, will feel a threat of loss of the job more acutely, and experience higher levels of job insecurity. We

also hypothesize that those with a partner, will exhibit less job insecurity than those reporting not to have a partner.

Social status is expected to affect the level of job insecurity experienced. This variable is analogous to the type of work that the persons have, such as blue-collar worker, white-collar employee, professional, or manager. It has been suggested that blue collar workers may be more dependent on their income than white collar workers and managers (Frese 1985; Gallie, White, Cheng & Tomlinson, 1998; Kinnunen et al., 1999), and based on this it is reasonable to assume that blue collar workers have higher levels of job insecurity than the other categories of employees. Related to social status is the educational level of the employees. It has been suggested that since non-manual workers usually have a higher educational level, they will not be as vulnerable to job loss as those with lower levels of education (Schaufeli, 1992). The educational level of employees is important since it may affect how many choices they have on the labor market. It seems reasonable to expect that those with less education, and only the lower levels completed, will lack skills and knowledge required for many choices to be available, and therefore be more vulnerable to the experience of job insecurity. Along the lines of this, Hartley et al. (1991) found in one of the studies they report that those with higher levels of education completed experienced less job insecurity. Our hypotheses following on this reasoning is that blue collar workers, and employees with less education, will experience more job insecurity than white collar workers, or those with more education, respectively.

We now turn to a look at work related background variables, such as the hours employees work, and if they are permanently employed or not. Those employees who work part-time may not feel that they are a part of the organization, that they are not treated as traditional core workers, to the same extent that those working full-time are, since the part-time type of contract may be used in order to even out work schedules (Barling & Gallagher, 1996; Sverke, Gallagher & Hellgren, 2000). This may cause the part-time workers to feel more insecure regarding the permanence of their employment, especially during turbulent times, if they worry that the organization will prioritize their “real” core workers in a downsizing situation. Along the lines of this, Still (1983) found part-time workers to be less satisfied with their job security than full-time workers. Levanoni and Sales (1990) also found that Canadian part-time employees were less satisfied with their employment security than those working full-time. Hence, we hypothesize, that those working part-time will experience more job insecurity than those holding full-time contracts.

Another important aspect of the employment contract is whether there is a time limit set to it. Researchers usually define a contingent worker as someone who lacks a permanent contract, regardless of the subjective perceptions of insecurity (Barker & Christensen, 1998). In this study we have counted as

contingent workers those who hold contracts with a time limit. We recognize that there are several different types of contingent workers (i. e. temporary firm workers, consultants, in-house temporaries, independent contractors, etc) who may differ in their perceptions of the situations (McLean Parks, Kidder & Gallagher, 1998). However, the definitions imply that the contingent workers are not as strongly attached to the organization, and that they probably are more at risk during a downsizing situation. Contingent workers have exhibited higher levels of job insecurity compared to permanent employees (Sverke et al., 2000). It is hypothesized that, in agreement with theory those holding a contingent contracts will exhibit higher levels of job insecurity than permanent workers.

There has been some research evidence that the experience of social support will lessen the experience of job insecurity (Armstrong-Stassen, 1993), and lessen its negative impact on well-being and work attitudes as well (Lim, 1996). Some aspects of social support may be provided by the union (Armstrong-Stassen, 1993; Dekker & Schaufeli, 1995). Those involved with the union are more likely to benefit from the positive support that the union can provide, given that the employees trust the union to stand up for them during hard times. Trade unions can help alleviate the feeling of powerlessness, since they are supposed to speak for the employee (Hartley, et al., 1991; Sverke & Hellgren, 2001). When the employee feels she can trust the union, she may feel less job insecurity. Based on this we hypothesize that union members in this study will have lower levels of job insecurity than non-members.

Method

Data collection

The present paper is part of a study with a wider scope, focusing on the role of the union in the new flexible labor market (Sverke et al., 2001). The data used in this study came from separate data collections, resulting in similar data, in four European countries: Belgium, Italy, the Netherlands, and Sweden.

The Belgian data was collected as a postal survey during the period November-December of 1998, and the questionnaire was distributed in both the Flemish and French parts of Belgium in a variety of organizations. A total of 3,003 questionnaires were sent out to the companies, and 1,120 usable questionnaires were returned for an approximate response rate of 37%. The mean age of the respondents was 37 years, ranging between 18 and 62 years. The majority of the respondents were men (65%).

The data from Italy was collected after the project had started, thus the questionnaire could be more specifically tailored to suit the needs of the project. The collection took place in May and June of 2000, and a total of 476 workers participated, for an approximate response rate of 55%. The majority of

respondents were men (68%), and their age ranged from 19 to 64 years, with a mean of 39 years.

For the Netherlands we used data collected within a longitudinal panel-survey among members of the largest trade unions affiliated with the National Christian Trade Union Federation, the CNV. The questionnaire we used was from wave 13 in the survey, collected in the summer of 1999. The response rate for this wave was 50% (N=799), based on the 1,590 members from the original sample. The members that cooperated consisted of 598 men (75%). The mean age of the sample was 48 years, ranging between 16 and 85 years.

The Swedish data was collected from the total staff of two emergency hospitals during organizational restructuring in the spring of 1998. Questionnaires were mailed to the home addresses of all 2,455 employees, followed by two reminder mailings. A total of 1,501 usable questionnaires were returned to the research team, for a response rate of 61%. The mean age of the respondents was 43 years ranging from 18 to 68 years. The majority (83 %) of the respondents were women.

Measures

Data were collected on demographics, i.e., age, gender social status, education, and family situation (partner and children), and on work related background variables, i.e., type of contract (part or full time, permanent or temporary) and union membership status. The fact that most data collections took place before the project was initiated will explain why some variables are not present in all datasets. Data has been recoded so that the response categories are comparable. Table 1 provides an overview of the measures used, and the scoring of these measures. Job insecurity was measured with a five-item scale, based on Ashford et al. (1989) and DeWitte (1999). Reliabilities (Cronbach's alpha) for the scale in the four countries range from 0.77 to 0.92, which is satisfactory.

Table 1. List of measures used in the studies

Variable	Measurement	Belgium	Italy	The Netherlands	Sweden
Job insecurity		2.27 (0.89)	2.61 (0.86)	1.85 (0.7)	1.79 (1.02)
Age	Age at time of data collection	36.9 (9.4)	38.8 (9.1)	47.5 (13.2)	42.7 (10.5)
Gender	Men=0, Women=1	34.7	32.5	25.2	82.7
Social status	White collar/professional =1, Blue collar=1	36.6	29.3	46.9	32.9
Education	University or higher=0, High school or lower=1	63.1	30.5	91.1	-
Partner	Single=0, Partner =1	-	65.1	84.2	71.2
Children at home	No children=0, Children =1	-	57.3	55.3	35.3
Part-time	Full time=0, Part time employment=1	9.4	6.6	20.3	39.7
Contingent work	Permanent=0, Temporary=1	6.0	10.9	10.5	17.5
Union membership	Non-member=0, Member = 1	48.7	37.2	0	7.7

- Not present in data set

Results

Associations

Correlations between the study variables are presented in Table 2 (Belgium and Italy) and Table 3 (the Netherlands and Sweden).

Table 2. Correlations between variables for Belgium and Italy

	1	2	3	4	5	6	7	8	9	10
1. Job insecurity		.06*	.13*	.06*	-.13*	-	-	.01	.11*	.18*
2. Age	.07		-.11*	-.02	-.10*	-	-	.01	-.14*	-.02
3. Gender (women)	.02	-.06		-.26*	-.03*	-	-	.36*	.07*	-.08*
4. Social status (blue-collar)	.10*	-.04	-.25		.50	-	-	-.17	-.08	.47*
5. Education (low)	.08	.15*	-.13*	.38**		-	-	.01	.00	.29*
6. Partner	-.02	.45*	-.13*	.03	.11		-	-	-	-
7. Children at home	-.04	.02	-.06	-.06	.00	.39*		-	-	-
8. Part time work	.14*	-.05	.19*	.04	.04	-.15*	-.02		.05	-.11*
9. Contingent work	.11*	-.19*	-.06	.01	.05	-.18*	-.12*	.26*		-.02
10. Union membership	.04	.29*	-.02	.22*	.19*	.17*	.04	.02	-.14*	

Note: Pairwise correlations for Belgium are presented above the diagonal and for Italy below the diagonal

* Correlation is significant at the 0.05 level (2-tailed).

- Not present in data set

The Belgian sample exhibited correlations that to a great extent confirmed the assumptions of the study. Job insecurity was significantly correlated with age, gender, status, education, contingent work, and union membership. In fact, the only variable not significantly related to job insecurity was part time work. Older workers and women, as well as blue-collar workers and especially those with lower education, exhibited higher levels of job insecurity. Those holding contingent contracts also reported more insecurity, than those permanently employed. The most curious result was that, contrary to our prediction, union membership was positively related to job insecurity, implying that union members experience higher levels of job insecurity than non-members.

The Italian sample exhibited a pattern of correlations quite different from Belgium. Among the few significant correlations, none contradicted expectations. The surprising result was that most expectations received no support. Two variables correlated significantly with job insecurity - part-time work and contingent work. This was predicted by theory, according to which part time and contingent workers will be more susceptible to the experience of job insecurity.

Table 3. Correlations between variables for the Netherlands and Sweden.

	1	2	3	4	5	6	7	8	9	10
1. Job insecurity		-.02	.00	-.14*	.03	-.09*	-.01	.00	.24*	-
2. Age	-.09*		-.17*	.18*	-.09*	.08*	-.68*	.06	-.28*	-
3. Gender (women)	-.02	.05		.09	.01	-.23*	.01	.51*	.04	-
4. Social status (blue-collar)	-.18*	.08*	.02		.06	.01	.06	.07	.10	-
5. Education (low)	-	-	-	-		.01	-.04	-.06	-.04	-
6. Partner	-.05*	.02	.02	-.03	-		.16*	-.02	-.22*	-
7. Children at home	-.01	-.33*	-.03	-.01	-	.28*		.02	.03	-
8. Part time work	.05	-.05	.13*	-.15*	-	.09*	.22*		.11*	-
9. Contingent work	.34*	-.34*	-.06*	.03	-	-.11*	.00	.07*		-
10. Union membership	-.06*	.16*	.09*	-.35	-	.09*	.04	-.07*	-.24*	

Note: Pairwise correlations for the Netherlands are presented above the diagonal and for Sweden below the diagonal

* Correlation is significant at the 0.05 level (2-tailed).

- Not present in data set

In the Netherlands, social status, education, partner, and contingent work had a significant correlation with job insecurity, consistent with expectations. The strongest correlation was found between contingent work and job insecurity. The presence of a partner was associated with lower levels of job insecurity.

In Sweden, job insecurity was significantly correlated with age, social status, contingent work, and union membership. The strongest relation of these was the one with contingent work, where job insecurity was experienced to a greater extent among those with a contingent contract. In contrast to the other countries

there was a negative relation between age and job insecurity, indicating that younger employees experienced more insecurity than older.

Predictions

The correlational results can be taken as a preliminary, and partial, support for the study assumptions, and are presented to give a description of how the variables relate to each other in the different countries. In order to test the hypotheses in a multivariate framework, we went on to perform regression analyses on the same variables, with the background variables predicting job insecurity. The multiple regression analyses included all those demographics and work related background variables available in the different countries. Thus, we attempted to predict the level of job insecurity from age, gender, social status, level of education, partner, children at home, part time work, contingent work, and union membership. The results of the regression analyses are presented in Table 4.

Table 4. Results of multiple regression analysis (standardized coefficients).

Predictor	Belgium	Italy	The Netherlands	Sweden
Age	.09**	.12	.16	.05
Gender (female)	.16***	.04	.02	-.01
Social status (prof.)	-.01	.010	.14	.18***
Education (university)	.09*	.03	.05	-
Partner	-	-.04	-.05	-.02
Children at home	-	-.01	.09	.01
Part time work	-.04	.11	-.06	.00
Contingent work	.12***	.09	.26**	.35***
Union membership	.17***	.00	-	.25
R ²	.07***	.02	.04***	0.14***

p<0.05; ** p<0.01; *** p<0.001

- Not present in data set

In the Belgian sample job insecurity was predicted by age, gender, education, contingent work, and union membership. Age and gender had a positive relation, suggesting that older employees and women experience more job insecurity compared to younger employees and men. Education and job insecurity had a significant relationship, suggesting, in accordance with the hypothesis, that those with lower education experience more job insecurity. Supporting the hypotheses, contingent work predicted job insecurity significantly, which indicates that those

who work under contingent contracts are expected to experience more job insecurity. Contrary to hypothesis, union membership had a positive relation with job insecurity. Those who were members of the union in the Belgian sample experienced more job insecurity than non-members. Altogether the background variables accounted for 7 percent of the variance in job insecurity.

There were no significant predictors found in the Italian sample. No hypothesis received support. It seems that demographics have no significant influence on the level of job insecurity reported among the workers participating in this study. The predictors all taken together did not account for any significant amount of variance in job insecurity.

The Dutch data showed that job insecurity was predicted by contingent work. The positive relation suggests that, in line with the hypothesis, those with contingent contracts experience more job insecurity than those permanently employed. In total, the variables only accounted for a small amount (4%) of the variance in job insecurity.

In the Swedish sample job insecurity was predicted by social status and contingent work. The relation with social status indicates that those who experience higher levels of job insecurity tended to be blue-collar workers, which supports our hypothesis. Also in keeping with the hypotheses, contingent workers reported higher levels of job insecurity than those with permanent contract in the Swedish sample. IN total, the variables accounted for 14 percent of the variance in job insecurity in the Swedish sample, a slightly larger proportion than in the other data sets.

Discussion

Whereas previous research to a great extent has examined the relation between job insecurity and its postulated outcomes, the present study aimed at investigating to what extent job insecurity can be predicted by a set of background variables. We had one hypothesis for each of nine variables, namely, age, gender, social status, education level, partner, children at home, part time work, contingent work, and union membership. We will discuss the results by looking at each variable, to see what conclusions can be drawn based on the four countries. Although this is not a comparative study, we believe there is valuable insight to be gained from looking at how widespread a certain phenomenon is. The use of four European countries provides us with a wider understanding of how background variables can serve to increase the knowledge of factors influencing job insecurity.

The predictive power of age seemed to be low, since age only predicted job insecurity in the Belgian sample, where older employees reported higher levels of job insecurity. Based on this evidence it is difficult to definitely reject or

accept the hypothesis. The significant result found is in line with previous research (e.g., van Vuuren et al., 1991; Mohr, 2000) where older employees exhibit higher levels of job insecurity than younger employees. However, the present result can be taken as a suggestion that age is not a large factor in predicting job insecurity. One alternative to this explanation is that age does not have a linear relation with job insecurity. De Witte (1999) has argued that that employees in the middle age group, i.e. between 30 and 50 years of age, who are more likely to have children and family responsibilities, and thus will be more dependent on their income, will react with higher levels of job insecurity. In the present study, however, we did not test this non-linear relation, but suggest that future research take it into account.

