Report No 1:2006

# Job insecurity A literature review

Magnus Sverke Johnny Hellgren Katharina Näswall



SALTSA — 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.

It is becoming increasingly obvious that long-term solutions must be based on experience in and research on matters relating to working life. SALTSA conducts problemoriented research in the areas labour market, employment, organisation of work and work environment and health.

SALTSA collaborates with international research institutes and has close contacts with industry, institutions and organisations in Europe, thus linking its research to practical working conditions.

#### Contact SALTSA

Lars Magnusson, National Institute for Working Life, Tel: +46 8 619 67 18, e-mail: lars.magnusson@arbetslivsinstitutet.se

Torbjörn Strandberg, LO, Tel: +46 8 796 25 63, e-mail: torbjorn.strandberg@lo.se Mats Essemyr, TCO, Tel: +46 8 782 92 72, e-mail: mats.essemyr@tco.se Charlotta Krafft, SACO, Tel: +46 8 613 48 62, e-mail: charlotta.krafft@saco.se

© National Institute for Working Life and authors 2006 SE-113 91 Stockholm, Sweden Tel: (+46) 8-619 67 00, fax: (+46) 8-656 30 25 Web: www.arbetslivsinstitutet.se/saltsa Printed at Elanders Gotab ISSN: 1404-790X

## Contents

The authors	2
The changing nature of work	3
The nature and measurement of job insecurity	4
Antecedents of job insecurity experiences	9
Consequences of job insecurity	11
Can the negative consequences of insecurity be reduced?	17
Conclusions	21
References	23

### The authors

**Magnus Sverke** is Professor of Work and Organizational Psychology at the Department of Psychology, Stockholm University, Sweden. A large portion of his research focuses on how employee work motivation and wellbeing are affected by organizational change and uncertain employment relations. He has a special interest in labor unions, including issues such as union structural change, membership attitudes and participation, and the role of unions in the flexible labor market. E-mail: mse@psychology.su.se.

**Johnny Hellgren**, PhD, is researcher and lecturer at the Department of Psychology, Stockholm University. His main research interests concern organizational change, job insecurity, health, psychological climate, organizational climate and its relationship to work motivation and performance, and the role of the union in contemporary working life. E-mail: jhn@psychology.su.se.

**Katharina Näswall**, PhD, works as a researcher and lecturer at the Department of Psychology, Stockholm University. Her main research interests concern job insecurity and other work related stressors, coping, and health outcomes as well as consequences of organizational change for employee well-being. E-mail: knl@psychology.su.se.

#### The changing nature of work

As noted by several commentators (e.g., Gowing, Kraft, & Campbell Quick, 1998; Howard, 1995; Pfeffer, 1998; Rifkin, 1995; Sverke, Hellgren, Näswall, Chirumbolo, De Witte & Goslinga, 2004), working life has been subject to dramatic change over the past decades. These changes concern issues such as increased economic dependency between countries, rapidly changing consumer markets, and escalated demands for flexibility within as well as between organizations. As a consequence, organizations have been forced to engage in various adaptive strategies in order to tackle new demands and remain vigorous in this unpredictable environment. Organizations have, as noted by among others Cascio (1998), two options to become more profitable: they can either increase their gains or decrease their costs, often by reducing the number of employees. These organizational options are often realized in actions like outsourcings, privatizations, mergers and acquisitions, often in combination with personnel reductions through layoffs, offers of early retirement, and increased utilization of subcontracted workers (Burke & Cooper, 2000; Burke & Nelson, 1998; Tetrick & Quick, 2003). Although these reorganization strategies differ in many ways, they usually have at least one thing in common - they lead to the workforce being permeated with worries regarding the future. Such feelings may concern the survival of the organization as a whole, as well as the future existence of the employee's present job or valuable features of the job.

One of the most commonly used tactics in reorganization is the practice of downsizing. Downsizing strategies may incorporate many different facets and angles but they all, by definition, contain methods of personnel reduction. Kets de Vries and Balazs (1997) defined downsizing as "the planned elimination of positions or jobs" (p.11). Another definition emphasizes downsizing as an organizational decision aimed at reducing the workforce and improving organizational performance, and that these decisions are intentional and deliberate (Cameron, Freeman, & Mishra 1991). During recent decades, the industrialized world has witnessed an increase in the occurrence of organizational downsizing and the laying-off of millions of people (Cascio, 1995). During the 1980s and 1990s more than 3 million white-collar jobs were eliminated in the United States alone, and the situation in Asia and Europe is not much different (Rifkin, 1995).

The transformation of working life has brought the issue of insecure working conditions to the forefront, and a growing number of scholars and practitioners are addressing the issue of job insecurity. During the 1980s and 1990s there was a large increase in the number of individuals who perceived their employment as insecure (OECD, 1997). The OECD (1997) reported data from workers in 21

OECD countries during 1996.<sup>1</sup> The results ranged from 31% reporting unsatisfactory levels of job security in Norway to 50% or more in France, Japan, the United Kingdom, and the United States (see also Burchell et al., 1999, for details about UK conditions, and Borg, Kristensen, & Burr, 2000, for data on Denmark). There is also substantial evidence to suggest that the nature of work has changed dramatically for those who remain employed. Employers in virtually every industrialized nation are, in varying degrees, moving toward increased flexibility in how they staff their organizations (Klein Hesselink & van Vuuren, 1999; Sparrow, 1998). Organizational strivings for functional and numerical flexibility have resulted in demands for new types of skills as well as in changes in employment contracts. Most notably, organizations have shown increased interest in employing workers on the basis of short or fixed term contracts rather than on the basis of implicit long-term contracts (McLean Parks, Kidder, & Gallagher, 1998; Sverke, Gallagher, & Hellgren, 2000). In addition, downsizing survivors have to do more with fewer resources, their work load increases, and uncertainty regarding task performance is likely to be prevalent (Burke & Nelson, 1998; Hartley, Jacobson, Klandermans, & van Vuuren, 1991).

As a result of the changes described above, job insecurity has emerged as one of the most important issues in contemporary work life and the phenomenon of job insecurity has consequently become more frequently studied among scholars and researchers (Sverke, Hellgren & Näswall, 2002). The overall purpose of this chapter is to address theoretical and methodological issues regarding the conceptualization of job insecurity and its antecedents and consequences, as well as highlight areas where future research is warranted.

### The nature and measurement of job insecurity

Given the changes taking place in working life, the construct of job insecurity itself has undergone a change of meaning. During the 1960s and 70s, the construct was often to be found in larger inventories of work climate, and was regarded as a motivator (job security) rather than as a stressor (e.g., Hackman & Oldham, 1975; Rizzo, House, & Lirtzman, 1970). In these studies, self-reported job security was treated as one variable among many which, when taken together, reflected an individual's overall sense of satisfaction in the work situation. One exception to this is Caplan, Cobb, French, Van Harrison, and Pinneau (1975) who developed a stress inventory that also contained a multi-item

<sup>&</sup>lt;sup>1</sup> The percentages are based on the norm level of employment security and are calculated as the average of the percentage reporting favorable answers to four questions concerning the level of job security perceived. For details, see OECD Employment Outlook (1997 Chapter 5).

scale for taking job insecurity into account. In the mid-1980s, research in this area began to more systematically focus on job insecurity and along with this came a change in the construct's meaning; it went from being seen as a motivator to being defined as a stressor (Greenhalgh & Rosenblatt, 1984). In connection with this, a more systematic approach to this research began to take shape, regarding, primarily, empirical results and, to a certain degree, theory development (see Sverke et al., 2002, for a review).

Among the first to place job insecurity in a larger theoretical context was Greenhalgh and Rosenblatt (1984) who, with their theoretical model, summed up the definitions of job insecurity and elaborated on the potential causes, effects, and organizational consequences of the phenomenon. Greenhalgh and Rosenblatt defined job insecurity as a "perceived powerlessness to maintain desired continuity in a threatened job situation" (1984, p. 438). They further maintained that job insecurity is based on the individual's perceptions and interpretations of the immediate work environment. This implies that subjectively experienced threats are derived from objective threats by means of the individual's perceptual and cognitive processes (cf. theories of psychological climate; e.g., James, Hater, Gent, & Bruni, 1978; James & Sells, 1981). With this conception of job insecurity as a theoretical starting point, a number of somewhat similar definitions have been presented in the literature. Job insecurity has, for example, been described as:

- "one's expectations about continuity in a job situation" (Davy, Kinicki, & Scheck, 1997, p. 323);
- "an overall concern about the future existence of the job" (Rosenblatt & Ruvio, 1996, p. 587);
- "an employee's perception of a potential threat to continuity in his or her current job" (Heaney, Israel, & House, 1994, p. 1431);
- "a discrepancy between the level of security a person experiences and the level she or he might prefer" (Hartley et al., 1991, p. 7);
- "the subjectively experienced anticipation of a fundamental and involuntary event" (Sverke et al., 2002, p. 243).

