Job Insecurity and Its Consequences
Investigating Moderators, Mediators and Gender
Anne Richter
“The real voyage of discovery consists not in seeking new landscapes but in having new eyes.” (Marcel Proust)
Abstract

This thesis has aimed at increasing our understanding of the relations between job insecurity and its consequences by addressing several specific research aims. The first research aim focused on increasing the range of job insecurity consequences by studying the relation between job insecurity and work–family conflict over time in order to investigate the directionality of their association, which was addressed in Study 3. It was found that job insecurity affected work–family conflict one year later, but only among men.

The second research aim addressed mechanisms involved in the job insecurity–outcome relations. Factors that might make employees more vulnerable to, or buffer against the negative effects of job insecurity were studied. Coping with job insecurity was investigated as potential moderating factors in Study 1. The results showed that problem-focused coping did not function as a buffer, nor did devaluation coping and avoidance coping, the two types of emotion-focused coping studied. Avoidance coping was actually a vulnerability factor for men, and related to more negative reactions to job insecurity in terms of job satisfaction and mental health complaints. Two forms of job dependence were also investigated in Study 2 as potential moderating factors of the relations between job insecurity and its outcomes. It was found that the relative contribution to the household income functioned as a vulnerability factor for men. Higher levels of work centrality combined with either quantitative or qualitative job insecurity were related to higher levels of job satisfaction among women. As a final mechanism, workload was investigated as a mediating variable of the relation between job insecurity and its outcomes in Study 3. The results showed that workload linked job insecurity to work–family conflict one year later, but only for men.

The third research aim of this thesis addressed gender, and differences between men and women were found in all three studies, where men overall seemed to suffer more from job insecurity. All in all, these results confirm previous results regarding the negative impact of job insecurity, but also provide information regarding important areas for future research to study, such as the further investigation of mechanisms as well as the role of gender.

Keywords: qualitative job insecurity, quantitative job insecurity, coping, workload, job dependence, work centrality, gender, work–family conflict
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“Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do. If you haven’t found it yet, keep looking. Don’t settle. As with all matters of the heart, you’ll know when you find it. And, like any great relationship, it just gets better and better as the years roll on. So keep looking until you find it. Don’t settle.”

I think I found my “great work” and the last four years have been a great start for a good person–job relationship and will hopefully be a good predictor for the future. But as I have learned during my many hours of statistics class, there is way more to a statistical relationship than just two variables, and this also applies to life in general. I have met so many wonderful people on my journey and I would like to thank some people in particular that have coached me and supported me during the last few years.

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Anne Richter

Stockholm, 19th of October, 2011
List of Studies

This thesis is based on the following studies:


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Introduction

In recent years, job insecurity has become more relevant for employees and organizations. The increasing uncertainty of employees has come to the attention of both research and the daily press, for example, in international newspaper article headlines such as "The number of insecure jobs increases" (RP, 2010) and “Help me to deal with job insecurity” (Budworth, 2009).

Employee uncertainty over potential job loss has often been assumed to have negative effects. From an individual perspective, it is the health and well-being of employees that may be negatively affected, while, from an organizational perspective, work behaviors and attitudes may be affected negatively. Since planning for the future might not be possible when experiencing job insecurity, and life outside work may be influenced negatively as well, job insecurity can have effects on a larger societal level. For instance, detrimental effects to well-being and health may have to be compensated for by the welfare and healthcare systems (cf. Pfeffer, 1997). Until now research on the consequences of job insecurity has mainly focused on topics that are relevant from an individual and organizational perspective (Cheng & Chan, 2008; Sverke, Hellgren, & Näswall, 2002), but further outcomes need to be included to gain a better understanding of the severity of job insecurity. Moreover, little is known about the inter-individual differences regarding responses to job insecurity (e.g., Armstrong-Stassen, 1994; Kinnunen, Mauno, & Siltaloppi, 2010), especially when considering coping or living circumstances. Intervening factors, between the experiencing of job insecurity and its consequences, such as perceptions of unfairness (Bernhard-Oettel, De Cuyper, Schreurs, & De Witte, 2011), have been increasingly studied over the last few years (Sverke, De Witte, Näswall, & Hellgren, 2010). A better knowledge of what the types of perceptions of the work situation are that may lead to employees experiencing negative consequences in connection with job insecurity would be an important step in understanding job insecurity better. In addition, research on the role of gender in the context of job insecurity has, as of yet, led to inconclusive results and many unanswered questions (De Witte, 1999; Mauno & Kinnunen, 1999; Westman, 2000), which calls for further investigations of gender in this area.
The Uncertainties in Today’s Working Life

One reason for the need for research on job insecurity concerns the changes that have occurred in the labor market, which have brought more uncertainty into the workforce environment. Since the Second World War, the labor markets of the industrialized countries have been characterized by almost full employment, steady growth, strengthening welfare systems, and increasing wages for employees (UNCTAD, 2001). The global situation and the world economy have undergone major changes in recent decades, which have affected organizations (Burke & Cooper, 2000). Globalization, as a more general facilitator for contextual change, has been the engine for increased global competition (Farber, 2008). Accordingly, as national markets are deregulated, national borders are no longer an obstacle for organizations’ operations (Burke & Cooper, 2000; ILO, 1996).