As in the case of age, gender predicted job insecurity only in the Belgian sample. We hypothesized that men would report more job insecurity than women. This was based on results of a recent meta-analysis where men reacted more negatively to job insecurity (Näswall et al., 2001) and earlier research showing men to experience job insecurity to greater extent than women (Kinnunen et al., 1999). Our hypothesis was not confirmed, and in the Belgian sample women were the ones more vulnerable to job insecurity. However, since no other country exhibited opposing or confirming results, we cannot conclude that gender has much predictive power for experiences of job insecurity.

According to previous research and theory, those with lower education will have fewer alternatives on the labor market, and thus will experience more job insecurity during turbulent times (e.g., Gallie et al., 1998). Based on this we proposed that those with lower social status, as defined by work status (i.e., blue collar workers) would experience more job insecurity than those employees with higher status. This was confirmed only in the Swedish sample. Social status had a significant correlation with job insecurity in all samples but Italy, but failed to reach significance in Belgium and the Netherlands when other variables were taken into account in the regression analysis. The preliminary correlation results give indication that social status should not be discarded as a possible predictor of job insecurity.

We also hypothesized that the less education an employee has, the more job insecurity she will experience (cf. Schaufeli 1992; van Vuuren et al., 1991). Like in the case of status, the preliminary correlational results showed a connection between education level and job insecurity in more than one country, but in the final regression analysis the prediction was only apparent in one data set (Belgium). Still, there are signs that both social status and education has some connection with job insecurity, and we propose that future research takes these variables into account, both as predictors, but also as moderating variables in the relation between job insecurity and its outcomes.

We hypothesized that employees who had children living at home are more likely to experience more job insecurity than employees living on their own. We based this on theories suggesting that individuals with a responsibility to take care of others would worry more about keeping their job (Warr, 1987). There was no support for this, since job insecurity was not predicted by the background variables in any of the data sets. There was some indication in the correlational results (in the Dutch sample) that the presence of a partner would lessen the level of job insecurity experienced, which is along the lines of our hypothesis. This preliminary result needs to be investigated further, as it may be a sign of non-work related social support which, according to previous studies, will lessen the impact of job insecurity (Lim, 1996).

We tested two hypotheses regarding employment status. The first one postulated that individuals employed only on part-time contracts would experience more job insecurity than those working full-time (Levanoni & Sales, 1990). However, the regression analyses provided no support for this in any of the data sets. In the Italian data set, however, there was a significant positive bivariate relationship between part time work and job insecurity, which implies that part-time should not be discarded as a variable which possibly can help explain the variation in the level of job insecurity experienced. The second hypothesis suggested that those with contingent contracts would experience more job insecurity than those employed permanently (Sverke et al., 2000). This was supported in all data sets but the Italian. In Belgium, the Netherlands, and Sweden those employed under contingent contracts appeared to be more vulnerable to job insecurity. Based on the results of this study we are quite confident that contingent work is an important factor for the level of job insecurity experienced.

In terms of union membership we tested the hypothesis that those employees who are members of a union would experience job insecurity to a lesser degree than non-members. This was based on theories explaining the possible buffering effect of the support provided by the union (cf. Lim, 1996; Dekker & Schaufeli, 1995). The prediction could only be tested in three data sets, since the Dutch sample consisted only of union members. In none of the other three countries did our hypothesis receive support. On the contrary, results from the Belgian sample indicated that union members actually are more vulnerable than non-members.

Based on the results from this study it is hard to find support for the hypothesis. On the contrary, it is important to investigate whether the union may actually make its members more vulnerable to job insecurity, and whether union and non-union members differ in their reactions to job insecurity. There is some support for this last notion to be found in a study by Sverke and Hellgren (2001), where members report less negative reactions to job insecurity than non-members.

The significant positive correlation between union membership and job insecurity in the Belgian sample was unexpected. However, it is conceivable that those who are union members have been alerted to the possibility that they may lose their jobs. This may make them more vigilant, and thus lead them to experience a higher degree of job insecurity than those not looking for signs of imminent job loss. This “vigilance” explanation has been used in the context of psychological contract (Robinson & Morrison, 2000), but it may be useful to include job insecurity in this framework as well. An alternative explanation to the higher levels of job insecurity among union members (in Belgium) is that those who work in areas where their employment is less secure are more likely to join a trade union. Allvin and Sverke (2000) found that unionized workers tend to rate issues such as job security as one of the most important issues for the union to work for. This may be a consequence of the uncertainty in the occupations of the unionized workers.

Based on all the results of this study, it is difficult to draw a comprehensive conclusion on what variables actually predict the level of job insecurity. However, a few of the results are clearer than others. Contingent work and, to some extent, social status appear to predispose employees to job insecurity. With the negative effects that job insecurity has according to widespread documentation (e.g., Ashford et al., 1989; Hartley et al., 1991; Hellgren et al., 1999) it is vital to divert research energy on efforts to prevent the higher levels of job insecurity in those employees who are more vulnerable to the experience of job insecurity.

Most of the hypotheses put forth in the present study were not confirmed. There may be several explanations for this. One explanation can be found in previous research trying to predict job insecurity. Here it has been suggested that particular background variables can lead to increased vulnerability to job insecurity if the individual believes a certain characteristic will make her more likely to lose the job (van Vuuren, et al., 1991). Perhaps research will have trouble identifying a specific set of variables that have predictive power. Instead, it is possible that we must focus on how an individual perceives her own background characteristics to affect her vulnerability. This is reminiscent of the explanation of job insecurity as a subjective phenomenon (Jacobson, 1991). In order to understand the impact of the individual’s perception of her vulnerability in an uncertain situation, this aspect should be included in future research. This has to some extent been done by van Vuuren and her colleagues (1991), but more research in this vein is necessary. For example, in the present study we used the presence of a partner, and children living at home as an indication of social support and financial responsibility. Information on whether, and why, the employee feels vulnerable due to a certain characteristic would be useful to be included in data collections.

Another reason for the present results may be that we have not yet captured the appropriate predictor variables. Since the variables in this study to a very limited extent appeared to be able to predict job insecurity, it is important that we continue searching for predictors for this phenomenon. Perhaps we need to focus on other factors that may help explain the occurrence of job insecurity. Social support from family is one factor that has not been extensively highlighted as a predictor of job insecurity (although some research has been done on non work-based support, cf Lim, 1996). Length of employment in the company may be an important factor to the level of job insecurity experienced (Kuhnert & Vance, 1992). There is also the possibility that the availability of alternatives to the present employment may affect how high the levels of experienced job insecurity are. Those who feel they could easily find another employment may not feel insecure. Thus it would be interesting to investigate the predictive power of employability (Turnley & Feldman, 1999). Other variables important to take into account are personality dispositions such as affectivity, locus of control, and level of self-esteem (cf. Roskies et al., 1993; van Vuuren et al., 1991).

A last potential reason for the lack of confirmation of hypotheses may be that demographics and background variables are not important for the level of job insecurity experienced. Instead, they may impact the individual's reaction to job insecurity. Thus, we should not discard the variables tested in the present paper as not having anything to do with job insecurity. As mentioned above, a recent meta-analysis (Näswall et al., 2001) has identified gender and social status as moderators of the relation between job insecurity and health outcomes. By building on the results of the present study, it would be useful to test the moderating effect of the background variables tested as predictors on both health and other outcomes, e.g. job satisfaction, organizational commitment, etc. As the meta-analysis hinted, there are variables affecting the relation, which should be identified in order to help us understand how the negative consequences of job insecurity.

The many non-significant relationships of the present study may at first appear discouraging. However, it is not necessarily positive that demographics predict the experience of job insecurity. As we wish to work towards improving the situation for the employees facing job insecurity, it is desirable to identify those negative factors that are amenable to change. It may be difficult, or impossible, to change the background variables which predispose individuals to job insecurity. Whether these background variables are predictors of moderators of job insecurity it is important to study the influence of background variables on job insecurity in order to identify vulnerable groups. Numerous research studies have documented the negative outcomes of job insecurity. At this point we need research directed at reducing the experience of job insecurity, and its negative

consequences. This would be beneficial for both employees and organizations, and would contribute to a better working life.

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Consequences of job insecurity for the organization and the individual: A European Study

*Antonio Chirumbolo
Johnny Hellgren
Hans DeWitte
Sjoerd Goslinga
Katharina Näswall
Magnus Sverke*

Introduction

Over the last few decades, the labor market has undergone many rapid and dramatic changes in nearly all industrialized Western countries. Since the end of the early 1980s, economic recessions, industrial restructuring, rapid technological growth and increased competition on the international markets have dramatically changed the nature and organization of work (Howard, 1995). The current international competition and globalization has had more concrete and relevant organizational consequences than before, for instance, privatizations, mergers, restructuring of organizations, flexible organization of work, outsourcing, and downsizing. In fact, in an attempt to reduce costs and increase competition and efficiency, organizations in most industrialized countries are currently involved in a phase of continuous restructuring that is increasingly geared towards greater organizational flexibility (Purcell & Purcell, 1998; Sparrow & Marchington, 1998). This restructuring often involves large scale reductions of permanent staff members (Cameron, Freeman, & Mishra, 1991; Kozlowski, Chao, Smith, & Hedlund, 1993) that affect millions of workers worldwide with redundancies, involuntary part-time work, and fixed-term employment contracts.

These profound changes have prompted a situation of secure employment to change into one that is ever more precarious. For many workers, the flexible working life means an increased feeling of insecurity and uncertainty concerning the nature and existence of the actual job, with important psychosocial implications (Hartley, Jacobson, Klandermans, & van Vuuren, 1991; Jacobson, 1991). This situation has made it ever more necessary to define the social, emotional and behavioral impact of feelings of insecurity for the individual worker as well as the organization.

Generally, studies refer to the feeling of job insecurity as one of personal inefficiency and incapacity to maintain continuity in a situation where the actual role or job position is threatened (Greenhalgh & Rosenblatt, 1984), often from an undesired change that places the continuity and security of the actual

employment at risk (Hartley et al., 1991). Job insecurity has both objective and subjective components. On the one hand, it reflects changes that occur within a company and the society in general; on the other, it refers to a subjective experience based on individual perceptions of uncertainty. This means that, even when exposed to the same objective situation, the feeling of job insecurity may vary from one individual to the next (Greenhalgh & Rosenblatt, 1984; Hartley et al., 1991). In this sense, job insecurity is undoubtedly a subjective experience based on perceptions and interpretations of the actual work environment (Klandermans & Van Vuuren, 1999). In fact, despite job insecurity very clearly appearing in organizations undergoing restructuring processes (Parker, Chmiel & Wall, 1997), numerous empirical studies show that feelings of job insecurity can also emerge in situations that are objectively non-threatening (Rosenblatt & Ruvio, 1996). For instance, O'Quin and Lo Tempio (1998) compared two different service agencies, one of which enjoyed relative stability whilst the other had recently carried out personnel restructuring. In both agencies, regardless whether perceived as stable or unstable, those who experienced higher levels of uncertainty judged the future of their organizations far more pessimistically and had greater intentions of changing company.

Clearly, changes in the labor market have serious consequences for those who lose their jobs. However, research also highlights the negative effects of these changes on those who get to keep their jobs (Latack & Dozier, 1986). Job insecurity actually works as a stress agent. Research on stress shows how the psychological anticipation of a stressful situation (in this case, the risk of losing one's job) is a more intense source of anxiety than the event itself (Lazarus & Folkman, 1984). In line with this, job insecurity may have as negative consequences for the individual as actual job loss (Latack & Dozier, 1986). A growing body of research shows that job insecurity is linked to physical and mental health problems (Ashford, Lee & Bobko 1989; Barling & Kelloway, 1996; Heaney, Israel & House, 1994; Hellgren, Sverke & Isaksson, 1999; Lim, 1996; Noer, 1993; for reviews see De Witte, 1999; Platt, Pavis & Akram, 1999) as well as to impaired emotional and family relations (Fox & Chancey, 1998; Larson et al., 1994; Wilson et al. 1993).

However, job insecurity can have effects not only on the worker's well-being but also on his or her work related attitudes. Indeed, numerous studies suggest that job insecurity can result in decreased job satisfaction and organizational commitment (Ashford et al., 1989; Davy, Kinicki & Scheck, 1997; Rosenblatt & Ruvio, 1996). Job insecurity also appears to be associated with employees' work related behavior. For instance, research suggests that job insecurity is negatively related to performance at work (Abramis, 1994), and positively related to turnover intentions (Arnold & Feldman, 1982; Brockner, 1988; Dekker &

Schaufeli, 1995). Thus, research conducted over the last decades shows how job insecurity can be generally harmful to both the individual and the organization.

In their recent meta-analysis on consequences of job insecurity, Sverke, Hellgren and Näswall (2002) distinguished between short-term vs. long-term reactions, and reactions that primarily oriented toward the individual vs. the organization. Certain types of outcomes (for instance attitudes) are supposed to develop closer in time to the stress experience, while others (e.g., behaviors and health problems) tend to emerge after a longer period of time. Moreover, some stress reactions are expected to have an impact mainly on the individual (e.g., psychological and physical health) or the organization (e.g., job performance or the inclination to turnover from the organization). In summarizing previous research on job insecurity, the meta-analysis shows that job insecurity is more strongly related to short-term consequences with an individual focus (e.g., job satisfaction) or an organizational focus (e.g., organizational commitment), than to long-term reactions mainly affecting the individual (e.g., mental health complaints) or the organization (e.g., turnover intention).