It should, in this context, be pointed out that certain researchers in the behavioral sciences, although perhaps more commonly in other scientific disciplines, use definitions of job insecurity that are largely "objective". These definitions are based on the assumption that job insecurity occurs as a contextual phenomenon independent of the individual's experiences and interpretation of the situation. An example of this is Pearce (1998), who defined temporary employment as an objective type of job insecurity that is characterized by "an independently determined probability that workers will have the same job in the foreseeable future" (p. 34). Others have classified entire organizations or workplaces as being more

or less marked by job insecurity (e.g, Büssing, 1999; Ferrie, Shipley, Marmot, Stansfeld, & Smith, 1998). The basic assumption in these objective definitions is that individuals who find themselves in types of employment and/or organizations that are classified as insecure experience more job insecurity than is the case with individuals who hold a "safer" type of employment or work for an organization deemed as safe. There are also researchers who base their definitions of job insecurity on the level of unemployment in society, which means that a rise in unemployment can be interpreted as a rise in general job insecurity (e.g., Gallie, White, Cheng, & Tomlingson, 1998).

Other researchers use combinations of various definitions and operationalizations in their research. For example, Mohr (2000, p. 339) discussed four different types of job insecurity: (1) "job insecurity as a state of public awareness" which involves a high degree of unemployment in society; (2) "job insecurity at the company level" which refers to unstable and insecure conditions in the organization; (3) "acute job insecurity" involving the concrete subjective experiencing of a threat to employment, and; (4) "anticipation of job loss" which applies to a situation where layoffs have already begun to be carried out in the organization in which the individual is employed. Job insecurity can therefore either be experienced at a personal level or attributed externally, such as in those situations where the researcher defines the population under investigation as being uncertain of how their future employment will progress (Ferrie, 2001). In a study comparing the consequences of objective and subjective types job insecurity, De Witte and Näswall (2003) found that, amongst those experiencing a high degree of job insecurity, it was the permanent rather then the temporary employees who reported lower levels of both job satisfaction and organizational commitment in comparison with the temporary employees. These authors went on to argue that job insecurity cannot only be defined from characteristics of the situation but should contain an element of subjectivity.

Several different measures are used to assess job insecurity in current research. The main differences center around whether an objective or a subjective theoretical approach is employed. Within the subjective approach, distinctions can be made between those who use single items as opposed to scales, global measures instead of multidimensional measures, and fear or worry questions rather than probability questions (Sverke et al., 2002). In the latter case, some researchers have been known to formulate their items so as to include wordings such as "I worry about", "I fear I will", or "I feel uneasy about", to give a few examples (e.g., Armstrong-Stassen, 1994; Barling & Kelloway, 1996; Burke, 1991; Mauno, Leskinen, & Kinnunen, 2001). Such items focus on job insecurity as something negative and undesired, and the questions themselves hint at the fact that job insecurity is a stressor, which is considered unpleasant for the individual and creates some sort of negative emotion. In contrast to this, other researchers instead utilize items that focus on how secure individuals think they are in their present employment (e.g., Davy et al., 1997; Lim, 1997). These questions contain wordings such as "How certain are you about your future employment in this organization?", and thus focus on the individual's perception of continuity in the present employment. Other related operationalizations focus on the likelihood of the individual being able to keep his/her job in the future (e.g., De Witte, 1999; Mohr, 2000; Roskies, Louis-Guerin, & Fournier, 1993). A typical question of this type is, for example, "What is the likelihood that you will have the same job in the foreseeable future?" (e.g., De Witte, 1999). Such questions focus on the individual's perceptions and evaluation of the likelihood of keeping his/her employment in the future.

The operationalizations using certainty and likelihood are quite closely related and are similar in the respect that they do not contain expressions that necessarily characterize the experience of job insecurity as a direct stressor. Nor do these measurements illustrate the involuntary nature of the experience. With this in mind, it is entirely possible for an individual to consider the likelihood that he/ she will lose the job to be high, at the same time as he/she welcomes this change, or has chosen it voluntarily. Because of this, there are researchers who argue that operationalizations containing intensifying words like "fear" or "worry" better reflect the definition of job insecurity as a subjective and involuntary stressor (Sverke et al., 2002).

In the behavioral sciences and psychological research, however, the subjective definitions of the construct are predominant. These definitions are based on two fundamental assumptions: (1) that the experience of job insecurity is individual and subjective, and (2) that it is based on an involuntary change from a secure to a non-secure situation.

While most definitions of the construct also share the view that job insecurity is a subjectively experienced stressor, it appears that the definition of the construct is broad enough to encompass different aspects of such uncertainty perceptions. Other aspects than threats of imminent job loss – such as loss of valued job features, demotion, and career insecurity – may also constitute central aspects of employees' uncertainty perceptions. Greenhalgh and Rosenblatt (1984), who were the first to introduce a multidimensional definition, noted: "Loss of valued job features is an important but often overlooked aspect of job insecurity" (p. 441). Thus, a significant distinction in this line of inquiry is that between "insecurity about the continuity of one's job or aspects of one's job" (Hartley et al., 1991, p. 32).

Indeed, a number of commentators (e.g., Ashford, Lee, & Bobko, 1989; Greenhalgh & Rosenblatt, 1984; Hartley & Klandermans, 1986; Roskies & Louis-Guerin, 1990) have argued that the definition and measurement of job insecurity would benefit from including concerns about deteriorated employment conditions and career opportunities in addition to threats of imminent job loss. Greenhalgh and Rosenblatt (1984) maintained that insecurity could best be described in terms of threats to the job itself, importance of total job, threats to valued job features, importance of valued job features, and a feeling of powerlessness to counteract these threats. Ashford et al. (1989) developed measures based on this definition of the different aspects, and combined the dimensions into a multiplicative job insecurity scale. Other researchers (e.g., Kinnunen, Mauno, Nätti, & Happonen, 1999) have used a similar approach, although not distinguishing between threats to the job itself and threats to job features.

Borg and Elizur (1992) differentiated between cognitive job insecurity (likelihood of job loss) and affective job insecurity (fear of job loss). Roskies and Louis-Guerin (1990) developed single-item measures of five different aspects of job insecurity: the likelihood of termination, early retirement, demotion, impaired working conditions, and long-term job insecurity. Hellgren, Sverke, and Isaksson (1999) made a distinction between quantitative job insecurity (worries about losing the job itself) and qualitative job insecurity (worries about losing important job features).

Following Hellgren et al. (1999), we argue that it would be meaningful to make a distinction between at least two different aspects of job insecurity: quantitative and qualitative insecurity. Quantitative job insecurity is similar to the global conceptualizations of the construct. Qualitative job insecurity pertains to perceptions of potential loss of quality in the employment relationship, such as deterioration of working conditions, demotion, lack of career opportunities, decreasing salary development, and concerns about person-organization fit in the future. It is likely that the latter aspect may also be divided into separate dimensions, but this is a question for future theoretical and empirical research. Even if measures of different aspects are available (e.g., Ashford et al., 1989; Hellgren et al., 1999; Roskies & Louis-Guerin, 1990), the measurement properties of the scales are far from clear. Assessment of measurement properties in a variety of settings and potential refinements of the instruments with the aid of confirmatory factor analysis are important issues for the research agenda. It is also obvious that such empirical work cannot be done without simultaneous conceptual advancements on what may be the most important and relevant aspects of job insecurity. It may also be noted that results from a meta-analysis (Sverke et al., 2002) indicate that job insecurity measures based on multiple-item scales may have a stronger relationship with the outcomes compared with single-item measures. Generally, scales consisting of multiple indicators exhibit a higher degree of reliability than is to be found with single items (Gorsuch, 1997; Spector, 1992). It has also been argued that measures consisting of multiple indicators encompass more of the job insecurity experience and generate a higher degree of content validity in comparison to single item measures (Sverke et al., 2002).

#### Antecedents of job insecurity experiences

In order to further understand the phenomenon of job insecurity, it is fruitful to take into consideration studies investigating potential antecedents of job insecurity. Job insecurity experiences, regardless of whether they are qualitative or quantitative, arise from an interaction between situational characteristics and characteristics of the individual that influence the interpretation the individual makes of environmental factors.

Age is one demographic factor that may affect the interpretation of cues in the environment as posing a threat of job loss. People in their 30s and 40s, for example, are in an age-bracket whose members are likely to be responsible for raising children and may, in connection with such circumstances, tend to experience the possibility of job loss more negatively than persons who are only responsible for their own sustenance (De Witte, 1999). As the responsibility for others diminishes, the vulnerability to job loss may also decrease, and result in lower levels of job insecurity, particularly, amongst older employees. However, studies have also reported evidence that older employees may experience higher levels of job insecurity (e.g., Mohr, 2000; Näswall & De Witte, 2003; Hartley et al., 1991). This has been attributed to the fact that it may be more difficult for older employees to find new employment, which would leave them more vulnerable to job loss (Hartley et al., 1991).