These global changes have called for alterations in organizations and organizational practices in order for companies to be able to survive in this new context with increased competitiveness. One attempt to adapt is the frequent use of privatization, mergers, acquisitions, joint ventures, and downsizing as various means for organizations to compete globally with other organizations (Farber, 2008; ILO, 1996). Businesses have become “leaner and meaner” (Burke & Cooper, 2000, p. 6) by focusing on core competencies and outsourcing more peripheral functions (Burke & Cooper, 2000). In addition, many organizations are smaller in size (Cascio, 1995; Martin & Freeman, 1998) and non-standard types of employment are used more frequently to guarantee organizational flexibility and short reaction times to external changes (Allvin, Aronsson, Hagström, Johansson, & Lundberg, 2011). The use of project and agency work as well as temporary employment is common practice among organizations today (Wikman, 2010). Consequently, there has been a decline in the use of long-term employment and thus in life-long tenure as well, which were the standard previously (Anderson & Schalk, 1998; Millward & Brewerton, 2000). A parallel development is the shift in the kinds of demands and competencies that are required of the workforce in today’s working life. Today, employees need to be able to deal with organizations’ need for flexibility, while loyalty to the organization, which formerly pre-dominated employees’ behavior and attitudes, has taken a back seat (De Cuyper, Notelaers, & De Witte, 2009; Kanter, 1995). Ultimately, this entails a shift in risk – from the organization to the individual – as the uncertainties of the labor market are mainly born by the individual (Beck, 2000).
This also means that organizations are less likely to provide an opportunity for the “organizational career,” a life-long employment with one employer (Greenhalgh & Rosenblatt, 2010). Instead, the “portfolio career” is on the rise (Kirkpatrick & Houque, 2005; Pink, 2001), where employees are expected to be rational agents looking after their economic well-being through increased market drive and self-direction (Kelan, 2008). In comparison to before, when organizations were more likely to provide security, employees today often need to ensure their own security by staying employable (De Cuyper et al., 2009; Kanter, 1995). Employees have to take on greater responsibility for continuously developing their human and social capital in order to be able to find new jobs – as their careers and economic futures are dependent on it.

At the same time, organizations have to master the fast pace of change in order to survive. Along with that, technology has advanced rapidly (Marks, 1994) with the increasing use of portable computers, smartphones, and the internet, which enable employees to be more flexible regarding work location as well as working hours (Burke & Cooper, 2000). However, there have been some negative effects on working life from these new technologies; the boundaries between work and life outside work have been blurred, increasing the risk of working “always and everywhere” (Allvin, 2008, p. 28), especially in situations where working hours are unclearly regulated (Burke & Cooper, 2000). When dealing with information overload, which can be caused by the new technologies (Burke & Cooper, 2000) and by the increased pace and amount of work employees have to accomplish, work stressors might spill more easily over into the non-work domain. This may make it more difficult for employees to disengage and recover (Arthur, Inkson, & Pringle, 1999; Näsvall, Hellgren, & Sverke, 2008), which has frequently been described as the “boundaryless working life” (Allvin, 2008).

**Job Insecurity, Mechanisms, and the Role of Gender**

Due to the major changes in working life, certain stressors have become more prominent, with one of the most common ones concerning the uncertainty experienced over the future of one’s job – job insecurity. Greenhalgh and Rosenblatt’s pioneering article from 1984 marks the beginning for investigations on the phenomenon of job insecurity, in which they defined job insecurity as the “perceived powerlessness to maintain desired continuity in a threatened job situation” (Greenhalgh & Rosenblatt, 1984, p. 438). Since then it has been considered as a work
stressor with important implications from occupational, health and managerial perspectives because of its negative consequences (Armstrong-Stassen, 1993; Ashford, Lee, & Bobko, 1989; Barling & Kelloway, 1996; Greenhalgh & Rosenblatt, 1984).

Thus far, it is well established that job insecurity affects both the individual and the organization (Borg & Elizur, 1992; Kuhnert & Palmer, 1991; Rosenblatt, Talmud, & Ruvio, 1999; Roskies & Louis-Guerin, 1990). Two meta-analyses on job insecurity found relations between job insecurity and the aspects of decreased job satisfaction, organizational commitment, trust, performance, job involvement, mental and physical health, and increased turnover intention (Cheng & Chan, 2008; Sverke et al., 2002). Due to the negative effects of job insecurity on the employee’s well-being and due to the blurred boundaries between the work and non-work domain, it is possible that work issues spill over into the non-work domain (Greenhaus & Beutell, 1985). At this point in time, findings on the consequences related to the non-work domain are scarce (exceptions include a study by Edwards and Rothbard, 2000, on the relation of job insecurity and work-family conflict) because most of the outcomes have focused on organizational outcomes or individual outcomes concerning, for instance, the health of employees. For this reason, more knowledge is needed in order to know if job insecurity has broader consequences (and what these consequences might be) and to understand how the work and the non-work domains are inter-connected in this context.