These findings could be taken to indicate that job insecurity directly influences the short-term attitudinal factors, but indirectly the long-term health-related and behavioral factors. The principal aim of this study is to test a model in which individual and organizational long-term consequences of job insecurity are mediated by individual and organizational short-term outcomes (see Figure 1). More specifically, based on the results of previous studies (e.g., Hartley et al., 1991; Davy et al., 1997; De Witte, 1999; Sverke et al., 2002), we made the following predictions:

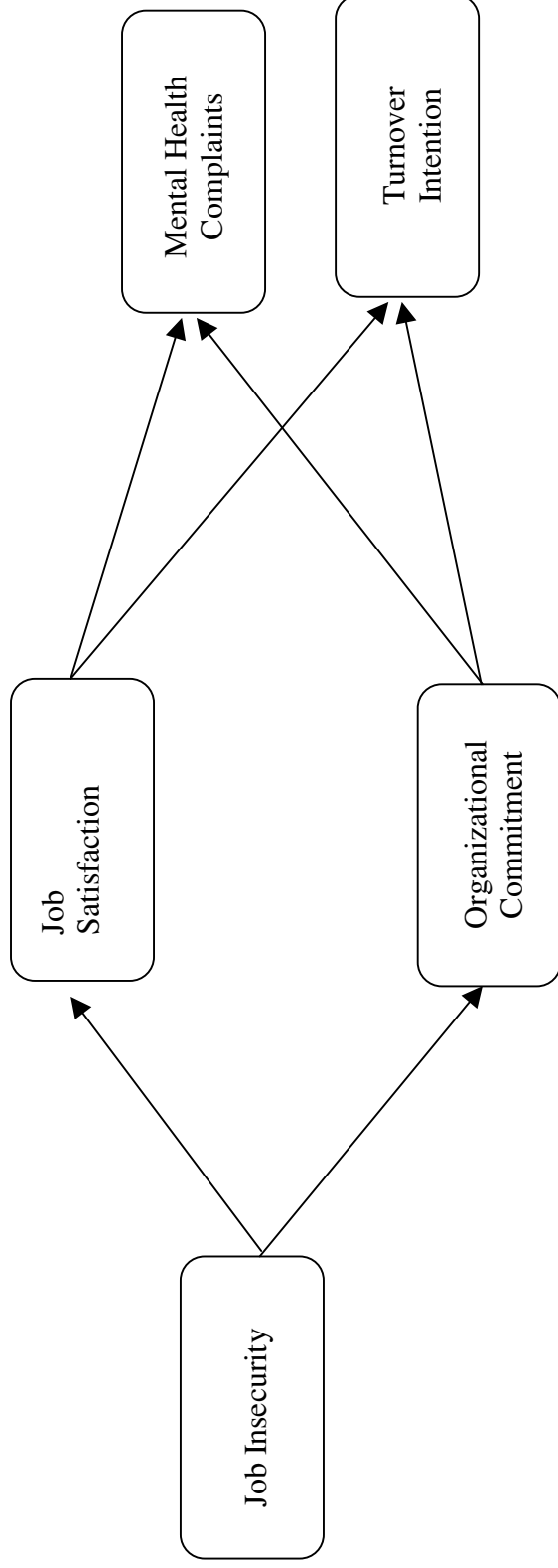
Hypothesis 1. Job insecurity is negatively related to individual (job satisfaction) and organizational (organizational commitment) short-term consequences;

Hypothesis 2. Job insecurity is positively related to individual (mental health complaints) and organizational (turnover intention) long-term consequences;

Hypothesis 3. The effects of job insecurity on the long-term consequences are mediated by the short-term consequences.

These hypotheses will be empirically tested using data collected in four European countries: Belgium, Italy, the Netherlands and Sweden.

Figure 1. Proposed model of direct and indirect effects of job insecurity.



Method

Participants

Belgium. The data used in the present study were part of a larger questionnaire focusing on health and repetitive strain injuries, administered as a postal survey in the period of November-December 1998. The study used a two-stage selection procedure. First, a representative sample of private sector companies with at least 5 employees was drawn. The personnel manager of each of the 439 sampled companies was interviewed by phone and asked whether he/she wanted to distribute questionnaires among the employees. Of those 439 companies contacted, only 116 personnel managers could be interviewed, and not all of these agreed to distribute the questionnaire. Some of these managers did not distribute the questionnaires after receiving them. Second, the questionnaires were distributed randomly among all employees in the company. Out of 3,003 questionnaires that were sent to the companies, a total of 1,120 (37.3%) useful questionnaires were returned. The mean age of the respondents was 37 years (SD=9), the average organizational tenure 14 years (SD=10), and the proportion of women 35 percent.

Italy. Data were collected from May to July 2000. Questionnaires were administered to 865 workers, mainly in small groups and at their workplace, and the response rate was 55 percent (N=476). The mean age of the sample was 39 years (SD=9). The majority of respondents were men (68 percent). On average, participants had held a job for 13 years (SD=10).

The Netherlands. Data were collected in the summer of 1999 within a longitudinal panel-survey among members of the largest trade unions affiliated with the National Christian Trade Union Federation, the CNV. The response rate for wave 13 was 50 percent, with 799 individuals cooperating to participate out of the 1,590 members in the original sample. The mean age of the sample was 48 years (SD=13), and the proportion of women 25 percent (no data were obtained on organizational tenure).

Sweden. Data are taken from a national sample of blue-collar workers from the Swedish Municipal Workers Union (SKAF) affiliated with the Swedish Trade Union Confederation (LO). A total of 1,923 usable questionnaires were returned out of an original sample size of 2,564, for a response rate of 75 percent. The mean age of the respondents was 45 years (SD=11). The average length of service in the organization was 14 years (SD=8). Women comprised 78 percent of the sample.

Measures

Job insecurity was measured using five items focusing on workers' perceptions of whether they would be able to keep their current job. Participants were asked to express their own agreement/disagreement with the statements, taken from Ashford et al. (1989) and De Witte (2000), on a five-point Likert scale (1=strongly disagree; 5=strongly agree). Examples of items were: "I fear I will lose my job" and "I am sure I can keep my job" (reverse scored item). High scores indicate higher levels of job insecurity. The reliability of this scale was satisfactory and varied between .76 (Italy) and .91 (the Netherlands).

Job satisfaction was assessed with five items measuring the overall satisfaction with the present job (De Witte, 2000; Hellgren, Sjöberg & Sverke, 1997). Participants were asked to express their agreement/disagreement with statements such as "I am very satisfied with my job" on a five-point Likert-scale ranging from 1 (strongly disagree) to 5 (strongly agree). High scores indicate increased job satisfaction. The reliability was good and ranged from .82 (Sweden) to .96 (the Netherlands).

Organizational commitment was measured using five items designed to reflect affective attachment towards the organization in which the individual works (Allen & Meyer, 1990; Meyer, Allen & Smith, 1993). A sample item is "I feel emotionally attached to my organization". Participants expressed their agreement/disagreement on a five-point scale (1=strongly disagree; 5=strongly agree) such that high scores indicate strong organizational commitment. The Cronbach alpha reliability varied between .86 (Belgium and Sweden) and .97 (the Netherlands).

Mental health complaints were measured through the General Health Questionnaire (Goldberg, 1979). This scale is composed of twelve items that refer to an anxiety-depression symptomatology. Participants indicated how frequently they had suffered from various symptoms (e.g., "Lost much sleep over worry", "Been feeling unhappy and depressed", "Been losing confidence in yourself") over the last six months (1=never; 4=almost always). The reliability was satisfactory in all samples, and ranged from a low of .78 (Italy) to a high of .84 (Sweden). High scores on this scale indicate poorer mental health.

Turnover intention was assessed using three items reflecting the propensity to leave the present job. The items were developed by Sjöberg and Sverke (1996; 2000) and based on Lyons (1971). Participants were asked to express their own agreement/disagreement with statements such as "I feel that I could leave this job", "I am actively looking for other jobs". In Italy and Sweden, responses were given on a five-point disagree/agree scale. Only one of the items were included in the Dutch questionnaire. The Belgian survey contained three similar items, albeit dichotomously scored. For all samples, high scores indicate a stronger intention to turnover. The reliability ranged from .68 (Italy) to .74 (Sweden).

Results

Correlations, means, standard deviations and reliability of the scales are provided for each country in Table 1. Job insecurity showed patterns of relationships across countries that, in most cases, were consistent with predictions. In fact, job insecurity was negatively associated with job satisfaction and organizational commitment, the only exception being Sweden in which job insecurity had a small positive correlation with organizational commitment ($r=.05$). Moreover, job insecurity was significantly correlated to mental health complaints and turnover intention in all countries.

Whereas the bivariate correlations were generally consistent with the proposed relationships of job insecurity with short-term (Hypothesis 1) and long-term consequences (Hypothesis 2), multiple regression procedures were used to test these hypotheses in a multivariate framework. Multiple regression was used also to test Hypothesis 3, which specified that the effects of job insecurity on mental health complaints and turnover intention are mediated by job satisfaction and organizational commitment. Testing for mediation, according to Baron and Kenny (1986), involves that the coefficients of three regression equations must be estimated and compared. First, the mediator should be predicted by the independent variable. Second, the dependent variable should be predicted by the independent variable. Third, when the mediator is introduced to the equation, it should predict the dependent variable; perfect mediation holds when, controlling for mediator, the independent variable no longer predicts the dependent variable.

Thus, following Baron and Kenny (1986), we first regressed job satisfaction and organizational commitment on job insecurity, controlling at the same time for some socio-demographic variables (age, gender, part time work, and contingent work). Second, in the prediction of mental health and turnover intention, we included job insecurity and the demographics in Step 1, and added the proposed mediators (job satisfaction and organizational commitment) in Step 2. Mediation is supported if (1) job insecurity significantly predicts job satisfaction and organizational commitment, (2) job insecurity significantly predicts mental health complaints and turnover intention in Step 1, and (3) the effects of job insecurity on mental health complaints and turnover intention become non-significant in Step 2 after controlling for the mediators.

Table 1. Intercorrelations, means, standard deviations, and reliability estimates.

	1	2	3	4	5	<u>M</u>	<u>SD</u>	α
Belgium								
1. Job Insecurity	1					2.26	.89	.89
2. Job Satisfaction	-.32*	1				3.70	.80	.85
3. Organizational Commitment	-.20*	.76*	1			3.39	.84	.86
4. Mental Health	.22*	-.37*	-.21*	1		1.25	.27	.77
5. Turnover intention	.13*	-.54*	-.44*	.36*	1	1.28	.36	.73
Italy								
1. Job Insecurity	1					2.61	.87	.76
2. Job Satisfaction	-.25*	1				3.60	.94	.87
3. Organizational Commitment	-.16*	.72*	1			3.20	1.02	.88
4. Mental Health	.28*	-.40*	-.31*	1		2.08	.37	.74
5. Turnover intention	.33*	-.45*	-.42*	.33*	1	2.63	1.01	.68
The Netherlands								
1. Job Insecurity	1					1.85	.69	.91
2. Job Satisfaction	-.23*	1				3.79	.63	.96
3. Organizational Commitment	-.17*	.65*	1			3.52	.65	.97
4. Mental Health	.14*	-.33*	-.17*	1		1.58	.42	.82
5. Turnover intention	.10*	-.33*	-.37*	.16*	1	2.85	1.20	---
Sweden								
1. Job Insecurity	1					2.09	1.06	.89
2. Job Satisfaction	-.11*	1				3.68	.88	.82
3. Organizational Commitment	.05*	.41*	1			2.54	.93	.86
4. Mental Health	.21*	-.35*	-.12*	1		1.99	.46	.84
5. Turnover intention	.10*	-.56*	-.41*	.28*	1	2.30	1.15	.78

* $p < .05$

Results for the Belgian sample are presented in Table 2. Consistent with Hypothesis 1, job insecurity significantly predicted both job satisfaction and

organizational commitment, after controlling for age, gender, part-time work, and contingent work. As postulated in Hypothesis 2, job insecurity also predicted mental health complaints in Step 1. However, in Step 2, when controlling for job satisfaction and organizational commitment, the effect of job insecurity on mental health was still significant, although reduced. Thus, no support was found for mediation (Hypothesis 3). However, consistent with predictions, in the final regression job insecurity predicted turnover intention in Step 1 (Hypothesis 2), and this effect became non-significant in Step 2 after controlling for job satisfaction and organizational commitment (Hypothesis 3). To summarize the results for Belgium, Hypothesis 1 was supported in that job satisfaction and organizational commitment was lower when job insecurity was high. Also Hypothesis 2 received support; the stronger the perception of job insecurity the more likely the individual is to suffer from mental health complaints and to turnover from the organization. However, Hypothesis 3 received only partial support. Whereas job insecurity was found to have only a direct effect on mental health complaints, the effect on turnover intention was mediated by work attitudes. Moreover, the non-significant effect of organizational commitment suggests that the relationship between job insecurity and turnover intention is mediated only by job satisfaction.

Table 2. Tests for direct and indirect effects of job insecurity after controlling for age, gender, part-time work, and contingent work: Belgium (standardized regression coefficients).

Predictor	Job Satisfaction	Organizational Commitment	Mental Health Complaints		Turnover Intention	
			Step1	Step2	Step1	Step2
Age	.12**	.19**	.04	.07*	-.23**	-.16**
Gender (woman)	-.07*	-.09**	.00	-.02	-.02	-.06*
Part-time work	.02	.01	-.02	-.01	-.01	-.00
Contingent work	.03	.00	-.07*	-.06*	.03	.05
Job Insecurity	-.31**	-.20**	.22**	.11**	.14**	-.02
Job Satisfaction			---	-.43**	---	-.51**
Organizational Commitment			---	.12**	---	-.03
R ²	.12	.09	.05	.16	.07	.32

* p<.05 ** p<.01

Table 3 presents the results for Italy. As predicted in Hypothesis 1, job insecurity evidenced a negative relation with both job satisfaction and organizational commitment after controlling for age, gender, part-time work, and contingent work. Consistent with Hypothesis 2, job insecurity had a positive relation with mental health complaints as well as turnover intention after the same control variables had been taken into account (see Step 1 of the last two regressions in Table 3). These results indicate that job insecurity is associated with lower job satisfaction and organizational commitment, more frequent mental health complaints, and a stronger intention to leave the organization. However, Hypothesis 3, which stated that work attitudes mediate the effects of job insecurity on employee health and behavior, was not supported in the Italian data. When the job satisfaction and organizational commitment was introduced in the prediction of mental health complaints and turnover intention, job insecurity still had a significant effect on both criteria.

Table 3. Tests for direct and indirect effects of job insecurity after controlling for age, gender, part-time work, and contingent work: Italy (standardized regression coefficients).

Predictor	Job Satisfaction	Organizational Commitment	Mental Health Complaints		Turnover Intention	
			Step1	Step2	Step1	Step2
Age	-.10*	.02	.11*	.08	-.07	-.09*
Gender	.01	-.13*	.11*	.11*	-.01	-.01
Parttime work	-.16**	-.12*	.00	-.05	.11*	.05
Contingent work	.15**	.08	-.02	.03	-.16*	-.10*
Job Insecurity	-.24**	-.14**	.28**	.20**	.32**	.23**
Job Satisfaction			---	-.27**	---	-.27**
Organizational Commitment			---	-.08	---	-.17**
R ²	.12	.06	.11	.21	.13	.29

* p<.05 ** p<.01

Results for the Netherlands are presented in Table 4. After controlling for demographic characteristics, job insecurity significantly predicted both job satisfaction and organizational commitment. Job insecurity also predicted mental health complaints in Step 1. However, when controlling for job satisfaction and organizational commitment in Step 2, the effect of job insecurity on mental health complaints was still significant, although reduced. Thus, no support was

found for mediation. In the second set of analyses, job insecurity predicted turnover intention in Step 1, but after controlling for job satisfaction and organizational commitment in Step 2 the effect of job insecurity on turnover intention dropped to non-significance. Thus, these results provide support for Hypotheses 1 and 2, and partial support for Hypothesis 3. Whereas there was no evidence of mediation in the job insecurity-mental health complaints relationship, the effect of job insecurity on turnover intention was mediated by job satisfaction and organizational commitment

Table 4. Tests for direct and indirect effects of job insecurity after controlling for age, gender, part-time work, and contingent work: the Netherlands (standardized regression coefficients).