Gender may play a role in how a person prepares for different occurrences throughout life. Some of the few studies focusing on how gender influences perceptions of job insecurity have found that men tend report higher levels of job insecurity than women (e.g., Kinnunen et al., 1999; Rosenblatt, Talmud, & Ruvio, 1999). This has been explained by the suggestion that traditional values may prompt men to experience higher levels of job insecurity than women, since this role traditionally requires the man to be the breadwinner of the family. Men would then tend to be more vulnerable to the threat of job loss, as it would not only threaten their source of income, but also their identity, to a higher degree than it would for women. However, what complicates overgeneralizing about the influence of gender is that, according to this argument, a woman who was the main breadwinner for her family could similarly be expected to experience greater job insecurity than a man would who did not have this responsibility to the same extent (De Witte, 1999). Some studies also provide empirical evidence that women report higher levels of job insecurity than men (Näswall & De Witte, 2003). The issue of how gender influences job insecurity perceptions is, however, not yet settled.

A small number of studies have investigated whether certain personality dispositions are related to experiences of job insecurity. The results from a few of these studies suggest that persons with a predominantly external locus of control are more likely to report higher levels of job insecurity (Ashford et al., 1989; Kinnunen et al., 1999; Sverke et al., 2004). In contrast, higher levels of selfesteem have been related to lower levels of job insecurity (Hartley et al., 1991). There is also some evidence that negative affectivity increases the likelihood of job insecurity perceptions (Sverke et al., 2004).

Socioeconomic status may influence an individual's experiencing of a situation and result in the interpretation that the job is being threatened. Status may also affect how important a job is considered to be, in that it affects an individual's dependence on the present employment. Related to socioeconomic status are type of work (manual vs. non-manual) and the level of education the individual has. Persons who have low-status (often manual) jobs and low income are often more dependent on their income and are therefore generally thought to be more vulnerable to the threat of job loss (Frese, 1985; Kinnunen et al., 1999). An individual with low income is usually not able to save money, which would make a loss of income more severe. Low-status jobs are often also associated with lower levels of education, resulting in fewer coping resources and strategies. Studies have also shown that blue-collar workers report higher levels of job insecurity than other worker categories (Näswall & DeWitte, 2003). Lower education and skill level also contribute to employees having fewer options of alternative employment in the labor market, or the individual's sense of employability (cf. Fugate, Kinicki, & Ashforth, 2004), which may increase their degree of dependence on the present job, and make the threat of unemployment more severe (Gallie et al., 1998; Schaufeli, 1992; Sverke et al, 2004).

Holding a certain type of employment contract can also influence perceptions of job insecurity. Employees who are hired on full-time or permanent contracts may experience less job insecurity. These employees may have a greater sense of being an integral part of the organization than part-time or temporary employees would (Barling & Gallagher, 1996; Sverke et al., 2000). Should the organization have to reduce their staff, those employees who are not considered core workers may be the first to have to leave the organization. However, the nature of the formal contracts of the temporary workers can actually prepare them for instability, in that any uncertainty that might arise over the future of their employment may not be something unexpected. Moreover, employees with temporary contracts are generally aware that there is a time limit to their employment since this is something known upon entering into the employment relationship (Gallagher & McLean Parks, 2001). Employees who are less formally attached to the organization may be less committed to keeping their job and less likely to experience job insecurity than permanent workers. Studies investigating job insecurity experiences among temporary workers typically find that employees holding contracts with a time limit experience more job insecurity than permanent or full-time employees (Näswall & De Witte, 2003; Sverke et al.,

2000). However, the relation between part-time work and job insecurity is less clear, as some studies (e.g., Still, 1983) show that part-time workers report more job insecurity than full-time. Others find mixed results, such that some groups of part-time workers are more insecure than full-time, but other groups of part-time workers are less insecure than full-time workers (Näswall & De Witte, 2003).

Social support has been named as a possible coping resource for reducing the perceptions of stress (Lazarus & Folkman, 1984). Those who are able to utilize support from others have been found to reported lower levels of job insecurity (Armstrong-Stassen, 1993). Social support may originate from a variety of sources. Family-based support, such as having the presence of a partner, has been found to act as a buffer against some of the negative consequences of job insecurity (Lim, 1996). It is possible that living with a partner may remove some of the pressure of having to bring in an income, but very few studies have investigated how family status affects the level of job insecurity experienced (e.g., Sverke et al., 2004), and the results are inconclusive, indicating that more research with more adequate measures is needed.

Another source of social support is union membership (Armstrong-Stassen, 1993; Dekker & Schaufeli, 1995). Being a member of a union may serve to protect against actions by management that would harm the employee. The sense of powerlessness often associated with job insecurity may decrease since unions often have a strong collective voice and may be able to affect management policies in favor of the employees (Barling, Fullagar, & Kelloway, 1992; Hellgren & Chirumbolo, 2003; Johnson, Bobko, & Hartenian, 1992; Sverke & Hellgren, 2001). Results from research on union membership and job insecurity indicate that union members report lower levels of job insecurity than nonmembers (Sverke et al., 2004). However, since only a few studies support this result, it is difficult to draw conclusions regarding the role of the union. There are even suggestions that union members might report higher levels of job insecurity, since workers are more likely to join a union when their employment is less secure (e.g., Bender & Sloane, 1999; Näswall & De Witte, 2003). At present, the impact of support from the family as well as the union on experiences of job insecurity needs to be further researched.

#### Consequences of job insecurity

Intuitively, one would expect feelings of job insecurity to have a strong psychological impact on those affected. Experiences of uncertainty concerning one's future employment are likely to have severe consequences for an employee's overall life situation in that economic and other highly valued aspects of life will be perceived as threatened (Ashford et al., 1989; Hartley et al., 1991). Employment provides individuals with income, social contacts, and opportunities for personal development, as well as a more structured life (Jahoda, 1982). If individuals feel their needs threatened by a perceived insecure employment situation, they are also experiencing a threat to the vital economic, social, and personal aspects of their lives (De Witte, 1999). The individual's evaluation of work is also shaped by a strong desire for stability (Schabracq & Cooper, 2000), and losing the job would mean losing this structure and stability as well. Individuals who feel that these important features of life are threatened, and are uncertain as to how to protect them, will be frustrated and experience stress.

Indeed, one of the most prominent features of job insecurity is the aspect of uncertainty and ambiguity. According to stress theories, not knowing how to counteract a threat to something valued will lead to stress experiences (Lazarus & Folkman, 1984). The experience of uncertainty concerning the future of employment prohibits the individual to cope with the threat adequately and diminishes the opportunities for reducing the level of stress experienced. In line with this reasoning, research suggests that perceived threats concerning the nature and continued existence of a job may have as detrimental consequences as job loss itself (Dekker & Schaufeli, 1995; Latack & Dozier, 1986). This is 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).

Stress experiences are accompanied by stress reactions, which may be described as somatic, psychological, and behavioral (Jex & Beehr, 1991; Spector, 2000). Consistent with this, job insecurity has been associated with several different health-related, attitudinal, and behavioral outcomes (see De Witte [1999] and Hartley et al. [1991] for reviews, and Sverke et al. [2002] for metaanalysis results).

In terms of health-related consequences, many studies have documented that job insecurity is negatively related to employee well-being. Physical health complaints, mental distress, and work-to-leisure carry-over tend to increase with the level of job insecurity experienced (e.g., Ashford et al., 1989; Barling & Kelloway, 1996; Hartley et al., 1991; Jick, 1985). The majority of studies that have investigated the relationship between job insecurity and well-being are based on self-reported health data, but there is also evidence indicating that job insecurity is related to health indicators that are more physiological or biological in nature (e.g., Arnetz et al., 1991; Catalano, Rook, & Dooley, 1986; Lindström, Leino, Seitsamo, & Torstila, 1997; Siegrist, Peter, Junge, Cremer, & Seidel, 1990). In addition, it has been shown that subjective job insecurity is both more strongly and more often related to mental health complaints as compared to the more physical and biological markers of health (Iversen & Sabroe, 1988; Mattiasson, Lindgärde, Nilsson, & Theorell, 1990; Mohr, 2000).

However, the radical change from a traditionally secure working environment to a rapidly changing and insecure one could be expected to have an impact not only on the well-being of the individuals, but also on their work attitudes and behavior, and, in the long run, for the vitality of the organization. As phrased by Greenhalgh and Rosenblatt (1984), "workers react to job insecurity, and their reactions have consequences for organizational effectiveness" (p. 438). Job insecurity has consistently been found to associate with a number of attitudinal reactions. The most commonly researched outcome in this context is job satisfaction. For instance, Ashford et al. (1989) showed that employees who felt insecure about their future employment were more dissatisfied with their jobs as compared to those who perceived their future job situation as more secure. Similar results have been obtained in a number of studies (e.g., Davy et al., 1997; Hartley et al., 1991; Heaney et al., 1994; Rosenblatt & Ruvio, 1996). Job insecurity has also been linked to impaired commitment to the organization (e.g., Armstrong-Stassen, 1993; Davy et al., 1997), reduced trust in management (e.g., Ashford et al., 1989; Borg & Elizur, 1992), and lower levels of job involvement (e.g., Kuhnert & Palmer, 1991; Leavoni & Sales, 1990).

A perceived insecurity concerning one's future role in the organization may also result in a variety of behavioral reactions. One of the most frequently examined observations in this respect is that job insecurity may make the employee less inclined to remain with the organization. Job insecurity, like any stressor, could lead to a withdrawal response as manifested in, for example, higher levels of turnover intention (Arnold & Feldman, 1982; Brockner, 1988; Burke & Nelson, 1998; Davy et al., 1997; Dekker & Schaufeli, 1995; Hartley et al., 1991). This is especially important also for managers given that qualified workers will more easily find a new job and thus are more likely to in fact quit if they experience job insecurity (Greenhalgh & Rosenblatt, 1984; Hartley et al., 1991). Employees' performance may also be affected by the degree to which they feel that their employment is secure. There are some inconsistencies in the empirical evidence for how job insecurity and performance are related. Some studies have empirically confirmed the expectation that higher levels of job insecurity would be associated with decreases in self-rated performance (e.g., Armstrong-Stassen, 1993; Rosenblatt et al., 1999). There is, however, another view on performance in relation to job insecurity, which suggests that employees who perceive a risk of layoffs may increase their work effort in order to be more valuable to the organization, and therefore not be made redundant (Brockner, Tyler, & Cooper-Schneider, 1992; Sverke & Hellgren, 2001).

However, the relationships between job insecurity and employee reactions may not be as clear-cut as implied by this brief review. Several issues need further research attention before any valid conclusions as to the consequences of job insecurity can be drawn. First of all, although meta-analysis results suggest that job insecurity is negatively related to employee well-being, attitudes, and work-related behavior (Sverke et al., 2002), some of the relations investigated were based on a large number of empirical studies (e.g., job satisfaction, organizational commitment), while other summarized a smaller number of samples (e.g., job involvement, trust). Moreover, there is also a need to investigate other factors that may be consequences of job insecurity, but have received less research attention. Further research is warranted to establish how perceptions of employment uncertainty are related to factors such as work intensity (Brown & Leigh, 1996), compliance with safety procedures (Probst & Brubaker, 2001), depression (Orpen, 1993), burnout (Westman, Etzion, & Danon, 2001), neckand-shoulder problems (Lindström et al., 1997), and ischemic heart disease occurrence (Siegrist et al., 1990).

Secondly, there is also a need to further investigate not only how job insecurity may impact the individuals or the organizations they work for, but also how other actors may be affected. Like other stressors, it is most likely that the consequences of job insecurity may be categorized not only according to whether they primarily affect the individual or the organization, but also according to how they affect other parts of life. For example, employees may take out the frustration associated with job insecurity on the union if they feel the union has not done enough to protect them (Sverke & Hellgren, 2001). There is some evidence that job insecurity is associated with negative outcomes for the union, such as dissatisfaction with the union and union turnover (Mellor, 1992; Sverke & Goslinga, 2003, Sverke et al., 2004). Research has also suggested that the demands the individual perceives he/she has to live up to when experiencing job insecurity may influence relations outside work, in that it may be difficult to perform well in several demanding roles simultaneously (Netemeyer, Bolens, & McMurrian, 1996). There is research evidence indicating that the stress of job insecurity may spill over to affect the spouse of the individual negatively (Westman et al., 2001). There is also evidence that reactions to job insecurity may have consequences for the individual's family, and even influence children's attitudes toward work, as they see their parents experiencing and reacting to work stressors (Barling, Dupre, & Hepburn, 1998; Lim & Leng Loo, 2003). These indications still need to undergo further empirical scrutiny.

Thirdly, different aspects of job insecurity may relate in different ways to these types of outcomes. Because a perceived loss of continuity in a job situation can span the range from threats of imminent job loss to loss of important job features (Davy et al., 1997; Greenhalgh & Rosenblatt, 1984), these different aspects may evoke divergent reactions (Roskies & Louis-Guerin, 1990). To date, only a few studies report relationships of different job insecurity dimensions and outcomes. Ashford et al. (1989) studied the specific effects of different facets of insecurity in addition to the multiplicative measure, and reported approximately similar correlations of both likelihood of job features continuation and likelihood of total job continuation with various work attitudes, but non-significant relationships with somatic complaints. Roskies and Louis-Guerin (1990) examined the relative importance of various aspects of job insecurity on mental health and work commitment, and found that insecurity about future working conditions was more strongly related to the outcomes than insecurity about demotion and termination. Hellgren et al. (1999) found that qualitative job insecurity was more strongly related to work attitudes while quantitative insecurity evidenced stronger relationships with different aspects of health complaints. In contrast, Riesel and Banai (2002), who also investigated effects of different aspects of job insecurity, found that the job loss component of job insecurity explained more variance in organizational commitment, trust, and job search behavior than the job features loss component. However, Greenhalgh and Rosenblatt (1984) noted that the aspect reflecting concerns about continued employment might be the most important of the two. Although a loss of valued job features certainly represents an aspect of job insecurity "inasmuch as it involves losing the job as the affected employee currently knows it", it is likely that this threat is "less severe because organizational membership - and all that such membership means to the individual – is not lost" (Greenhalgh & Rosenblatt, p. 441). Clearly, further research is needed to understand the potentially differential effects of various dimensions of job insecurity.

A fourth problem concerning the relationship between job insecurity and its postulated outcomes is that the relative impact of insecurity above the effects of other factors is far from clear. For instance, research has not clarified the effects of job insecurity beyond what can be explained by mood dispositions (Hellgren et al., 1999; Roskies et al., 1993). A great body of literature suggests that self reports of job stress, well-being, and health are under influence of personality traits like positive and negative affectivity, and that such personality dispositions hence should be controlled for (Brief, Burke, George, Robinson, & Webster, 1988; Costa & McCrae, 1980; Roskies et al., 1993; Schaubroeck, Ganster & Fox, 1992; Watson & Pennebaker, 1989). It has also been suggested that the degree to which an individual reacts to job insecurity is influenced by demographic characteristics like gender, age, and civil status (e.g., De Witte, 1999). In addition, it would be valuable to further assess the unique criterion effects of job insecurity beyond those of other stressors. Previous research indicates that the negative effects of insecurity tend to remain, albeit of a lower magnitude, after controlling for demographics, personality, and other stressors (e.g., Hellgren & Sverke, 2001; Näswall, Sverke, & Hellgren, 2005), but there are of course several variables that may affect the potential outcomes of job insecurity.

Fifth, most studies that have examined the consequences of job insecurity have been cross-sectional, relating job insecurity to its potential outcomes within a single data collection wave. This means that the knowledge is limited regarding the long-term effects of job insecurity, but also in terms of how the consequences develop over time. For instance, it is likely that those who experience job insecurity over a long time will be more negatively affected as compared to those whose uncertainty perceptions are less enduring (Heaney et al., 1994). The issue of the timeframe between points of measurement may also be crucial in this respect, since some stress reactions develop soon after the initial exposure to the stressor, and may or may not diminish over time, while others are manifested after a longer period of time (Beehr & Newman, 1978; Zapf, Dormann, & Frese, 1996). A careful theoretical consideration must be made of how various stress reactions may develop when designing longitudinal research, and an effort needs to be put into determining the appropriate times for measurement when researching job insecurity and its outcomes.

We know even less, however, when it comes to the relative effects of job insecurity on employee attitudes and well-being after prior levels of such outcomes have been taken into account. A sixth consideration thus concerns causality. A review of the research on stress reactions (Depue & Monroe, 1986) indicates that prior levels of distress almost exclusively have been found to far better predict subsequent disorders than the life event stressors under study. Although uncertainties about the future of one's job have been found to relate to lowered work attitudes and well-being, even after controlling for prior levels of the outcomes (e.g., Hellgren et al., 1999), the direction of these relationship is merely assumed. A few studies have, however, addressed the issue of causality more explicitly. In a study measuring job insecurity and potential outcomes over several measurement occasions, Garst, Frese, and Molenaar (2000) found that initial levels of job insecurity were related to negative outcomes at later time points. It has also been shown to be plausible that initial levels of job insecurity are related to subsequent mental health complaints, rather than the opposite – that initial levels of mental health complaints influence subsequent levels of job insecurity (Hellgren & Sverke, 2003). Clearly, however, additional longitudinal research - in which the same employees are followed over time, and both insecurity and its postulated consequences are measured at multiple occasions is needed to detect the strength, direction, and duration of the effects of job insecurity on its potential outcomes (Ashford et al., 1989). Naturally, in order to effectively study if, or how, job insecurity contributes to impairments in employee well-being, attitudes, and behavior, the assessment of initial levels of the outcome variables in focus should preferably take place before rumors about organizational change start to circulate, even if this is almost impossible in field settings.