Predictor	Job Satisfaction	Organizational Commitment	Mental Health Complaints		Turnover Intention	
			Step1	Step2	Step1	Step2
Age	.03	.12*	.05	.07	-.27**	-.24**
Gender	.08	.13**	.13**	.15**	-.06	-.02
Parttime work	-.06	-.12*	.02	.00	.11*	.07
Contingent work	.10	.06	-.10*	-.07	.08	-.04
Job Insecurity	-.25**	-.18**	.16**	.09*	.11**	.02
Job Satisfaction			---	-.34**	---	-.17**
Organizational Commitment			---	.05	---	-.23**
R ²	.07	.05	.05	.14	.08	.20

* p<.05 ** p<.01

Table 5 presents the results for the Swedish sample. Job insecurity significantly predicted job satisfaction but not organizational commitment when the control variables had been taken into account. Also, mental health complaints were predicted by job insecurity in Step 1. However, in Step 2, when job satisfaction and organizational commitment were introduced to the equation, the effect of job insecurity on mental health complaints was still significant, although reduced. In the final regression, job insecurity predicted turnover intention in Step 1 and this effect became non-significant when controlling for job satisfaction and organizational commitment in Step 2. However, although both organizational commitment predicted turnover intention, the non-significant

effect of job insecurity on organizational commitment suggests that only job satisfaction fulfills the criteria of a mediator in the job insecurity-turnover intention relation. The Swedish data thus provide partial support for Hypothesis 1 (significant effect of job insecurity only on job satisfaction), support for Hypothesis 2, and partial support for Hypothesis 3 (mediated effect of insecurity only on turnover intention).

Table 5. Tests for direct and indirect effects of job insecurity after controlling for age, gender, part-time work, and contingent work: Sweden (standardized regression coefficients).

Predictor	Job Satisfaction	Organizational Commitment	Mental Health Complaints		Turnover Intention	
			Step1	Step2	Step1	Step2
Age	.22**	.17**	.03	.10**	-.27**	-.14**
Gender	.04	-.07*	.08*	.09**	-.00	-.00
Parttime work	-.02	.01	-.03	-.03	-.03	-.04
Contingent work	-.08*	.05	-.08*	-.05	-.03	.01
Job Insecurity	.11**	.04	.24**	.20**	.09**	.04
Job Satisfaction			---	-.36**	---	-.45**
Organizational Commitment			---	.00	---	-.20**
R ²	.06	.04	.06	.17	.08	.38

* p<.05 ** p<.01

Discussion

Although a growing number of studies suggest that job insecurity may have detrimental consequences for both the individual and the organization, only limited research attention has gone into understanding how such consequences may develop in the short and long perspective (Sverke et al., 2002). It is possible, for instance, that job insecurity affects employees' attitudes in the short perspective and that these short-term consequences, in turn, mediate the of job insecurity on more long-term effects, such as employee well-being and work behavior. The main focus of this paper was to test a model according to which individual and organizational short-term outcomes of job insecurity mediate its

individual and organizational long-term consequences. We used data from four European countries to test three hypotheses derived from the model.

Our first hypothesis concerned the short-term, attitudinal consequences of job insecurity. After controlling for socio-demographic characteristics, job insecurity was found to be negatively associated with job satisfaction in all four samples, and with organizational commitment in all samples but the Swedish. These results provide strong support for Hypothesis 1. They also replicate previous research that has uncovered negative effects of job insecurity on individually oriented work attitudes, such as job satisfaction (e.g., Ashford et al., 1989; Grunberg, Moore, & Greenberg, 1998; Lim, 1996; Rosenblatt & Ruvio, 1996), as well as organizationally oriented attitudes (e.g., Armstrong-Stassen, 1993; Davy et al, 1997; Iverson & Roy, 1994; McFarlane Shore & Tetrick, 1991).

The results were also consistent with Hypothesis 2, which concerned the direct effects of job insecurity on its postulated long-term consequences. In all four countries, job insecurity predicted mental health complaints and turnover intention after controlling for socio-demographic characteristics. This finding is consistent with previous research where stronger perceptions of job insecurity have been found to be associated with impaired psychological well-being (e.g., De Witte, 1999; Friesen & Sarros, 1989; Kuhnert, Sims, & Lahey, 1989; Wilson, Larson, & Stone, 1993) and an inclination to exit from the organization (e.g., Ashford et al., 1989; Cavanaugh & Noe, 1999; Hellgren et al., 1999; Stedham & Mitchell, 1996).

These findings have implications from the individual as well as the organizational perspective. From an individual point of view, higher levels of job insecurity were related to a worse state of psychological health. In particular, individuals who viewed their employment to be at risk had a greater probability of feeling anxious or depressed, reported to have lost confidence in themselves, to feel inadequate and constantly under strain, to suffer from insomnia, and being unable to concentrate. They also turned out to be more dissatisfied with their jobs. From an organizational perspective, detrimental effects of job insecurity appear to be reflected in the negative attitudes these workers held towards their organizations. In fact, they insecure employees were less committed to the organization they worked for, and less emotionally attached to it. Furthermore, they expressed a stronger propensity to leave their organization. In this respect, studies have shown that voluntary turnover typically involves the most qualified workers, because they are probably the most attractive on the labor market (Kozlowski et al., 1993). However, these employees are often the most precious for the organization, so that their withdrawal represents a notable loss for the company.

Whereas the results obtained in Belgium, Italy, the Netherlands, and Sweden consistently supported the first two hypotheses of the study, Hypothesis 3, which

postulated that the long-term individual and organizational effects of job insecurity are mediated by the short-term attitudinal consequences, received only partial support. Work related attitudes were found to mediate the relationship between job insecurity and the long-term organizational outcome investigated here, namely the intention to withdraw from one's job. This result was almost consistent across countries, the only exception being Italy where job insecurity still predicted turnover intention also after controlling for job satisfaction and organizational commitment. In contrast, our results indicate that job insecurity had a direct effect on the long-term individual outcome (mental health) that was not mediated by job and organizational attitudes. This result was consistent across all four countries.

There are several plausible explanations to the finding that job satisfaction and organizational commitment mediated the effect of job insecurity on turnover intention but not on mental health complaints. The reasons for the negative consequences of job insecurity may be interpreted in light of stress studies (Davy et al., 1997; De Witte, 1999; Sverke et al., 2002). The sense of uncertainty that stems from the perception of losing one's job is a powerful stress agent that prompts individuals to put a series of coping strategies into action. Some strategies are reflected in a psychological detachment from the stressful situation. In this perspective, less commitment, less job satisfaction and a more pronounced intention to leave the organization are strategies to psychologically distance oneself from the stressful situation, namely the risk of losing one's actual job.

Negative consequences of job insecurity on well-being can also be easily understood in this perspective. Within Western society, work is not only a source of livelihood but also represents social participation and recognition (Jahoda, 1982). The perceived threat of unemployment points to social and identity needs, as well as the loss of important resources, whether they are material or social. Job insecurity often means a state of prolonged uncertainty that implies an unpredictable and uncontrollable situation for the individual (De Witte, 1999). For the insecure employee it is no longer clear what will happen in the future, nor which will be the most appropriate behaviors or strategies to adopt in order to cope with the situation. In other words, this lack of certainty about the future actually includes a parallel uncertainty about expectations and behaviors to be adopted. Such lack of control, or sense of powerlessness when facing unpredictable and stressful situations, is in fact considered to be the main reason for stressors to translate into negative health consequences (e.g., De Witte, 1999; Jex & Beehr, 1991; Lazarus & Folkman, 1984).

Although it is plausible that job insecurity has direct effects on individually oriented long-term outcomes and mediated effects only on organizationally oriented outcomes, it might also be that our choice of mediators has colored the results. Work attitudes have frequently been examined in turnover research, and

several studies have acknowledged the important role of both job satisfaction (e.g., Mobley, Griffeth, Hand & Meglino, 1979) and organizational commitment (e.g., Blau & Boal, 1989). Although these work attitudes were not found to moderate the effect of job insecurity on mental health complaints, it is also possible some other variables intervene in the relationship between insecurity and health. In fact, it appears that personal characteristics, such as self-esteem and personal control, and a supportive social and interpersonal environment may influence or limit the effects of insecurity. For instance, the impact of job insecurity on psychological and physical health appears to be far greater among those workers with lower levels of self-esteem and with an external locus of control in relation to workers with high self-esteem and an internal locus (Orpen, 1994). Similarly, it has been shown that the negative relation between job insecurity and psychological well-being tends to be stronger among employees who experience less interpersonal support from work colleagues or superiors (Lim, 1996, 1997). Unfortunately, these variables were not assessed in the present study but we urge future research to investigate potential mediators of the effects of job insecurity on employee well-being.

In conclusion, with the labor market becoming more precarious and flexible, the cost of this appears to be considerable from social, individual as well as organizational perspectives. Some outcomes of job insecurity can both have direct effects for the individual and indirect impact on the organization (e.g., the case of mental and physical health), whereas others tend to be damaging for the organization and only posing an indirect cost for the individual (e.g., job performance, job shift) (Sverke et al., 2002). In this perspective, the present results appear to have many implications for those appointed to develop social and economic policies. Future longitudinal research is still necessary and would be favorable for the better understanding of the process through which job insecurity translates into short-term and long-term consequences. Although the present findings indicate that work attitudes mediate the effects of job insecurity on employees' work related behavior, future research is warranted to unravel whether the effects on employee health are direct or mediated by other factors than work attitudes. Future efforts should consider intra-individual (such as personality traits), interpersonal (such as social support from family, colleagues and friends), and context related factors (such as perceived employability and job alternatives) as potential mediators of the effects of job insecurity on employee health and well-being.

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How does job insecurity affect union members? Exit, voice, and loyalty reactions in four European countries

*Magnus Sverke
Sjoerd Goslinga
Antonio Chirumbolo
Hans De Witte
Johnny Hellgren
Katharina Näswall*

Introduction

For most industrialized economies, the last decades represent an era of dramatic change. Information technology has paved the way for less labor-intensive production and enabled organizations to outsource a range of non-core business functions. Intensified international competition and periods of economic decline have put organizations under pressure to reduce their production costs and investments in human capital. State deregulation and an accelerating faith in market principles have brought about changes in management practices and led to an increased emphasis on numerical flexibility in the staffing of organizations (Cappelli, 1999; Pfeffer, 1998). As a result, employment relations have undergone profound transformations. Long-term relationships based on mutual dependence between employer and employee have gradually given way for short-term employment relations based on flexibility (Hartley, 1995; Sparrow, 2000; van Ruysseveldt, 1995).

A central characteristic of this trend is an increased uncertainty among employees concerning the nature and future existence of their present jobs (Hartley, Jacobson, Klandermans & van Vuuren, 1991; Sverke & Hellgren, 2002). A growing number of employees face the risk of losing their jobs as a consequence of organizational restructuring and layoffs, and, hence, experience a “powerlessness to maintain desired continuity in a threatened job situation” (Greenhalgh & Rosenblatt, 1984, p. 438). Official statistics indicate that in recent years such perceptions of job insecurity have increased substantially within the OECD countries. For example, the proportion of workers reporting that they are satisfied with their job security fell from 61 percent in 1992 to 56 percent in 1996 (OECD, 1997).

A growing body of research suggests that job insecurity may have important consequences for both the individual and the organization (Burke & Nelson, 1998; Cameron, Freeman & Mishra, 1991; Greenhalgh & Rosenblatt, 1984; for meta-analysis results, see Sverke, Hellgren & Näswall, 2002). Indeed, job

insecurity has been found to be negatively associated with factors such as job satisfaction (Ashford, Lee & Bobko, 1989), well-being (De Witte, 1999), organizational commitment (Davy, Kinicki & Scheck, 1997), trust in management (Borg & Elizur, 1992), and turnover intention (Hellgren, Sverke & Isaksson, 1999). Other studies suggest effects such as lack of compliance with safety regulations (Probst & Brubaker, 2001) and resistance to change (Noer, 1993). One striking characteristic of previous research, however, is that it has generated only limited interest in unraveling the effects of job insecurity on labor unions (Sverke & Hellgren, 2002).

Given the lack of research on how job insecurity relates to union outcomes, the present research was designed to shed light on whether unionized workers' reactions to job insecurity primarily affect the company or the union. A framework which assist researchers in addressing this issue is Hirschman's (1970) exit, voice, and loyalty theory. According to this framework, individuals can respond to dissatisfying employment conditions, such as job insecurity, by exiting from the organization, voicing their concerns in an attempt to correct the problem, or altering their loyalty to the organization. It would seem plausible to suggest that members' evaluations of which party is responsible for deteriorating employment security – the employer or the union – may make them more inclined to retaliate against that party.

The exit, voice, and loyalty framework

The linking of unsatisfactory conditions to specific actions and work behaviors represents a fruitful area of recent research. To a large extent, this research has benefited from Hirschman's (1970) exit, voice, and loyalty framework. Hirschman described exit and voice as the major economic and political alternatives for firms, organizations, and states in decline to bring about change. Hence, unsatisfactory conditions can lead an actor to exit from the situation by a permanent movement away from the organization. For instance, a dissatisfied customer can switch to another supplier. In contrast, voice represents articulation of interests in an attempt to change the unfavorable situation, rather than to escape from it. For instance, the actor may, individually or collectively, attempt to change the production policies of the supplier or the quality of the merchandise. Both exit and voice can make the people in charge consider why dissatisfaction has occurred and to remedy the unsatisfactory conditions, especially if these reactions are exhibited by valuable and respected actors (Freeman & Medoff, 1984). The active responses of exit and voice can also be contrasted with a more passive form – loyalty. Hirschman (1970) described loyalty as the product of various factors that bind the actor to the organization and thus make exit costly and voice problematic.

Although Hirschman (1970) developed the exit, voice, and loyalty framework to describe primarily how organizations respond to decline, his theory has had broader implications by enriching the understanding of the wide range of responses that can result from dissatisfying conditions in general. Indeed, the framework has guided research investigating the consequences of a variety of factors, such as unsatisfactory romantic involvements (Rusbult, Zembrodt & Gunn, 1982) and job dissatisfaction (Farrell, 1983). Not least importantly, more recent studies have used Hirschman's (1970) framework to describe workers' reactions to violations of psychological contracts between employee and employer (Turnley & Feldman, 1999), downsizing (Spreitzer & Mishra, 2000), and job insecurity (Sverke & Hellgren, 2001).

Exit has been described as a typical response to job insecurity, and a growing body of research suggests that employees who are dissatisfied with their job security can choose to exit from their job or organization (Hartley et al., 1991). Indeed, numerous studies have found high levels of perceived job insecurity to be associated with an increased propensity to voluntarily turnover from the employment relationship (Ashford et al., 1989; Cavanaugh & Noe, 1999; Hellgren et al., 1999). Such exit behavior clearly involves adverse consequences for the employer, especially because employees with valuable skills easily can find better job alternatives and therefore often tend to be among the first to leave the organization (Kozlowski, Chao, Smith & Hedlund, 1993; Pfeffer, 1998).