#### Can the negative consequences of insecurity be reduced?

Theoretical and empirical evidence thus indicate that perceptions of job insecurity have detrimental consequences for employee attitudes and well-being, which raises the high-priority question of how to reduce these such consequences. Organizations can take measures to prevent the most negative impact of job insecurity from occurring by, for instance, providing accurate information, enhancing communication, supplying retraining for alternative employment, and training their employees in how to cope with the stress created by job insecurity (Hartley et al., 1991; Heaney et al., 1994; Kets de Vries & Balazs, 1997). Several studies have investigated the buffering, or moderating, effects of a variety of factors, ranging from personality dispositions to different types of social support.

In their model of job insecurity, its antecedents and consequences, Greenhalgh and Rosenblatt (1984) suggested that individual differences could be expected to moderate the relationship between the experience of job insecurity and the employee's reactions to it. There are, for example, indications that men react more negatively to job insecurity than women (Näswall, Sverke, & Hellgren, 2001). It is also conceivable that some personality dispositions may affect the relationship between job insecurity and its outcomes.

One of the studies that specifically investigated the relationship between personality traits, job insecurity, and employee well-being was made by Roskies et al. (1993). They found that individuals expressing high levels of negative affectivity do not inevitably perceive the outcomes of job insecurity as more severe than those low in this attribute, but they may report lower well-being because of their elevated initial values. Similarly, they suggested that positive affectivity would have an opposite but equally strong influence on perceived stress and attitudes. Similar moderating effects were found in the study by Mak and Mueller (2000), where those reporting higher levels of negative affectivity also reported more negative reactions to job insecurity in terms of physical strain. Roskies and her associates (1993) also found that personality was the most important predictor of distress, even more important than the perception of job insecurity. This was also found in a study by Näswall et al. (2005); when negative affectivity was controlled for, the relationship between job insecurity and mental distress was significantly weaker. However, the Näswall et al. (2005) study failed to identify any moderating effect of negative or positive affectivity.

Few studies have investigated the moderating effects of personality characteristics other than affectivity. One of the few studies including other personality characteristics found that locus of control moderated the relation between job insecurity and mental health complaints (Näswall et al., 2005). Individuals with a more internal locus of control (the feeling that one has a certain degree of control over events; Rotter, 1966) reported less negative reactions to job insecurity than those with an external locus of control (the feeling that control over events lies outside the individual; Rotter, 1966). These results indicate that personality characteristics may affect the relation between job insecurity and well-being to some extent, but also that the results are inconclusive and that care must be taken when drawing conclusions on the moderating effect of personality disposition on the reactions to job insecurity. In addition, other dispositions than affectivity or locus of control (e.g., self-efficacy, core self-evaluations, need for security) may moderate the effects of job insecurity on outcomes (Ashford et al, 1989; Greenhalgh & Rosenblatt, 1984).

There is also research focusing on whether and how the negative effects of downsizing can be reduced through fair treatment of the employees. Perceptions of fair treatment in the context of layoffs and downsizing refer to an individual's appraisal of the procedures used to enact organizational change (Thibaut & Walker, 1975). Although this perspective has primarily been applied to downsizing in general, it may prove useful to the more specific field of job insecurity as well. Concepts such as participation in the change process (Lind & Tyler, 1988; Parker, Chmiel, & Wall, 1997), global process control (Davy, Kinicki, & Scheck, 1991), and organizational justice (Brockner, 1990; Novelli, Kirkman, & Shapiro, 1995) have emerged as important factors influencing survivors' work attitudes, performance, and well-being. The reasoning behind this is that employee perceptions of fair treatment during the change process and participation in decision-making will have beneficial consequences for their work attitudes and well-being, and may even moderate the negative effects of downsizing-induced stress on such outcomes.

Research studies have found empirical support for the positive role of the various fairness factors. For example, individuals tend to report higher job satisfaction when they have an opportunity to provide input into how decisions are made (Konovsky & Folger, 1987; Lind & Tyler, 1988). Having an influence on decision-making and perceptions of a just and fair process have been shown to be associated with less severe reactions to job insecurity (Brockner, 1990; Hellgren & Sverke, 2001). A study by Parker et al. (1997) showed that participation (i.e., being kept informed and involved over the course of downsizing) was associated with higher job satisfaction and better well-being. Participation has also been shown to moderate the effects of role stress among hospital employees (Pozner & Randolph, 1980). It is likely that employees feel a sense of control over the situation when they have an opportunity to influence the decisions being made. Barling and Kelloway (1996) found that control perceptions had positive direct effects on various health indicators and work attitudes, and in addition, that control perceptions moderated the effects of job insecurity on physical health. Tetrick and LaRocco (1987) reported that control predicted lower levels of perceived stress and higher job satisfaction, and moderated the

relationship between these variables. Brockner and associates have demonstrated the importance of justice in the downsizing process in several publications (e.g., Brockner, 1990; Brockner & Grover, 1988; Brockner et al., 1992).

A factor that has received very little attention as a potential moderator of job insecurity perceptions is employability (cf. Fugate et al., 2004; Turnley & Feldman, 1999). It is nevertheless reasonable that an individual who feels that she could easily obtain a new job does not react as negatively to job insecurity perceptions as someone who feels she is unable to acquire new employment. The moderating effect of employment on the job insecurity–outcome relationship has yet to be extensively investigated.

Research has also examined the moderating effects of social support on the relationship between job insecurity and employee reactions. The underlying logic, based on stress research, is that these sources of support can mitigate the resulting negative reactions by helping the individual cope with the stressor (i.e., job insecurity) more adequately (cf. Lazarus & Folkman, 1984). Support from co-workers and supervisors have been cited as important buffers against stress (Viswesvaran, Sanchez, & Fisher, 1999). There exists some empirical evidence for this as well. For instance, Lim (1996) found that nonwork-based support (i.e., support provided by family and friends) buffered against the negative effects of job insecurity on life satisfaction, while work-based social support buffered against the negative effects on job satisfaction, proactive job search, and non-compliant job behaviors. Armstrong-Stassen (1993) has also shown that supervisor support during organizational restructuring decreased the negative effect of job insecurity on attitudes toward the organization.

Unfortunately, even though job insecurity is an increasingly important factor in unionized as well as non-unionized workplaces, very little research has examined if and how union membership relates to job insecurity and its outcomes. It has been suggested that union membership may help alleviating perceptions of job insecurity in that unions decrease feelings of powerlessness among employees (Greenhalgh & Rosenblatt, 1984). It may also be argued that without the collective support provided by union membership the more difficulty an employee will have in coping with job insecurity (Dekker & Schaufeli, 1995); on the other hand, those who stay outside the unions may trust their own capacity to cope with insecurity perceptions.

Over a decade ago, Mellor (1992) observed that "one surprising aspect of prior studies on layoff reactions is that none have been conducted in unionized work settings, despite the fact that most layoffs have occurred in these settings, as opposed to nonunionized settings" (p. 581). Since then, our understanding of the role of unionization has improved somewhat. For instance, a study that included the mere presence of union membership as an external coping resource (Shaw, Fields, Thacker, & Fisher, 1993) found positive relationships between union

membership and both organizational commitment and positive attitudes towards the organizational change, but no interaction effects of job insecurity and union membership on these reactions. Similar results are reported by Sverke and Hellgren (2001). Dekker and Schaufeli (1995) reported that social support derived from union membership, co-workers, and colleagues did not buffer the moderate effects of job insecurity on employee well-being.

A study conducted by Sverke et al. (2004) tested whether perceptions of union support, which can be considered a form of collective social support, moderated the relation between job insecurity and various outcomes in four European countries. Union support moderated the relation between job insecurity and physical health complaints in that those reporting low support in combination with high job insecurity also reported the most physical health complaints. The pattern was similar for organizational commitment, where those experiencing high job insecurity in combination with fewer perceptions of union support also reported weaker organizational commitment. The study by Sverke et al. (2004) also demonstrated strong main effects of perceptions of union support, such that those reporting more union support generally also were better off in terms of well-being, job satisfaction, and organizational commitment; these individuals also were less interested in leaving the organization and were more positively disposed toward the union in general.

The area of factors that may moderate the negative effects of job insecurity certainly represents a fruitful direction for further research. Even if individual differences, fair treatment of employees in layoffs, and social support do nothing about the stressor itself – that is, they may not change the insecure employment situation into a more favorable one – they all may have beneficial effects for the individual if they prevent the most negative reactions from occurring. Given that employees' reactions to uncertainties in a given organizational context are of fundamental importance from both the occupational health and managerial perspectives (Matteson & Ivancevich, 1987), moderators of job insecurity take on double importance. From the occupational health perspective, it becomes crucial to understand how the negative consequences of job insecurity for employee well-being and work attitudes can be buffered by various moderating variables. From the managerial perspective, it is obvious that a workforce plagued with stress reactions and impaired well-being can not reverse decline and make the organization more effective (Hartley et al., 1991). This clearly illustrates that the moderation of the effects of job insecurity deserves additional attention in the future.

## Conclusions

Downsizing and other forms of organizational change involving layoffs (e.g., mergers, acquisitions, outsourcing, organizational restructuring) will continue as production and overhead costs remain noncompetitive (Burke & Nelson, 1998) and thus render job insecurity a lasting characteristic of working life. Its negative reactions, combined with the facts that uncertain job situations tend to increase change resistance (Noer, 1993), that the most valuable individuals are more inclined to seek other job alternatives (Greenhalgh & Rosenblatt, 1984), and that the survivors have to do more with fewer resources (Burke & Nelson, 1998), suggest that job insecurity is of vital concern for both employees and their organizations.

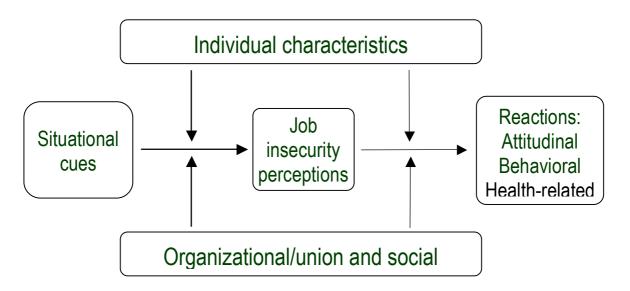


Figure 1: A conceptual model of job insecurity, its antecedents, consequences, and moderators

Our goal with the present review has been to contribute to the understanding of job insecurity by addressing theoretical as well as methodological issues and highlighting areas where further research is warranted. We summarize our conclusions from this literature review in an integrated model of job insecurity (see Figure 1). The model describes job insecurity as a subjectively experienced, multi-dimensional phenomenon which may arise as a function of the interaction between the objective situation and subjective characteristics, a phenomenon which may have detrimental consequences for employee attitudes and well-being, where such consequences may be mitigated by a number of potential moderators.

Our review has focused on job insecurity as a consequence that may follow upon the changing nature of work. However, as we have briefly sketched, job insecurity may not be an inherent and inevitable consequence of downsizing, structural change, and organizational strivings for flexibility (Burke & Nelson, 1998; Klein Hesselink & van Vuuren, 1998). Rather, job insecurity can be described as a function of both the objective situation (e.g., labor market characteristics, organizational change) and the individual's subjective characteristics (e.g., family responsibility, employability). More research is warranted in order to investigate what groups are particularly vulnerable to experiencing job insecurity and how such experiences can be decreased.

In our view, more systematic research is needed also as to the consequences of job insecurity. We call for more longitudinal research to address issues of causality, long-term effects of insecurity, and its relative effects after controlling for other important factors, such as initial levels of the outcomes under study. In order to address these issues in a proper way, additional theory development is necessary. Conceptual refinement appears justified to broadening the definition of job insecurity to encompass more than threats of job loss. Although work has been done in this direction, concerns about valued job features represents an area where several different aspects are plausible, for instance, threats of impaired job content, demotion, pay development, and relations with coworkers. Such theoretical work should be carried out in close cooperation with development, and validation, of measures to reflect these different dimensions.

We also believe that further research is needed to examine how the negative effects of job insecurity can be reduced. Three areas of moderators seem especially important – individual differences, fairness perceptions, and social support – but we have noted that more research is needed in each of these areas, especially research highlighting strategies that organizations and unions can utilize to help employees in their coping with job insecurity and its consequences.

The accelerating rate of organizational change indicates that job insecurity is a phenomenon that will continue to characterize modern working life also in the years to come. As the flexibility of the labor market is likely to increase even more rapidly in the future, it is also of vital importance that research on job insecurity is sensitive to changes in working life and addresses more modern forms of employment relationships. While flexibility certainly meets the demands of many employers, it could well be that work on a project basis and temporary employment are also in line with the expectations and wishes of certain groups of individuals, presumably young workers, professionals, and employees in emerging industry sectors. If such a value shift is taking place, then the construct of job insecurity takes on still other connotations, such as threats to continuous on-the-job training, professional development, and future employability.

#### References

- Armstrong-Stassen, M. (1993). Production workers' reactions to a plant closing: The role of transfer, stress and support. Anxiety, Stress and Coping: An International Journal, 6, 201-214.
- Armstrong-Stassen, M. (1994). Coping with transition: A study of layoff survivors. *Journal of Organizational Behavior*, 15, 597-621.
- Arnetz, B. B., Brenner, S.-O., Levi, L., Hjelm, R., Petterson, I.-L., Wasserman, J., Petrini, B., Eneroth, P., Kallner, A., Kvetnansky, R., & Vigas, M. (1991).
  Neuroendocrine and immunologic effects of unemployment and job insecurity. *Psychotherapy & Psychosomatics Research*, 55, 76-80.
- Arnold, H. J., & Feldman, D. C. (1982). A multivariate analysis of the determinants of job turnover. *Journal of Applied Psychology*, 67, 350-360.
- Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, causes, and consequences of job insecurity: A theory-based measure and substantive test. Academy of Management Journal, 4, 803-829.
- Barling, J., Dupre, K. E., & Hepburn, C. G. (1998). Effects of parents job insecurity on children's work beliefs and attitudes. *Journal of Applied Psychology*, 83, 112-118.
- Barling, J., Fullagar, C., & Kelloway, E. K. (1992). *The union and its members: A psychological approach.* New York: Wiley.
- Barling, J., & Gallagher, D. G. (1996). Part-time employment. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 243-277). New York: Wiley.
- Barling, J., & Kelloway, K. E. (1996). Job insecurity and health: The moderating role of workplace control. *Stress medicine*, 12, 253-259.
- Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review. *Personnel psychology*, *31*, 665-699.
- Bender, K. A., & Sloane, P. J. (1999). Trade union membership, tenure and the level of job insecurity. *Applied Economics*, 31, 123-135.
- Borg, I., & Elizur, D. (1992). Job insecurity: Correlates, moderators and measurement. *International Journal of Manpower*, 13, 13-26.
- Borg, V., Kristensen, T. S., & Burr, H. (2000). Work environment and changes in selfrated health: A Five year follow-up study. *Stress Medicine*, 16, 37-47.
- Brief, A. P., Burke, M. J., George, J. M., Robinson, B. S., & Webster, J. (1988). Should negative affectivity remain an unmeasured variable in the study of job stress? *Journal of Applied Psychology*, 2, 193-198.
- Brockner, J. (1988). The effects of work layoffs on survivors: Research, theory, and practice. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*, Vol. 10. Greenwich, CT: JAI Press.
- Brockner, J. (1990). Scope of justice in the workplace: How survivors react to coworker layoffs. *Journal of Social Issues*, 46, 95-106.