However, it is not clear if there are similar exit effects for union organizations, that is, if job insecurity makes unionized employees more inclined to withdraw from membership. Union members typically place high priority on job security (Allvin & Sverke, 2000; Brown Johnson, Bobko & Hartenian, 1992; Lind, 1996), and perceptions of job insecurity typically make employees more inclined to unionize (e.g., Bender & Sloane, 1999; Iverson, 1996). Because the mission of unions is to protect the interests of the members, the collective support derived from membership may make the members less inclined to exit from the union when they fear to lose their jobs. On the other hand, if members believe that their unions are not successful in protecting their job insecurity, or if they trust their own capacity to redress insecurity, exiting from the union would be a manifestation of dissatisfaction. To address these issues, we examine the relationship of job insecurity with both organizational turnover intention and union turnover intention.

Voice is conceived of as interest articulation, and thus represents a more political response than exit (Hirschman, 1970). In organizational settings voice typically represents any attempts to restore deteriorating conditions and return to previous levels of functioning (Farrell, 1983). In terms of employment relations, it has been argued that voice embodies the individual worker's efforts at restoring impairments in the contractual relationship between employee and

employer (Turnley & Feldman, 1999). In one of the few studies that explicitly have addressed voice responses to job insecurity, Sverke and Hellgren (2001) investigated if unionized and non-unionized employees in an organization undergoing change differed with respect to involvement in individualized forms of voice. They found that union members typically were less inclined than their non-affiliated coworkers to individually raise their concerns and protest against the organizational change. However, the study did not consider collective forms of protest.

Whereas unionization in itself can represent a voice function by putting pressure on management to improve the characteristics of the employment contract (Freeman & Medoff, 1984), unions also represent a forum for collective voice expressions (Heller, Pusic, Strauss & Wilpert, 1998). Research generally suggests that dissatisfaction with various facets of work may make union members more inclined to participate in union activities in an effort to bring about change (Barling, Fullagar & Kelloway, 1992; Gallagher & Strauss, 1991; Klandermans, 1996). Hence, we investigate if job insecurity is associated with union participation.

The third category of responses to unsatisfactory conditions proposed by Hirschman (1970) is loyalty. Originally, loyalty was described as passive support of the organization, as a characteristic of individuals who “suffer in silence, confident that things will soon get better” (Hirschman, 1970, p. 38). More recent research, however, suggests that workers, rather than silently supporting their organization, respond with emotional withdrawal and loss of loyalty when confronted with unsatisfactory employment relations (Sparrow, 2000; Turnley & Feldman, 1999). In this vein, numerous studies have found job insecurity to be negatively associated with organizational commitment (Davy et al., 1997; Yousef, 1998; for meta-analysis results, see Sverke et al., 2002).

In contrast to the vast amount of research that has addressed the loyalty implications of job insecurity for the employing organization, the understanding of the consequences for union loyalty is limited at best. Research on union member adjustments to industrial conflicts may help illuminate this issue. It appears that in situations plagued with union-management conflict, such as a strike, members tend to express more positive attitudes towards their union (Mellor, 1990; Stagner & Eflal, 1982). Along similar lines, it could be assumed that downsizing and job insecurity could evoke expressions of loyalty to the union, at least if the employer is perceived as responsible for the unsatisfactory employment security and the union makes this an important issue. Consistent with this reasoning, positive evaluations of union performance has been found to predict union loyalty (Johnson & Johnson, 1992). However, there is also research to suggest that members’ loyalty to the union could drop if the union is held responsible for the unsatisfactory conditions. For instance, a study of Mellor

(1992) showed that the level of union commitment was lower when members attributed the responsibility for layoff decisions to the union. In addition, research suggests that members' loyalty to the union is higher when they feel that their jobs are secure (Iverson & Kuruvilla, 1995). We addressed the loyalty implications of job insecurity by investigating the effects on both organizational and union commitment.

The present study

The overall aim of this study is to contribute to the understanding of the behavioral consequences of job insecurity. More specifically, we investigate if job insecurity is primarily associated with exit, voice, or loyalty reactions. Given that previous research typically has focused on organizational outcomes, as opposed to consequences for the union, the study is designed to detect if job insecurity mainly affects the company or the union.

In addition, whereas most research is based on data from one single sample, we use data from union members in four European countries – Belgium, Italy, the Netherlands, and Sweden. Although labor unions all over the globe are facing membership decline and challenges posed by internationalization, the accelerating diversity of the workforce, deregulations in labor laws, and employer opposition, there are also important differences between countries (Ferner & Hyman, 1998; Sverke, 1997; Visser, 1994; Waddington & Hoffman, 2000). Hence, the use of data from countries with differing industrial relations characteristics allows for investigating to what extent the reactions to job insecurity generalize across cultural settings.

One striking difference between the four countries concerns union density. Sweden is a country with a very high unionization rate in international comparison, and the Swedish model of interest representation has long served as a source of inspiration for union officials as well as industrial relations researchers. In 1995, the proportion of unionized workers in Sweden (85 percent) could be contrasted to the rather low union density rates in the Netherlands (23 percent) and Italy (32 percent), with Belgium (60 percent) in an intermediate position (Ebbinghaus & Visser, 2000; Kjellberg, 2001; figures including unemployed workers). Another difference concerns the division of the union movement into federations. Whereas the federations are based on political as well as religious grounds in Belgium (Van Gyes, De Witte & van der Hallen, 2000) and the Netherlands (Valkenburg & Coenen, 2000), the Italian union movement is divided on political grounds (Regini & Regalia, 2000), and Sweden has separate federations for blue-collar workers, white-collar employees, and professionals (Kjellberg, 2000). A third example of differences between the four countries concerns industrial relations climate. The number of industrial conflicts (strikes and lockouts) in 1995 was very high in Italy (545), while there were

rather few in Belgium (46) and the Netherlands (14), and none in Sweden (Gold & Weiss, 1998).

There are also a number of characteristics of the labor market scene that distinguish between the four countries. For instance, the level of unemployment in Belgium (10.0 percent) and Italy (10.7 percent) was substantially higher compared to the Netherlands (3.0 percent) and Sweden (5.9 percent) in 2000 (OECD, 2001). Further, in 1996 the percentage of workers employed on fixed term contracts in the Netherlands (12.0 percent) and Sweden (11.8 percent) was substantially larger than in Belgium (5.9 percent) and Italy (7.5 percent), as observed in a publication from the European Foundation for the Improvement of Living and Working Conditions (Gold & Weiss, 1998). Also the share of part-time employment of total employment differs between countries. In 2000, the proportion of part-time work in the Netherlands (32.1 percent) clearly over-rid that of Belgium 19.0 percent), Italy (12.2 percent), and Sweden (14.0 percent) (OECD, 2001). These factors could influence the level of job insecurity perceived by the workers and affect the individuals' choice of strategies to cope with employment uncertainty.

Data

Sample characteristics

This study is based on data from a European project which encompasses four countries (see Sverke et al., 2001, for details about the project). Data were collected either before (Belgium and the Netherlands) or after (Italy and Sweden) initiation of the project. Efforts were made to obtain relatively heterogeneous samples within countries. However, because the focus of the project is not on cultural differences, no attempts were made to have identical samples across countries. Given that the primary interest rather is cross-validation, the differences between samples enable us to analyze the extent to which results generalize across countries. Sample sizes, response rates, and characteristics of the respondents are presented in Table 1. For all countries, the analyses were based only on union members with complete data on the study variables.

The Belgian data originate from a telephone survey conducted in the period April-July 1998. The sampling focused on employees in relatively large private sector plants in all three parts of Belgium (Flanders, Brussels, Wallonia). First, a representative sample of 98 out of 589 Belgian municipalities was selected. Second, proportional to the number of inhabitants in each municipality, telephone numbers were randomly drawn within each municipality. Based on this, a total of 23,912 persons were contacted. Individuals eligible for the study had to be wage-earners employed in workplaces with at least 50 employees. About 44 percent (10,554 persons) did not fit the sampling criteria. Of the

remaining 13,358 individuals, 45 percent refused to participate, 44 percent could not be contacted (telephone number incorrect, never at home, ill, etc.), and no more than 1,487 did fit the criteria and were willing to be interviewed. The minimum response rate could thus be estimated to 11 percent (based on the conservative assumption that all individuals in the group that could not be reached met the criteria for inclusion in the study). Approximately 58 percent of the participants were members of a union, which leaves us with an effective sample of 851 individuals. The mean age of the sample was 39 years ($SD = 9$), and the proportion of women 40 percent. No data were available on union tenure.

Table 1. Summary of sample characteristics.

	Belgium	Italy	The Netherlands	Sweden
Sample size	13,358	865	1,590	2,564
Participants	1,487	476	799	1,923
Response rate (%)	11	55	50	75
Union members (%)	58	62	100	100
Effective sample size*	851	287	611	1806
Mean age (years)	39	41	43	45
Proportion women (%)	40	31	28	78
Union tenure (years)	–	13	14	16

– Not measured.

* Unionized participants with complete data on the study variables.

The Italian data were collected in Spring 2000 among a sample of 865 workers, mainly in small groups and at their workplaces. The sample was recruited mainly in the north and the center of the country, and represented both the service and the manufacturing industries, primarily in the private sector. Completed questionnaires were received from 476 employees, for a response rate of 55 percent. In the present study, we used data only from the 62 percent of the sample that belonged to a union. After correction for internal attrition in the study variables, there remained an effective sample of 287 union members with complete data on the study variables. Around one-third of the participants were women (31 percent), the mean age was 41 years ($SD = 9$), and the average length of union membership 13 years ($SD = 10$).

The Dutch sample was drawn from one wave of a longitudinal panel survey which started in 1992, and the present data were collected in Summer 1999. The telephone survey is conducted among members of the largest trade unions affiliated with the National Christian Trade Union Federation (the CNV), the second largest trade union federation in the Netherlands. The ten CNV unions included in our study represent over 90% of the total CNV constituency. Among these ten unions six are public sector unions. Out of 1,590 members sampled for the data collection wave, 799 (50 percent) agreed to participate. Listwise deletion for missing data resulted in an effective sample size of 611 members. Their mean age was 43 years ($SD = 10$), their average union tenure 14 years ($SD = 11$), and the proportion of women 28 percent.

Data for Sweden were taken from a national sample of blue-collar workers from the Swedish Municipal Workers Union (Kommunal) affiliated with the Swedish Trade Union Confederation (LO). The union represents service workers, mainly within the public sector. In Spring 2000, postal questionnaires were sent to a random sample of 2,564 members, and a total of 1,923 usable questionnaires were returned for a response rate of 75 percent. The effective sample was reduced to 1,806 members with complete data on the study variables. They had been union members for an average of 16 years ($SD = 8$) and their mean age was 45 years ($SD = 11$). Women comprised 78 percent of the sample.

Measures

The ambition was to obtain comparable data from all countries. However, the fact that all data sets were not tailored for the project explains why there are small differences in operationalizations across countries and why a few variables were not measured in one of the countries (Belgium). Table 2 presents the number of items used for each variable in the four different countries along with reliability estimates. In general, the variables exhibited acceptable reliability in all three countries. Correlations among the study variables are reported in the Appendix.

Job insecurity

In Italy, the Netherlands, and Sweden, job insecurity was assessed using five items (e.g., "I am afraid I will get fired") drawn from other measures of job insecurity (Ashford et al., 1989; De Witte, 2000; Hellgren et al., 1999). The response alternatives ranged from 1 (strongly disagree) to 5 (strongly agree). The Cronbach alpha reliability ranged from .78 to .91. In Belgium, job insecurity was measured with a single item developed by De Witte (1997). Respondents rated the perceived likelihood of losing their job on a scale ranging from 1 (very unlikely to become unemployed) to 5 (very likely).

Table 2. Reliability of variables (Cronbach's alpha).

	Belgium		Italy		The Netherlands		Sweden	
	# items	α	# items	α	# items	α	# items	α
Job insecurity	1	α	5	.78	5	.91	5	.89
Exit variables								
Organizational turnover intention	0	–	3	.68	1	α	3	.77
Union turnover intention	1	α	3	.75	3	.68	1	α
Voice variables								
Union participation	1	α	2	.72	2	.71	1	α
Union participation intention	1	α	2	.82	2	.80	1	α
Loyalty variables								
Organizational commitment	0	–	5	.88	5	.78	5	.86
Union commitment	4	.79	5	.74	4	.84	5	.86

– Not measured.

α Variable measured using a single item.

Exit variables. Both exit variables, which reflected the propensity to leave the employing organization and the union, respectively, were assessed on a five-point Likert scale (1=strongly disagree, 5=strongly agree). Organizational turnover intention was measured with a three-item scale (Sjöberg & Sverke, 2000) in Italy and Sweden. The items, which were drawn from commonly used turnover scales (Camman et al., 1979; Lyons, 1971), evidenced reliability estimates around .70. Only one of the items (“I feel that I could leave this job”) was used in the Netherlands. This variable was not included in the Belgian survey. Union turnover intention was measured with three items in Italy and the Netherlands (e.g., “I would quit my union if I had a good alternative”). The scale,

which was developed by Sverke and Kuruville (1995), showed a reliability estimate of .75 in Italy and .68 in the Netherlands. The surveys in Belgium and Sweden included only one of these items.

Voice variables. Both voice variables focused on raising one's voice through participation in union activity. The measurement of union participation was based on two dichotomous items reflecting involvement in union activities and actions in the past six months (1=no, 2=yes). Both items were used in Italy (alpha=.72) and the Netherlands (alpha=.71), whereas the Belgian and Swedish data contained only one item respectively. The measurement of union participation intention was also conducted with slight differences between countries. Two items ("Would you want to become a representative?" and "Would you want to organize activities for a short while?") were used in Italy (alpha=.82) and the Netherlands (alpha=.80), while only the first of these was used in Belgium and Sweden. Responses were given on a scale ranging from 1 (certainly not) to 4 (certainly).

Loyalty variables. A short-form, five-item version of Allen and Meyer's (1990) affective commitment scale was used to measure organizational commitment. This variable showed adequate reliability in Italy (alpha=.88), the Netherlands (alpha=.78), and Sweden (alpha=.86), but was not included in Belgium. Union commitment was assessed using a short-form version of Sverke and Kuruville's (1995) measure of value-based commitment to the union, and a sample item is "My union means a great deal to me personally". Five items were used in Italy and Sweden, whereas only four of these were included in the Belgian and Dutch surveys. The reliability ranged from .74 (the Netherlands) to .86 (Sweden). For both loyalty variables the response scale ranged from 1 (strongly disagree) to 5 (strongly agree).

Methods of analysis

Analysis of variance (ANOVA) procedures were used to investigate whether the levels of exit, voice, and loyalty reactions differed across countries. Because the F test only detects overall mean level differences between samples, these analyses were followed-up with Bonferroni post-hoc tests to identify which of the four countries that differed from another.

To investigate the relationships of job insecurity with exit, voice, and loyalty reactions, we used the multi-sample regression procedures in Lisrel 8 (Jöreskog & Sörbom, 1993). These structural equation models were computed using maximum-likelihood estimation based on the variance/covariance matrices in each country. We first computed the effect of job insecurity on each exit, voice, and loyalty variable. In a second step, we tested for similarities of effect sizes across countries by constraining the regression coefficients to be equal over samples. A significant chi-square test between the saturated and the constrained

model indicates that the strength of the relation between insecurity and coping reaction differs between countries, whereas a non-significant chi-square signals that the magnitude of effect size generalizes over countries.

Results

Table 3 presents mean values in all study variables, and reports the ANOVA results of tests for mean level differences across countries. As can be seen from the table, the aggregate level of job insecurity was relatively low in all four samples, but there was a significant difference between countries. Whereas job insecurity was below 2 on the 5-point scale in Belgium and the Netherlands, it was somewhat higher in Sweden (2.08), and the Italian sample evidenced a mean value (2.63) that was significantly higher as compared to the remaining countries.

If we turn our attention to the first set of coping reactions of interest in the present study – exit – the results reveal that there were significant overall differences between countries in the propensity to leave both the organization and the union. Organizational turnover intention was significantly higher in Italy (2.70) and the Netherlands (2.85) as compared to Sweden (2.31). Thus, despite the fact that the level of job insecurity was lowest in the Dutch sample and highest in the Italian, these two countries evidenced similar levels of organizational turnover intention. Union turnover intention was highest in Belgium (2.98 on the 5-point scale) and lowest in Sweden (1.39), with Italy and the Netherlands in-between (2.34 and 2.41, respectively). These results also indicate that the intention to exit from the organization, on a general level, was stronger than the intention to exit from the union (even if the high level of union turnover intention obtained in the Belgian sample, because of lack of organizational data, could not be contrasted with organizational turnover intention).

In terms of voice, union participation was highest in Italy (1.68 on the 2-point scale) and substantially lower in Sweden (1.27), Belgium (1.20), and the Netherlands (1.15). The pattern for union participation intention followed a rather similar pattern. Also for this variable, the mean level was highest in the Italian sample (2.34 on the 4-point scale) and lowest in the Dutch sample (1.65), with the Belgian and Swedish samples in-between (1.95 and 1.80, respectively). Thus, raising one's voice by actively participating in union activities does not appear to be a particularly preferred option among union members in any of the samples but the Italian.

Table 3. ANOVA tests for mean differences.

Variable	Belgium	Italy	The Netherlands	Sweden	df	F	Post hoc ^a
Job insecurity	1.95	2.63	1.85	2.08	3,3562	44.44*	(B,I) (B,S) (I,N) (I,S) (N,S)
Exit variables							
Organizational turnover intention	–	2.70	2.85	2.31	2,2699	56.09*	(I,S) (N,S)
Union turnover intention	2.98	2.34	2.41	1.39	3,3562	600.70*	(B,I) (B,N) (B,S) (I,S) (N,S)
Voice variables							
Union participation	1.20	1.68	1.15	1.27	3,3562	121.96*	(B,I) (B,S) (I,N) (I,S) (N,S)
Union participation intention	1.95	2.34	1.65	1.80	3,3562	35.42*	(B,I) (B,N) (B,S) (I,N) (I,S) (N,S)
Loyalty variables							
Organizational commitment	–	3.08	3.52	2.53	2,2699	298.29*	(I,N) (I,S) (N,S)
Union commitment	2.62	3.77	2.78	2.74	3,3562	118.28*	(B,I) (B,N) (B,S) (I,N) (I,S)

– Not measured.

Scale range 1–5 for all variables but union participation (1–2) and union participation intention (1–4).

* $p < .05$.

^a Difference between countries in parenthesis is significant using the Bonferroni post-hoc test ($p < .05$).

There were overall mean level differences between countries in both loyalty variables. Organizational commitment was relatively high in the Netherlands (3.52 on the 5-point scale), medium in Italy (3.08), and rather low in Sweden (2.53), and all country comparisons were significant when the Bonferroni criterion was applied (note that this variable was not assessed in the Belgian survey). Members in the Italian sample expressed an average level of union commitment (3.77 on the 5-point scale) that was significantly higher than the other three samples. The levels of union commitment in the Netherlands (2.78) and Sweden (2.74) were almost identical and higher than that expressed by the union members surveyed in Belgium (2.62). These results thus indicate that union members in Italy and Sweden express more loyalty to their union than to the organization they work in (although the levels of both foci of commitment were substantively higher in Italy), while Dutch union members are more attached to their organization than to their union (again, the lack of organizational data prohibited comparisons among commitment types for Belgium).

The question then arises if the levels of exit, voice, and loyalty reactions covary systematically with that of job insecurity – and if the pattern of relationships is similar in different countries. Table 4 summarizes the results of the regression analyses and the tests for equalities of effect sizes across countries.

Job insecurity predicted organizational turnover intention in all three countries where this exit reaction was measured. The positive and significant relation obtained in Italy, the Netherlands, and Sweden indicates that the stronger the experience of job insecurity, the more prone the employee is to exit from the present employer. However, there were differences between the countries as reflected in the significant chi-square difference test. The moderate effect size in Italy (.37) was stronger as compared to the weak association between job insecurity and organization turnover intention in the Netherlands (.10) and Sweden (.09). A different pattern of results emerged for union turnover intention. Significant associations were detected in two countries and the chi-square test signaled differing relationships across countries. Whereas union members in Belgium and Italy were more inclined to withdraw from union membership in their attempts to redress perceptions of job insecurity, the two variables were unrelated in the Dutch and Swedish samples. These results imply that job insecurity, in general, is more likely to result in exit from the organization than from the union.

With respect to voice, job insecurity was unrelated to both union participation and union participation intention. This finding generalized across countries as reflected in the non-significant chi-square difference tests. The lack of significant effects of job insecurity on the two participation measures thus indicates that

voicing one's concerns through active involvement in union affairs does not appear to be a characteristic to job insecurity in any of the countries.

Table 4. Effects of job insecurity on exit, voice, and loyalty (standardized regression coefficients).

Variable	Belgium	Italy	The Netherlands	Sweden	df	χ^2 ^a
Exit variables						
Organizational turnover intention	–	.37*	.10*	.09*	2	21.56*
Union turnover intention	.08*	.20*	.02	.02	3	14.50*
Voice variables						
Union participation	-.05	.02	-.07	-.03	3	1.78
Union participation intention	-.01	.06	.06	.01	3	2.35
Loyalty variables						
Organizational commitment	–	-.16*	-.17*	.05	2	28.86*
Union commitment	-.00	-.14*	.06	.04	3	9.60*

– Not measured.

* $p < .05$.

^a A significant chi-square indicates that the magnitudes of effect size differ across countries.

The magnitudes of relationships between job insecurity and both loyalty variables differed significantly across countries as reflected in the significant chi-square tests. Job insecurity predicted organizational commitment in two countries (Italy and the Netherlands), and union commitment in only one country (Italy). The negative regression coefficients indicate that in these countries the level of commitment decreased with stronger perceptions of job insecurity. The results also suggest that decreased organizational loyalty appears to be a more typical response to job insecurity than decreased loyalty to the union.

Discussion

We opened this paper by observing that job insecurity has become an increasingly important feature of modern working life. Whereas previous research indicates that perceptions of job insecurity may have adverse consequences from both the occupational health and the managerial perspective (see Sverke et al., 2002, for meta-analysis results), very little is known in terms of consequences for union-related variables. By surveying union members from four European countries, we investigated how job insecurity relates to exit, voice, and loyalty reactions. We also raised the question if such reactions tend to affect primarily the employer or the union.

The results of the study indicate that job insecurity is related mainly to exit and loyalty reactions, but not to voice. In terms of exit, a striking pattern in our results concerns the association obtained between job insecurity and organizational turnover intention. Although the magnitudes of effect sizes differed across countries, there was a positive relation between job insecurity and the propensity to exit from the organization in all three countries where this relationship was investigated (i.e., Italy, the Netherlands, and Sweden). This finding replicates previous research which has found that the intention to leave the organization increases with the level of job insecurity (e.g., Arnold & Feldman, 1982; Brockner, 1988; Davy et al., 1997; Hellgren et al., 1999). Our results also expand previous research by indicating that job insecurity may have similar consequences for union turnover intention. Only a few studies have previously addressed this issue, and typically concluded that job insecurity is positively related to union membership (e.g., Bender & Sloane, 1999; Iverson, 1996). In our data, job insecurity was associated with a propensity to exit from membership in two of the four countries (i.e., Belgium and Italy).

With respect to loyalty, our results generally confirm the notion that job insecurity may lead employees to diminish their loyalty to the organization. Consistent with a large body of research that has uncovered a negative relationship between job insecurity and organizational commitment (e.g., Davy et al., 1997; Hartley et al., 1991; Yousef, 1998), we found job insecurity to predict reduced organizational commitment in two of the countries where this relationship was tested (Italy and the Netherlands). In contrast to this, we found a negative relationship between job insecurity and union commitment in only one of the four countries (Italy). Although research on job insecurity and union attitudes is scarce, a few studies indicate that union loyalty is higher in the absence of job insecurity (e.g., Iverson & Kuruvilla, 1995). Whereas the Italian data provides support for this view, the results for the remaining three countries suggest that job insecurity is unrelated to union commitment.

A notable finding of the present study concerns the absence of effects on voice. In neither of the countries was job insecurity associated with the two

indicators of union participation. Previous research has found job insecurity to predict individualized forms of voice, such as protest against organizational restructuring (Shaw, Fields, Thacker & Fisher, 1993; Sverke & Hellgren, 2001), but the effects on collective voice through member participation in union activity have hardly been addressed. Although research on union participation has concluded that dissatisfaction with work characteristics is an important factor for members' active involvement (Barling et al., 1992; Klandermans, 1996), members' decisions to take part in union activity are also shaped by numerous other factors (Gallagher & Strauss, 1991; Sverke, 1996). The very nature of unions is to provide a forum for collectively voicing members' concerns (Freeman & Medoff, 1984; Heller et al., 1998). A plausible explanation for the absence of relations between job insecurity and union participation in the present study is that members simply count on their unions to restore employment security without themselves taking active part in these efforts.

Let us return to the question whether job insecurity primarily has consequences for management or for unions. Consistent with previous research (e.g., Hartley et al, 1991; Sverke et al., 2002), our data clearly suggest that job insecurity tends to affect the employing organization. Insecure workers typically express less loyalty to their organization and are more inclined to exit from it. The fact that these results were obtained in different countries and in samples with varying levels of job insecurity lend credibility to this conclusion. The only exception to this uniform pattern of results is represented by the absence of a significant association between job insecurity and organizational commitment in Sweden.

In contrast, the pattern of results is not as unequivocal when it comes to consequences for unions. The fact that job insecurity was unrelated to union exit in two countries (the Netherlands and Sweden), and to union loyalty in three countries (Belgium, the Netherlands, and Sweden), could be taken to suggest that worries of job loss have only marginal impact on members' attitudinal and behavioral orientations to their unions. On the other hand, job insecurity was associated with reduced union commitment and a stronger inclination to withdraw from union membership in the sample where the level of job insecurity was the highest (i.e., Italy). Whereas this finding could indicate that union-related variables are negatively affected only when job insecurity is a major concern of the workers (as expressed in higher levels of worries of job loss), the absence of significant effects in the sample with the second highest level of job insecurity (Sweden) partly mitigates the plausibility of this explanation.

An alternative explanation would be that characteristics of the national industrial relations system explain whether members retaliate against their employer or their union when they experience job insecurity. For instance, the lack of union exit and loyalty effects in Sweden could be a result of the

harmonious union-management climate and the high degree of unionization. Along similar lines, the characteristics of Italy – a relatively low union density rate and an industrial relations climate fraught with conflict – could explain why the Italian workers were more inclined to respond with exit and loss of loyalty when they experienced job insecurity. However, this explanation is contradicted by the observation that union variables were unaffected in the country with the lowest unionization rate (the Netherlands) and the fact that job insecurity was related to union turnover intention in the country with the second highest proportion of unionized workers (Belgium).

Yet another potential explanation to our findings concerns labor market characteristics. The effects of job insecurity on union variables were more pronounced in the countries with the highest unemployment rates (Belgium and Italy). Clearly, a high level of national unemployment would increase the difficulties of finding alternative jobs and thus make perceptions of job insecurity especially burdensome (Hartley et al., 1991). However, whereas this might explain why insecure workers in Belgium and Italy expressed more negative reactions toward their unions, this explanation is partly contradicted by the strong relationship between job insecurity and organizational turnover intention in Italy. Moreover, following Hirschman's (1970) reasoning, if exit is costly then increased loyalty would be a natural option for employees to restore employment uncertainty – by supporting the employer and putting in extra effort at work employees have the opportunity to prove that they are valuable to the organization (Sverke & Hellgren, 2001).

A perhaps more convincing explanation to the findings of the present study focuses on members' judgments of the performance of the union. For instance, it has been shown that positive evaluations of union performance typically make members embrace more positive views of their union and to express more loyalty to it (Johnson & Johnson, 1992). As suggested by Mellor (1992), it could be that members' perceptions of their unions are negatively affected only when they attribute the dissatisfying employment situation to the unions. According to this view, only to the extent members hold the union responsible for the experience of job insecurity, they would respond with reduced loyalty and be more inclined to exit from the union. Hence, it could be that union membership serves as a collective source of support which protects members from both job insecurity and the adverse consequences of it (Dekker & Schaufeli, 1995; Hellgren & Sverke, 2001), something which is also apparent from the observation that job insecurity typically make workers more inclined to unionize (Bender & Sloane, 1999).

Given the turbulence on the labor market scene in most industrialized countries, job insecurity will continue to take its toll on employees as a consequence of organizational restructuring, layoffs, and more flexible

employment relations (Burke & Nelson, 1998). Although the cross-sectional nature of our data warrants some caution in drawing causal inferences, the similarity of findings across countries with respect to organizational consequences of job insecurity have an obvious managerial implication. A workforce plagued with impaired organizational loyalty and a stronger inclination to turnover from the job cannot reverse decline and make their organization more effective (Hartley et al., 1991; Sverke et al., 2002). Even if the pattern of results was not as uniform when it comes to union-related consequences of job insecurity, the implication for union is that members' perceptions of job insecurity can result in loss of loyalty and diminished membership numbers. The challenge for unions, when corporate decline forces unions to work together with management and employment security becomes less characteristic of working life, is to continue protecting members' interests and to provide alternative ways to handle market demands and pressures from corporate competition.