- Brockner, J., & Grover, S. L. (1988). Predictors of survivors job involvement following layoffs: A field study. *Journal of Applied Psychology*, *3*, 436-442.
- Brockner, J., Tyler, T., R. & Cooper-Schneider, R. (1992). The influence of prior commitment to an institution on reactions to perceived unfairness: The higher they are, the harder the fall. *Administrative Science Quartely*, *37*, 241-261.
- Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, *81*, 358-368.
- Burchell, B. J., Day, D., Hudson, M., Ladipo, D., Mankelow, R., Nolan, J. P., Reed, H., Wichert, I. C., & Wilkinson, F. (1999). *Job insecurity and work intensification*. York: Joseph Rowntree Foundation.
- Burke, R. J. (1991). Job insecurity in stockbrokers. *Journal of Managerial Psychology*, 5, 10-16.
- Burke, R. J., & Cooper, C. L. (Eds.). (2000). *The organization in crisis: Downsizing, restructuring, and privatization*. Oxford: Blackwell.
- Burke, R. J., & Nelson, D. (1998). Mergers and acquisitions, downsizing, and privatization: A North American perspective. In M. K. Gowing, J. D. Kraft, & J. C. Quick (Eds.), *The new organizational reality: Downsizing, restructuring, and revitalization* (pp. 21-54). Washington, DC. American Psychological Association.
- Büssing, A. (1999). Can control at work and social support moderate psychological consequences of job insecurity? Results from a quasi-experimental study in the steel industry. *European Journal of Work and Organizational Psychology*, *8*, 219-242.
- Cameron, K., Freeman, S., & Mishra, A. (1991). Best practices in white-collar downsizing: Managing contradictions. Academy of Management Executive, 5, 57-73.
- Caplan, R. D., Cobb, S., French, J. R. P., van Harrison, R., & Pinneau, S. R. (1975). Job demands and worker health. Washington, D. C.: National Institute for Occupational Safety and Health.
- Cascio, W. F. (1998). Learning from outcomes: Financial experiences of 311 firms that have downsized. In M. K. Gowing, J. D. Kraft, & J. C. Quick (Eds.), *The new* organizational reality: Downsizing, restructuring, and revitalization (pp. 21-54). Washington, DC: American Psychological Association.
- Catalano, R., Rook, K., & Dooley, D. (1986). Labor markets and help-seeking: A test of the employment security hypothesis. *Journal of Health and Social Behavior*, 27, 277-2287.
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 4, 668-678.
- Davy, J. A., Kinicki, A. J., & Scheck, C. L. (1997). A test of job security's direct and mediated effects on withdrawal cognitions. *Journal of Organizational Behavior*, 18, 323-349.
- Davy, J. A., Kinicki, A. J., & Scheck, C. L. (1991). Developing and testing a model of survivor responses to layoffs. *Journal of Vocational Behavior*, *38*, 302-317.

- Dekker, S. W. A., & Schaufeli, W. B. (1995). The effects of job insecurity on psychological health and withdrawal: A longitudinal study. *Australian Psychologist*, 30, 57-63.
- Depue, R. A., & Monroe, S. M. (1986). Conceptualization and measurement of human disorder in life stress research. *Psychological Bulletin*, *99*, 36-51.
- De Witte, H. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, 8, 155-177.
- De Witte, H., & Näswall, K. (2003). "Objective" vs. "Subjective" job insecurity: Consequences of temporary work for job satisfaction and organizational commitment in four European countries. *Economic and Industrial Democracy*, 24, 209-312.
- Ferrie, J. (2001). Is job insecurity harmful to health? *Journal of the Royal Society of Medicine*, 94, 71-76.
- Ferrie, J. E., Shipley, M. J., Marmot, M. G., Stansfeld, S. A., & Smith, G. D. (1998). An uncertain future: The health effects of threats to employment security in white-collar men and women. *American Journal of Public Health*, 88, 1030-1036.
- Frese, M. (1985). Stress at work and psychosomatic complaints: A causal interpretation. *Journal of Applied Psychology*, 70(2), 314-328.
- Fugate, M., Kinicki, A.J., & Asforth, B.E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65, 14-38.
- Gallagher, D. G., & McLean Parks, J. (2001). I pledge thee my troth ... contingently: Commitment and the contingent work relationship. *Human Resource Management Review*, 11, 181-208.
- Gallie, D., White, M., Cheng, Y., & Tomlinson, M. (1998). *Restructuring the employment relationship*. Oxford: Clarendon Press.
- Garst, H., Frese, M., & Molenaar, P. C. M. (2000). The temporal factor of change in stressor-strain relationships: A growth curve model on a longitudinal study in East Germany. *Journal of Applied Psychology*, 85, 417-438.
- Greenhalgh, L., and Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review*, *3*, 438-448.
- Gorsuch, R. L. (1997). Exploratory factor analysis: Its role in item analysis. *Journal of Personality Assessment*, 68, 532-560.
- Gowing, M. K., Kraft, J. D., & Campbell Quick, J. (Eds.) (1998). The new organizational reality: Downsizing, restructuring, and revitalization. Washington, DC. American Psychological Association.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60, 159-170.
- Hartley, J., Jacobson, D., Klandermans, B., & van Vuuren, T. (1991). *Job insecurity: Coping with jobs at risk*. London: Sage.
- Hartley, J., & Klandermans, P. G. (1986). Individual and collective responses to job insecurity. In G. Debus & H.-W. Schroiff (Eds.), *The psychology of work and organization* (pp. 129-136). Amsterdam: Elsevier Science.

- Heaney, C. A., Israel, B. A., & House, J. S. (1994). Chronic job insecurity among automobile workers: Effects on job satisfaction and health. *Social Science & Medicine*, 38, 1431-37.
- Hellgren, J., & Chirumbolo, A. (2003). Can union support reduce the negative effects of job insecurity on well-being? *Economic and Industrial Democracy*, 24, 271-289.
- Hellgren, J., & Sverke, M. (2001). Unionized employees' perceptions of role stress and fairness during organizational downsizing: Consequences for job satisfaction, union satisfaction and well-being. *Economic and Industrial Democracy*, 22, 543-567.
- Hellgren, J., & Sverke, M. (2003). Does job insecurity lead to impaired well-being or vice versa? Estimation of cross-lagged effects using latent variable modeling. *Journal of Organizational Behavior*, 24, 215-236.
- Hellgren, J., Sverke, M., & Isaksson, K. (1999). A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. *European Journal of Work and Organization Psychology*, 8, 179-195.

Howard, A. (1995). The changing nature of work. San Francisco, CA: Jossey-Bass.

- Iversen, L., & Sabroe, S. (1988). Psychological well-being among unemployed and employed people after a company closedown: A longitudinal study. *Journal of Social Issues*, 44, 141-152.
- Jahoda, M. (1982). *Employment and unemployment: A social-psychological analysis*. Cambridge, MA: Cambridge University Press.
- James, L. R., Hater, J. J., Gent, M. J., & Bruni, J. R. (1978). Psychological climate: Implications from cognitive social learning theory and interactional psychology. *Personnel Psychology*, 31, 783-813.
- James, L. R., & Sells, S. B. (1981). Psychological climate: Theoretical perspectives and empirical research. In D. Magnusson (Ed.), *Toward a psychology of situations: An interactional perspective* (pp. 275-295). Hillsdale, NJ: Lawrence Erlbaum.
- Jex, S. M., & Beehr, T. A. (1991). Emerging theoretical and methodological issues in the study of work-related stress. In K. Rowland & G. Ferries (Eds.), *Research in personnel and human resources management* (Vol. 9, pp. 311-365). Greenwich, CT: JAI Press.
- Jick, T. D. (1985). As the axe fails: Budget cuts and the experience of stress in organizations. In T. A. Beehr & R. S. Bhagat (Eds.), *Human stress and cognition in organizations: An integrated perspective* (pp. 83-114). New York: Wiley.
- Johnson, N. B., Bobko, P., & Hartenian, L. S. (1992). Union influence and local union leaders' perceptions of job insecurity: An empirical test. *British Journal of Industrial Relations*, 30, 45-60.
- Kets de Vries, M. F. R., & Balazs, K. (1997). The downside of downsizing. *Human Relations*, 50, 11-50.
- Kinnunen, U., Mauno, S., Nätti, J., & Happonen, M. (1999). Perceived job insecurity: A longitudinal study among Finish employees. *European Journal of Work and Organi*zational Psychology, 8, 243-260.
- Klein Hesselink, D. J., & van Vuuren, T. (1999). Job flexibility and job insecurity: The Dutch case. *European Journal of Work and Organizational Psychology*, 8, 273-293.