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Appendix

Table A1. Variable intercorrelations.

Variable	1	2	3	4	5	6	7
Belgium							
1. Job insecurity	1						
2. Organizational turnover intention	–	–					
3. Union turnover intention	.08*	–	1				
4. Union participation	-.05	–	-.15*	1			
5. Union participation intention	-.01	–	-.19*	.30*	1		
6. Organizational commitment	–	–	–	–	–	–	
7. Union commitment	-.00	–	-.37*	.17	.39*	–	1
Italy							
1. Job insecurity	1						
2. Organizational turnover intention	.37*	1					
3. Union turnover intention	.20*	.16*	1				
4. Union participation	.02	-.05	-.19*	1			
5. Union participation intention	-.11	.03	-.23*	.53*	1		
6. Organizational commitment	-.16*	-.46*	.02	.04	-.09	1	
7. Union commitment	-.14*	-.13*	-.37*	.31*	.42*	.14*	1
The Netherlands							
1. Job insecurity	1						
2. Organizational turnover intention	.10*	1					
3. Union turnover intention	.02	.19*	1				
4. Union participation	-.07	.00	.00	1			
5. Union participation intention	-.03	.08	-.14*	.21*	1		
6. Organizational commitment	-.17*	-.37*	-.12*	.10*	-.02	1	
7. Union commitment	.06	-.15*	-.43*	.02	.29*	.21*	1
Sweden							
1. Job insecurity	1						
2. Organizational turnover intention	.09*	1					
3. Union turnover intention	.02	.21*	1				
4. Union participation	-.03	-.02	-.17*	1			
5. Union participation intention	.00	.01	-.22*	.41*	1		
6. Organizational commitment	.05	-.41*	-.15*	.10*	.18*	1	
7. Union commitment	.04	-.18*	-.36*	.35*	.56*	.48*	1

* $p < .05$.

– Not measured.

Contingent work and labor union membership turnover: A study among union members in four European countries

Sjoerd Goslinga

Magnus Sverke

Antonio Chirumbolo

Hans DeWitte

Johnny Hellgren

Katharina Näswall

Introduction

In the past decades, both part-time employment and temporary employment have grown substantially in almost all industrialized countries. The proportion of part-time employment saw a high increase in Australia, Belgium, France, Ireland and The Netherlands between 1986 and 1995, while a more modest increase in part-time employment is found in Canada, Italy, Japan, Luxembourg, the United States and the United Kingdom. Only in a few countries the proportion of part-time work was relatively stable, and these are all countries in which the proportion of part-time work was already high (Denmark, Norway and Sweden) (Delsen, 1995; 1998). In 1995 the proportion of part-time work varied from over 20% in Japan, Denmark, Sweden, Norway, The Netherlands, Australia, and the United Kingdom, between 10% and 20% in Belgium, Canada, France, Germany, Ireland, and the United States, to less than 10% in Greece, Italy, Luxembourg, and Portugal (Delsen, 1998). In most of these countries temporary work increased too. A high proportion of temporary employment (around 15% or higher) now is found in Australia, Greece, Portugal and Spain. In Denmark, Finland, France and Japan the proportion of temporary work ranges between 10% and 15%, and in Belgium, Germany, Ireland, Italy, The Netherlands, Sweden, Turkey and the U.K. the proportion of temporary work is 5% to 10% (Delsen, 1995).

The growth of alternative employment types has raised concerns about the existing theoretical and empirical literature in industrial and organizational psychology (Feldman & Doeringhaus, 1992; Barling & Gallagher, 1996; Gallagher & McLean Parks, 2001). The generalizability of empirical findings was questioned, since almost all research used full-time, life long employed subjects. Part-timers have been labeled the ‘missing persons’ in I/O psychology (Rotchford & Roberts, 1982) and the same could have been said of temporary workers. In the 1980s and 1990s studies started to focus on differences between full-timers and part-timers and, to a lesser extent, on differences between

permanent and temporary workers. Most of this work examined differences in job attitudes, such as job satisfaction and organizational commitment (e.g., McGinnis & Morrow, 1990; Steffy & Jones, 1990; Lee & Johnson, 1991; Ellingson, Gruys & Sackett, 1998).

With few exceptions, also studies of union attitudes and union participation have been limited to samples of permanent and full-time employed union members. Even when more heterogeneous samples were investigated, no attention has been given to possible differences between union members with different contracts or employment status. Consequently, it is not clear whether the results obtained with these studies generalize to contingent and part-time employed union members (Barling & Gallagher, 1996). Moreover, the few studies that examined differences between full-timers and part-timers were all limited to a comparison of union commitment levels and showed somewhat mixed results. For instance, Gallagher, Tansky & Wetzel (1997) found higher levels of union commitment among full-timers, and so did Martin and Peterson (1987). In contrast, Morishima (1988) found the opposite, that is, in his study part-timers displayed higher levels of union commitment than full-timers. Importantly, the differences between full-timers and part-timers in these studies decreased substantially or disappeared when the analyses were controlled for work characteristics and demographics (Sherer & Morishima, 1989; Gallagher *et al.*, 1997). Whether differences exist between full-timers and part-timers in other union related attitudes and in union related behaviors remains a question. Moreover, studies examining differences between permanent and contingent workers appear to be non-existent in the literature.

The purpose of this paper is to examine more extensively whether differences exist in union attitudes and union participation between full-time and part-time employed union members and between union members who have an ongoing contract and union members who have a temporary contract. Unions depend to a large extent upon the number of members and the voluntary participation of members in the union organization and in union activities. Hence, our focus will be on union attitudes that are relevant for union participation and union turnover.

Atypical workers and trade unions

It is not very surprising that most research on union participation and union attitudes used 'traditional' employees, and neglected employees in 'new' types of employment, because among union members even less non-traditional employment is found than among the workforce as a whole in most countries. In the United States, Canada, Australia, Japan and all European countries union density among part-timers and among temporary workers is lower than among their full-time and permanently employed counterparts. These differences are less

pronounced in countries with extremely high unionization rates, such as Sweden and Finland (Barling & Gallagher, 1996; Delsen, 1995).

One reason for the under-representation of atypical workers that has been suggested is that employees with a non-traditional employment contract are more difficult to organize for unions (Gallagher & Sverke, 2000). A second reason for the lower union density rates among atypical workers might be that unions in many countries have been reluctant to accept new employment types. Delsen (1995, p. 94) remarks that “Unions have frequently assumed that atypical employment is used as a ‘buffer’ to cushion economic downturns and, therefore, implies high risks of job loss and subsequent unemployment”. The aim of unions for secure jobs led them to prevent the growth of temporary employment. Part-time work was initially opposed too, because many part-time jobs were also temporary jobs or provided less job security. Moreover, many part-time jobs offered less in terms of fringe benefits, responsibility and challenge in the work itself (see also Feldman, 1990). Unions saw the growth of part-time jobs as a threat to the growth of full-time employment and feared that the growth of part-time employment would slow down the trend towards an overall reduction of working time (Delsen, 1995; Barling & Gallagher, 1996).

The growth of alternative employment arrangements has important consequences for trade unions. In order for unions to maintain or strengthen their position it seems crucial that unions attract and retain members from the growing groups of atypical workers (Visser, 1994). Many unions do now accept part-time work when the choice for part-time work is voluntary and there is an ongoing contract. Unions have recognized that part-time work is an important employment opportunity for especially younger and female workers. At this point it is not clear how unions and their leadership will respond to the growth of contingent or temporary jobs and what strategies they will utilize (Gallagher & Sverke, 2000). However, unions (still) have a hard time organizing and retaining both part-timers and temporary employees. Atypical workers are more reluctant to join a union and, when they become members, quit their membership more often than traditional workers (Hartley, 1994; Van den Putte, 1995).

Union attitudes and union turnover

For the present study we expect differences in union attitudes between full-timers and part-timers and between permanent and temporary workers. First of all, because of the way unions have looked upon atypical work and their reluctance to accept atypical workers as members. This has resulted in a lack of services explicitly developed for and directed at atypical workers. In addition, the aim for a reduction of atypical jobs meant not much priority was given in collective bargaining for improvement of working conditions, job security, fringe benefits, etc. for atypical workers (see Delsen, 1995). Therefore, it seems that membership

is in several ways less rewarding for atypical workers than it is for traditional workers. Hence, we expect part-timers and temporary workers to have less positive experiences with their union.

Experiences with the union are reflected in several attitudes toward the union and toward the union's performance. From previous work we selected a number of union attitudes that appear to influence union participation and union turnover: union commitment, union support, union instrumentality and union satisfaction. In addition, we expand previous union participation models by examining another attitude: trust in the union.

Union commitment is the most widely studied union attitude and the importance of union commitment for union participation is well documented (see Barling, Fullagar & Kelloway, 1992). Several conceptualizations of union commitment can be found in the literature (e.g., Gordon *et al.*, 1980; Sverke & Kuruvilla, 1995). Union commitment refers to members' psychological attachment to their union based upon an identification with its goals and values and an appreciation of the services that it provides (Gordon *et al.*, 1980; Sverke & Kuruvilla, 1995). The present study utilizes a measure of commitment as the affective bond between individual members and their union. This conceptualization is based on Meyer and Allen's (1990) affective organizational (company) commitment and is similar to Gordon *et al.*'s (1980) 'loyalty' factor of union commitment, and to Sverke and Kuruvilla's (1995) 'value-based' union commitment. Affective commitment is generally viewed as one of the most important intermediate factors between experiences with the union organization and behaviors of individual members. Stronger affective commitment promotes different types of participation, such as holding a representative position, attendance of union meetings, etc. (see Barling, *et al.*, 1992), and is negatively related to union turnover intentions (Klandermans, 1989; Sverke & Sjöberg, 1995).

Union support captures the extent to which members feel they can call upon their union whenever they have a question or problem at work and the feeling their union cares about their well-being (cf. Shore *et al.*, 1994). The ideas about union support stem from a social exchange perspective on the relationship between members and their organization (e.g., Eisenberger *et al.*, 1986; 1990). Members will be more supportive of the organization to the extent that they perceive that the organization supports them. Research among union members has found positive relationships between members' perceived union support and union commitment (Goslinga, 1996; Sinclair & Tetrick, 1996), different types of union participation (Aryee & Chay, 2001) and the intention to remain in the union (Goslinga, 1996).

Like organizational trust (cf. Cummings & Bromiley, 1996), union trust reflects the extent to which union members perceive that their union treats them

fair and is honest. Trust is central to the effective and efficient functioning of organizations (see Tyler & Kramer, 1996) and is especially important for the permanence of exchange relationships, because it allows parties (more) time to reciprocate. Although the role of trust has never before been studied within the context of trade unions, we expect that the perceived trustworthiness of the union has important implications for sustained membership participation.

Union instrumentality reflects whether union members believe their union can (help) improve their work, working conditions, fringe benefits, etc. (cf. Newton & Shore, 1992; Sverke & Kuruvilla, 1995). Union instrumentality is especially important for the decision to join a union (Hartley, 1992), but is also related to union turnover intentions (Sverke & Sjöberg, 1995).

Union satisfaction is a more general attitude and can be defined as “an outcome of the extent to which members perceive their union to be meeting their needs” (Barling *et al.*, 1992, p. 166). Union satisfaction, in other words, is an evaluative construct reflecting members’ contentment with union representation and performance (Fiorito, Gallagher & Fukami, 1988; Kuruvilla, Gallagher & Wetzel, 1993). Union satisfaction can be empirically distinguished from union commitment (Kuruvilla *et al.*, 1993) and research shows that union satisfaction contributes to the explanation of union turnover intentions over and above union commitment (Klandermans, 1989).

In all these attitudes, the performance of the union and the perceived benefits of union membership are manifested. Consequently, all these attitudes will affect the decision of individual union members to continue or discontinue union membership. Since we expect less positive union attitudes among atypical employed union members as compared to traditional employed union members, it follows that we also expect a higher turnover intention among part-timers and temporary workers. This is in line with the preliminary evidence that atypical workers quit union membership more often than traditional workers (Van den Putte, 1995). However, we assume that a difference in turnover intentions is the outcome of a difference in union attitudes. This implies that when we take union attitudes into account no direct effect of employment status nor contract type on union turnover intentions will emerge.

These expectations will be examined in three samples of union members from three different countries (The Netherlands, Italy and Sweden). Although there might be differences between countries in the (changes in the) volume of atypical work as well as union policies regarding atypical work, we do not specify hypotheses about differences between countries. Rather, we expect that our expectations concerning differences between traditional and atypical workers will hold true in the different countries.

Method

Participants and procedures

The Netherlands. Data were collected within a longitudinal panel-survey among members of the largest trade unions affiliated with the National Christian Trade Union Federation, the CNV. Among these unions are six public sector unions and three private sector unions. Data came from one wave of the panel survey, and were collected in the summer of 1999. Members were interviewed by telephone. The response rate was 50% (N = 799). The sample was limited to members with a paid job (N = 611). The majority of the respondents were male (72.5%). The mean age was 42.8 years, ranging between 16 and 79 years, and the average length of union membership 14.3 years, ranging between 0 and 50 years. Most members had a full-time job (79.7%) and 10.5% were temporary workers.

Italy. For this study data were collected from May to July 2000. Questionnaires were administered to 476 employees, mainly in small groups and at their workplace. For the present study the sample was limited to union members (N = 296). The majority of respondents were males (68.7%), and their age ranged from 22 to 59 years (M = 40.6). The majority had a full-time job (93.5%) and 7.5% had a temporary job. On average, participants had their current job for 14.9 years (ranging from less than a year to 37 years).

Sweden. Data were taken from a national sample of blue-collar workers from the Swedish Municipal Workers Union (Kommunal) affiliated with the Swedish Trade Union Confederation (LO). The sample was randomly selected from a total population of 370,590 members. Questionnaires were sent out to 2,564 workers, and a total of 1,923 usable questionnaires were returned (a response rate of 75%). Cases with one or more missing values in the dataset were excluded, resulting in a sample size of 1611 union members. The mean age of the respondents was 45 years, ranging between 19 and 75 years. Average length of membership in the union ranged from 1 to 45 years (M = 16.4). The majority of the sample were female (78.0%). All respondents had a paid job. Half of them were employed full-time (46.9%) and 7.3% were temporary workers. Organizational tenure ranged from 1 to 45 years (M = 14.3).

Measures

Union Commitment. Union commitment was measured with four items. The items were drawn from Goslinga's (2001) adaptation of Meyer, Allen, and Smith's (1993) affective organizational commitment scale and from Sverke and Kuruvilla's (1995) value-based union commitment scale (e.g., "I feel a strong sense of belonging to my union"). The response alternatives ranged from (1) strongly disagree to (5) strongly agree, a high score indicating strong commitment.

Union Support. A 5-item adaptation of Shore et al.'s (1994) perceived union support scale was used in both the Netherlands and Italy (e.g., "I can always call upon my union with questions or problems"). Response options were on a 5-point scale that ranged from (1) strongly disagree to (5) strongly agree, such that a high score indicates high perceived union support. Previous research with this measure in the Netherlands yielded a good reliability for the scale (Goslinga, 1996). In Sweden union support was measured with four of the five items used in Italy and The Netherlands, with the same response options.

Union Trust. A four-item scale was developed to measure union trust. The items were based on the Organizational Trust Inventory (Cummings & Bromiley, 1996) (e.g., "I feel my union treats me fair"). The response alternatives ranged from (1) strongly disagree to (5) strongly agree, high scores indicating high perceptions of union trust.

Union Instrumentality. A 6-item version of Sverke and Kuruvilla's (1995) union instrumentality scale was used in all three countries (e.g., "My union's chances of improving my pay are great"). Again, response options ranged from (1) strongly disagree to (5) strongly agree.

Union Satisfaction. A four-item scale was used to measure union satisfaction in both the Dutch and Swedish questionnaires (e.g., "How satisfied are you with your union?", "How satisfied are you with union policies?"). One of the items ("How satisfied are you with the services provided to individual members") was not included in the Italian questionnaire. Answers were scored on a 5-point scale, that ranged from (1) very dissatisfied to (5) very satisfied.

Union Membership Turnover. Members' intention to leave their union was assessed in two different ways. The Dutch and Italian data sets used a three-item scale (e.g., "I sometimes consider quitting my union membership") with response alternatives ranging from (1) strongly disagree to (5) strongly agree. A single item was used in Sweden ("I have considered quitting my union membership in the past six months"), using the same response format.

Scale reliabilities

Almost all scales had good reliabilities (Cronbach's alpha above .70) (Table 1). Exceptions were the union turnover measure and union satisfaction measure in The Netherlands (Cronbach's alphas .68 and .66) and the union support measure in Italy (Cronbach's alpha = .59). However, scale reliabilities did not improve when one or more items were removed from these scales. For that reason, and in order to secure comparability between the different samples, the scales were not changed.

Results

Means, standard deviations and intercorrelations of the dependent variables are reported in Table 1. The intercorrelations between union trust, union support, union instrumentality, union satisfaction, union commitment and union turnover intention were significant in all three samples. The correlations between union trust, union support, union instrumentality, union satisfaction and union commitment were all positive and ranged between .21 (the correlation between union satisfaction and union commitment in the Italian sample) and .81 (the correlation between union trust and union support in the Swedish sample). In all three samples the associations between these union attitudes and union turnover intention were negative and ranged between -.28 (the correlation between union instrumentality and union turnover intention in the Dutch sample) and -.49 (the correlation between union commitment and union turnover intention in the Dutch sample).

Comparison of means

T-tests were conducted in order to compare the mean scores on union attitudes and union turnover intention between full-timers and part-timers and between permanent and temporary employed workers. This was done separately for each country.

In the Dutch sample, differences emerged between full-timers and part-timers on both union satisfaction and union turnover intention (Table 2). There existed a significantly higher level of union satisfaction among part-timers ($M = 3.81$) compared to full-timers ($M = 3.66$). Moreover, full-timers reported higher levels of union turnover intention ($M = 2.45$) than did part-timers ($M = 2.25$). In the Italian sample only one significant difference was found between full-timers and part-timers; part-timers reported lower levels of union instrumentality ($M = 2.19$) than did full-timers ($M = 3.15$). In the Swedish data there existed a difference in union turnover intention between full-timers and part-timers. Full-timers reported higher levels of turnover intention ($M = 2.33$) than did part-timers ($M = 2.18$).

Table 1. Means, standard deviations and intercorrelations.

	<i>M</i>	<i>SD</i>	α	Correlations				
				1	2	3	4	5
The Netherlands (N = 611)								
1. Union Trust	3.75	.48	.82					
2. Perceived Union Support	3.67	.47	.72	.58***				
3. Union Instrumentality	2.92	.56	.73	.36***	.34***			
4. Union Satisfaction	3.69	.55	.66	.53***	.54***	.45***		
5. Union Commitment	2.78	.75	.84	.45***	.43***	.44***	.44***	
6. Union Turnover Intention	2.41	.73	.68	-.42***	-.41***	-.28***	-.49***	-.43***
Italy (N=234)								
1. Union Trust	3.54	.90	.85					
2. Perceived Union Support	3.36	.74	.59	.63***				
3. Union Instrumentality	3.09	.95	.88	.47***	.36***			
4. Union Satisfaction	2.63	.88	.87	.62***	.46***	.49***		
5. Union Commitment	3.66	.92	.80	.42***	.34***	.31***	.21**	
6. Union Turnover Intention	2.33	1.16	.74	-.48***	-.44***	-.29***	-.46***	-.38***
Sweden (N=1611)								
1. Union Trust	3.13	.90	.88					
2. Perceived Union Support	2.59	.97	.72	.81***				
3. Union Instrumentality	2.83	.86	.87	.70***	.65***			
4. Union Satisfaction	3.07	.86	.87	.73***	.70***	.63***		
5. Union Commitment	3.20	.82	.85	.72***	.65***	.72***	.62***	
6. Union Turnover Intention	2.26	1.42	-	-.47***	-.47***	-.39***	-.48***	-.38***

* $p < .05$; ** $p < .01$; *** $p < .001$

The comparison between permanent and temporary workers yielded two significant differences in the Dutch sample, but none in the Italian and Swedish samples. In the Dutch sample, union instrumentality was found to be significantly higher among temporary workers ($M = 3.08$) than among permanent workers ($M = 2.90$) and union turnover intention was significantly higher among permanent workers ($M = 2.43$) than among temporary workers ($M = 2.26$).

Table 2. Comparison of means.

	Union Trust	Perceived Union Support	Union Instrumentality	Union Satisfaction	Union Commitment	Union Turnover Intention
The Netherlands (N = 611)						
full-time	3.76	3.67	2.91	3.66	2.80	2.45
part-time	3.71	3.65	2.96	3.81	2.72	2.25
t-value	1.08	0.57	-0.77	-2.80**	0.98	3.23**
permanent	3.74	3.66	2.90	3.68	2.78	2.43
temporary	3.83	3.73	3.08	3.75	2.83	2.26
t-value	-1.40	-1.11	-2.45*	-1.26	-0.55	2.09*
Italy (N = 234)						
full-time	3.57	3.37	3.15	2.65	3.68	2.32
part-time	3.03	3.23	2.19	2.46	3.28	2.56
t-value	1.66	0.76	4.06***	0.83	1.44	-0.61
permanent	3.54	3.37	3.09	2.63	3.67	2.33
temporary	3.45	3.27	3.09	2.73	3.40	2.33
t-value	0.36	0.51	0.01	-0.45	1.11	-0.01
Sweden (N = 1611)						
full-time	3.14	3.19	2.82	3.05	2.64	2.33
part-time	3.12	3.20	2.84	3.08	2.55	2.18
t-value	0.45	-0.22	-0.59	-0.63	1.97	2.20*
permanent	3.13	3.20	2.82	3.07	2.60	2.26
temporary	3.13	3.18	2.93	3.03	2.44	2.10
t-value	0.01	0.15	-1.22	0.46	1.77	1.28

* $p < .05$; ** $p < .01$; *** $p < .001$

Predicting union turnover

Next, regression analyses were conducted with union turnover intention as the dependent variable. The variables were entered in two steps: first, the demographic and work characteristics (age, sex, full-vs. part-time work and permanent vs. temporary work) were entered. Thus, we examined the effect of employment type on union turnover when age and sex were controlled for. In the second step, the union attitudes (union trust, union support, union instrumentality, union satisfaction, and union commitment) were entered. Again, the analyses were conducted separately for each of the three countries (Table 3).

Table 3. Results of hierarchical regression analyses of union turnover intention on antecedents.

	The Netherlands		Italy		Sweden	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Step 1						
Age	-.11*	-.07	.04	-.04	-.01	.03
Sex	.00	-.03	-.04	.05	-.07*	.00
Part-time work	-.10*	-.08*	.03	-.04	-.03	-.06*
Temporary work	-.09*	-.05	.00	-.01	-.02	-.02
Step 2						
Union Trust		-.13**		-.15		-.13**
Union Support		-.10*		-.18*		-.17***
Union Instrumentality		-.01		.02		-.02
Union Satisfaction		-.27***		-.27***		-.24***
Union Commitment		-.21***		-.20**		-.03
<i>F</i>	4.30**	33.72***	0.18	12.88***	2.85*	65.30***
d.f.	4, 606	9, 601	4, 228	9, 223	4, 1591	9, 1586
<i>R</i> ²	.03	.34	.00	.34	.01	.28

* $p < .05$; ** $p < .01$; *** $p < .001$

In the first step, significant main effects of age, full- versus part-time work as well as permanent versus temporary work were found in the Dutch sample. Turnover intention decreased with age and was higher among full-timers and permanent workers. In the Italian sample, neither age and sex nor the employment type variables had significant beta-weights. In the Swedish sample, only sex had a significant beta-weight, indicating that women had a higher turnover intention than men.

Adding union trust, union support, union instrumentality, union satisfaction and union commitment to the regression equations showed significant main effects of union support and union satisfaction in all three samples. Furthermore, in all three samples the effect of union instrumentality was insignificant. The effect of union trust was not significant in the Italian sample, but had significant beta-weights in the Dutch as well as the Swedish sample. Union commitment had a significant beta-weight in both the Dutch and the Italian sample. In the Swedish sample, however, the effect of union commitment was not significant. When members had more trust in their union, perceived more support from their union, were more satisfied with their union and felt more committed to their union, the less they were inclined to quit their membership.

In the Dutch sample, the beta-weights of age and employment contract (permanent versus temporary) became non-significant after inclusion of the union attitudes. The effect of employment status (full-time versus part-time) was not affected. In the Italian sample, neither the effects of the demographic variables nor the effects of the employment type variables changed. The effect of sex was non-significant after entering the attitudes in the Swedish sample. At the same time, the beta-weight of employment status (full-time versus part-time) became significant, indicating that part-timers have lower intentions to leave their union when the analysis also considers union attitudes. With all predictors entered, the models explained between 28% (Sweden) and 34% (both the Netherlands and Italy) of the variance in union turnover intention.

Discussion

The main issue of the present study was whether differences exist in union attitudes and in union turnover intentions between full-time and part-time as well as between permanent and contingent employed union members. There has been a paucity of research on differences in the experience of union membership between traditional and atypical employed union members (Barling & Gallagher, 1996). Because both part-time work and temporary work are growing, and both part-timers and temporary workers are under-represented in trade unions, unions could benefit from attracting and retaining atypical workers as members. However, unions in many countries have had difficulty both attracting and retaining members from these groups of employees.

Using three samples of union members from three European countries, the present study examined differences in union attitudes and union turnover intentions between full-time and part-time employed union members as well as between permanent and temporary employed union members. Based on what is known about union policy toward atypical work and the few previous empirical studies on differences between full-time and part-time employed union members,

we expected atypical workers to have less positive union attitudes and a stronger union turnover intention than traditional workers.

The results showed only few differences in union attitudes between full-time and part-time employed union members. When differences were found, the results were not consistent in the three countries included in the study. In line with expectations, in the Italian sample higher levels of union instrumentality were found among full-timers than among part-timers. However, contrary to expectations, in the Dutch sample part-timers displayed a higher level of union satisfaction than full-timers. In the Swedish sample no differences in union attitudes between full-timers and part-timers emerged. As far as union commitment, and specifically the affective bond between members and their union, is concerned, the absence of important differences between full-time and part-time employed union members is consistent with previous research (Gallagher *et al.*, 1997).

Even less differences in union attitudes were found between permanent and temporary employed union members. While more positive union attitudes were expected among permanent workers, in the Dutch sample temporary workers reported a higher level of union instrumentality than permanent workers. In both the Italian and Swedish samples no differences in union attitudes between permanent and temporary workers were found. Thus, the results suggest that both employment status (full-time versus part-time) and contract type (permanent versus temporary) have very limited effects on union attitudes. Thereby, the present study expands previous research by demonstrating that no important differences exist between traditional and atypical workers in a whole range of union attitudes.

The results further revealed that union turnover intention was not higher among atypical workers than among traditional workers. In the Dutch sample, full-timers as well as permanent employed workers were found to have a somewhat higher union turnover intention than part-timers and contingent workers. However, when the analyses also considered demographics and union attitudes, the effect of contract type on union turnover intention became non-significant in the Dutch sample. In the Swedish sample, full-timers displayed higher levels of turnover intention than part-timers, while no difference in union turnover intention between permanent and temporary workers was found. No differences between traditional and atypical workers were observed in the Italian sample. Thus, in both the Dutch and Swedish samples, small effects of employment status on union turnover intention were found, when the analysis was controlled for age, sex and union attitudes. Contrary to what was expected, however, full-timers displayed higher levels of turnover intention than part-timers.

Previous studies have provided some preliminary evidence that the lower union density among atypical workers is caused by lower entry-rates as well as by higher exit-rates (Hartley, 1994; Van den Putte, 1995). Nevertheless, in the present study we found no differences in union turnover intention between permanent and temporary workers in all three countries and a higher turnover intention among full-timers compared to part-timers in two countries. A potential explanation to these results is that perhaps exit-behavior of atypical workers is (now) less of a problem than suggested in previous studies. The present results indicate that once atypical workers have joined they are (at least) as willing to remain members as traditional workers. It is also possible that only specific groups of atypical workers choose to become and remain union members. Within the broad category of non-traditional employment numerous differences exist that determine the relationship and psychological contract between individual employees and the organization (McLean Parks, Kidder & Gallagher, 1998). Future research on atypical work and unions could benefit from taking into consideration the differences that might exist within the category of atypical employment.

The present findings also expand our understanding of union membership turnover. Although for unions probably the most important type of membership behavior, union turnover has been neglected in the union participation literature (Aryee & Chay, 2001). In our study, union attitudes explained a substantial part of the differences in union turnover intention in all three countries. Both union support and union satisfaction were found to affect union turnover intention in all three samples. A factor that had not been considered in previous research, but that has been given attention in relation to employee behavior (cf. Cummings & Bromiley, 1996) – trust in the organization – appears to be of importance for union turnover as well. In both the Dutch and Swedish samples, union trust contributed to the explanation of differences in union turnover intention independently of demographics, employment type and other union attitudes. Union commitment also affected union turnover intention in both the Dutch and Italian samples, but in the Swedish sample no main effect of union commitment on union turnover intention was found. Consistent across the three samples was the finding that union instrumentality did not directly affect union turnover intention.

Thus, it appears that the way the union treats individual members and handles the relationship between members and the union is extremely important for sustained participation. The more tangible benefits of union membership, as reflected in union instrumentality, seem to be less important for the decision to continue or discontinue membership. Most importantly, this conclusion appears to be valid for irrespective of the employment status of the union member.

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