- Konovsky, M. & Folger, R. (1987). Relative effects of procedural and distributive justice on employee attitudes. *Representative Research in Social Psychology*, 17, 15-24.
- Kuhnert, K. W., & Palmer, D. R. (1991). Job security, health and the intrinsic and extrinsic characteristics of work. *Group & Organization Studies*, *16*, 178-192.
- Latack, J. C., & Dozier, J. B. (1986). After the axe falls: Job loss on a career transition. *Academy of Management Review*, 11, 375-392.
- Lazarus, R. S., & Folkman, S. (1984). *Stress appraisal and coping*. New York: Springer.
- Levanoni, E., & Sales, C. A. (1990). Differences in job attitudes between full-time and part-time Canadian employees. *Journal of Social Psychology*, *130*, 231-237.
- Lim, V. K. G. (1996). Job insecurity and its outcomes: Moderating effects of workbased and nonwork-based social support. *Human Relations*, 2, 171-194.
- Lim, V. K. G. (1997). Moderating effects of work-based support on the ralationship between job insecurity and its consequences. *Work and Stress*, *11*, 251-266.
- Lim, V. K. G., & Leng Loo, G. (2003). Effects of parental job insecurity and parenting behaviors on youth's self-efficacy and work attitutes. *Journal of Vocational Behavior*, 63, 86-98.
- Lind, E., & Tyler, T. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Lindström, K., Leino, T., Seitsamo, J., & Torstila, I. (1997). A longitudinal study of work characteristics and health complaints among insurance employees in VDT work. *International Journal of Human-Computer Interaction*, *9*, 343-368.
- Mak, A. S., & Mueller, J. (2000). Job insecurity, coping resources and personality dispositions in occupational strain. *Work & Stress*, *14*, 312-328.
- Matteson, M. T., & Ivancevich, J. M. (1987). *Controlling work stress: Effective human resource and management strategies*. San Francisco: Jossey-Bass.
- Mattiasson, I., Lindgarde, F., Nilsson, J. A., & Theorell, T. (1990). Threat of unemployment and cardiovascular risk factors: Longitudinal study of quality of sleep and serum cholesterol concentration in men threatened with redundancy. *British Journal of Medicine*, 301, 461-466.
- Mauno, S., Leskinen, E., & Kinnunen, U. (2001). Multi-wave, multi-variable models of job insecurity: Applying different scales in studying the stability of job insecurity. *Journal of Organizational Behavior*, 22, 919-937.
- McLean Parks, J., Kidder, D. L., & Gallagher, D. G. (1998). Fitting square pegs into round holes: Mapping the domain of contingent work arrangements onto the psychological contract. *Journal of Organizational Behavior*, *19*, 697-730.
- Mellor, S. (1992). The influence of layoff severity on post-layoff union commitment among survivors-The moderating effect of the perceived legitimacy of a layoff account. *Personnel Psychology*, 45, 579-600.
- Mohr, G. B. (2000). The changing significance of different stressors after the announcement of bankruptcy: A longitudinal investigation with special emphasis on job insecurity. *Journal of Organizational Behavior*, 21, 337-359.

- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81, 400-410.
- Noer, D. (1993). *Healing the wounds: Overcoming the trauma of layoffs and revitalizing downsized organizations*. San Francisco: Jossey-Bass.
- Novelli, Jr., L., Kirkman, B. L., & Shapiro, D. L. (1995). Effective implementation of organizational change: An organizational justice perspective. In C. L. Cooper & D. M Rousseau (Eds.), *Trends in organizational behavior*, Vol. 2 (pp. 15-36). Chichester, UK: Wiley.
- Näswall, K., & De Witte, H. (2003). Who feels insecure in Europe? Predicting job insecurity from background variables. *Economic and Industrial Democracy*, 24, 187-213.
- Näswall, K., Sverke, M., & Hellgren, J. (2005). The moderating role of personality characteristics on the relation between job insecurity and strain. *Work & Stress*, *19*, 37-49.
- Näswall, K., Sverke, M., & Hellgren, J. (2001). Tryggare kan ingen vara? Metaanalys av relationen mellan anställningsotrygghet och välbefinnande [No one can be safer? Meta-analysis of the relationship between job insecurity and well-being]. Arbetsmarknad & Arbetsliv, 7, 179-195.
- OECD. (1997). Is job insecurity on the increase in OECD countries?, *OECD Employment Outlook July* (pp. 129-153). Paris: Office for Economic Cooperation and Development.
- Orpen, C. (1993). Job dependence as a moderator of effects of job threat on employees' job insecurity and performance. *Psychological Reports*, 72, 449-450.
- Parker, S. K., Chmiel, N., & Wall, T. D. (1997). Work characteristics and employee well-being within a context of strategic downsizing. *Journal of Occupational Health Psychology*, 4, 289-303.
- Pearce, J. L. (1998). Job insecurity is important but not for the reasons you might think: The example of contingent workers. In C. L. Cooper & D. M. Rousseau (Eds.), *Trends in organizational behavior* (Vol. 5, pp. 31-46). New York, NY: Wiley.
- Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Boston, MA: Harvard University Press.
- Pozner, B. Z., Randolph, W. A. (1980). Moderators of role stress among hospital personnel. *The Journal of Psychology*, 105, 215-224.
- Probst, T. M., & Brubaker, T. L. (2001). The effects of job insecurity on employee safety outcomes: Cross-sectional and longitudinal explorations. *Journal of Occupational Health Psychology*, 6, 139-159.
- Reisel, W. D., & Banai, M. (2002). Comparison of a multidimensional and a global measure of job insecurity: Predicting job attitudes and work behaviors. *Psychological Reports*, 90, 913-922.
- Rifkin, J. (1995). The end of work: The decline of the global labor force and the dawn of the post-market era. New York: Putnam.

- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, *15*, 150-163.
- Rosenblatt, Z., & Ruvio, A. (1996). A test of a multidimensional model of job insecurity: The case of Israeli teachers. *Journal of Organizational Behavior*, *17*, 587-605.
- Rosenblatt, Z., Talmud, I., & Ruvio, A. (1999). A gender-based framework of the experience of job insecurity and its effects on work attitudes. *European Journal of Work and Organizational Psychology*, 8, 197-217.
- Roskies, E., & Louis-Guerin, C. (1990). Job insecurity in managers: Antecedents and consequences. *Journal of Organizational Behavior*, *11*, 345-359.
- Roskies, E., Louis-Guerin, C., & Fournier, C. (1993). Coping with job insecurity: How does personality make a difference? *Journal of Organizational Behavior*, *14*, 617-630.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80 (Whole No 609).
- Schabracq, M. J., & Cooper, C. L. (2000). The changing nature of work and stress. *Journal of Mangerial Psychology*, 15, 227-241.
- Schaubroeck, J., Ganster, D. C., & Fox, M. L. (1992). Dispositional affect and workrelated stress. *Journal of Applied Psychology*, *3*, 322-335.
- Schaufeli, W. (1992). Unemployment and mental health in well and poorly educated school-leavers. In C. Verhaar & L. Jansma (Eds.), On the mysteries of unemployment: Causes, consequences and policies. (pp. 253-271). Dordecht, the Netherlands: Kluwer Academic Publishers.
- Shaw, J. B., Fields, W. M., Thacker, J. W., & Fisher, C. D. (1993). The availability of personal and external coping resources: Their impact on job stress and employee attitudes during organizational restructuring. *Work & Stress*, 7, 229-246.
- Siegrist, J., Peter, R., Junge, A., Cremer, P., & Siegel, D. (1990). Low status control, high effort at work and ischemic heart disease: Prospective evidence from bluecollar men. *Social Science and Medicine*, 31, 1127-1134.
- Sparrow, P. (1998). The pursuit of multiple and parallel organizational flexibilities: Reconstituting jobs. *European Journal of Work and Organizational Psychology*, 7, 79-95.
- Spector, P. E. (1992). A consideration of the validity and meaning of self-report measures of job conditions. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 7, pp. 123-151). New York: Wiley.
- Spector, P. E. (2000). A control theory of the job stress process. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 153-169). Oxford: University Press.
- Still, L. W. (1983). Part-time versus full-time salespeople: Individual attributes, organizational commitment, and work attitudes. *Journal of Retailing*, *59*, 55-79.
- Sverke, M., Gallagher, D. G., & Hellgren, J. (2000). Alternative work arrangements: Job stress, well-being and pro-organizational attitudes among employees with different employment contracts. In K. Isaksson, C. Hogstedt, C. Eriksson, & T.

Theorell (Eds.), *Health effects of the new labour market* (pp. 145-167). New York: Plenum.

- Sverke, M., & Goslinga, S. (2003). The consequences of job insecurity for employers and unions: Exit, voice, and loyalty. *Economic and Industrial Democracy*, 24, 241-270.
- Sverke, M., Hellgren, J., Näswall, K., Chirumbolo, A., De Witte, H., & Goslinga, S. (2004). Job insecurity and union membership: European unions in the wake of flexible production. Brussels: P.I.E.-Peter Lang.
- Sverke, M., & Hellgren, J. (2001). Exit, voice, and loyalty reactions to job insecurity: Do unionized and non-unionized employees differ? *British Journal of Industrial Relations*, 39, 167-182.
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7, 242-264.
- Tetrick, L. E., & Quick, J. C. (2003). Prevention at work: Public health in occupational settings. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 3-17). Washington, DC: American Psychological Association.
- Tetrick, L. E., & LaRocco, J. M. (1987). Understanding, prediction, and control as moderators of the relationships between perceived stress, satisfaction, and psychological well-being. *Journal of Applied Psychology*, 72, 538-543.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Turnley, W. H., & Feldman, D. C. (1999). The impact of psychological contract violations on exit, voice, loyalty, and neglect. *Human Relations*, 52, 895-922.
- Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54, 314-334.
- Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress and distress: Exploring the central role of negative affectivity. *Psychological Review*, 2, 234-254.
- Westman, M., Etzion, D., & Danon, E. (2001). Job insecurity and crossover of burnout in married couples. *Journal of Organizational Behavior*, 22, 467-481.
- Zapf, D., Dormann, C., & Frese, M. (1996). Longitudinal studies in organizational stress research: A review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology*, 1, 145-169.