In order to understand the antecedents and outcomes of job insecurity better, it is important to establish if job insecurity triggers negative outcomes over time, or if there are reciprocal relations that make employees more prone to experiencing job insecurity. Cross-sectional studies have established that job insecurity is associated with negative consequences. However, only a few studies, mainly focusing on health outcomes, such as Hellgren, and Sverke (2003) or Ibrahim, Smith, and Muntaner (2009), have investigated the directionality of job insecurity and its outcomes. More research is needed on job insecurity and its possible consequences, and the directionality of these relations, in order to increase our knowledge about the potential outcomes that follow job insecurity as well as the potential durations of its effects.

Along with establishing the possible reactions that may follow the experiencing of job insecurity, the employee and organizational characteristics that may influence the extent to which job insecurity affects employees and organizations negatively need to be identified. This kind of information would shed light on the underlying mechanisms of job insecurity and may provide a starting point for potential interventions for
employees experiencing job insecurity. Variations in the strength of the relationships between job insecurity and a variety of job insecurity outcomes have been observed (Cheng & Chan, 2008; Sverke et al., 2002). Accordingly, more job insecurity research is needed to better identify these relations and the factors that may explain the variations. These factors, representing mechanisms, can be conceptualized in different ways.

One such factor is represented by moderating variables that can either buffer against or make employees more vulnerable to the negative outcomes of job insecurity. Certain demographic variables, for instance, have been found to act in this way, including tenure, age, and occupational status (Cheng & Chan, 2008; Sverke et al., 2002) as well as personality variables, such as optimism and locus of control, and other factors, such as recovery experience and employability (Kinunnen et al., 2010; Mäkikangas & Kinnunen, 2003; Näswall, Sverke, & Hellgren, 2005). More information is needed on individual-level factors, such as whether and in what way differences in how individuals handle job insecurity or in their degree of job dependence can influence the relationships between job insecurity and its outcomes.

Secondly, another type of factor that may explain the variation of the relationship of job insecurity and its outcomes is the intervening factor, which develops as a result of job insecurity, and serves as a connection between job insecurity and its known negative outcomes. These mediating variables explain in what way job insecurity is related to certain outcomes. Factors related to changes in the work situation as a response to job insecurity should be further investigated to increase our understanding of how organizational factors that may vary over time can affect the experienced consequences of job insecurity.

Additionally, gender should be further investigated in order to bring more direction to the variety of findings that previous research has produced regarding the role of gender in the context of job insecurity (Westman, 2000). For example, job insecurity has been related to mental ill-health among men (De Witte, 1999), whereas other studies, such as that of Rosenblatt and colleagues, found that job insecurity was mainly related to work attitudes among women (Rosenblatt et al., 1999). Gender needs to be studied further in the context of job insecurity and its outcomes, and needs to be considered in particular when examining individual differences or mechanisms to see if the inclusion of gender may contribute to the understanding of these findings.
The Present Thesis

The overall aim of this thesis is to improve our understanding of job insecurity and how it relates to its consequences by investigating individual differences concerning how job insecurity may affect the workforce as well as factors that may mediate the effects of job insecurity. To be more specific, the following three aims have been formulated. The first aim concerns investigating a broader range of consequences of job insecurity by including an outcome that has not yet gained much research attention and testing this relationship over time. The second aim of this thesis is to study mechanisms potentially influencing job insecurity by focusing on factors that may make employees more vulnerable to or buffer against the negative effects of job insecurity, which could help explain in what way job insecurity is associated with its negative consequences. The third aim is to investigate the role of gender with regard to these potential mechanisms and, more generally, with regard to those aspects of job insecurity and its outcomes that have been dealt with in this thesis. A diagram of the conceptual relations among the overall aim and the specific aims is presented in Figure 1.

Figure 1. Conceptual model of this thesis.
Study 1 investigates the second and third aims by focusing on how employees try to cope with job insecurity and investigating possible gender differences in the coping process. As very little is known about this type of coping, three different coping strategies were tested to determine their effects on the relations of job insecurity and known job insecurity outcomes (job satisfaction, affective organizational commitment, turnover intention, mental and somatic ill-health).

Looking more closely at the second and third aims, Study 2 examined employees’ degree of job dependence as another possible mechanism of job insecurity while also considering the role of gender. Since perceived job dependence, for financial or more psychological reasons, may differ between employees and affect how seriously a threat to the job is perceived, an investigation of whether these factors function as mechanisms which affect the relations between job insecurity and known outcomes (job satisfaction and mental ill-health) was included in this study.

Addressing all three specific aims, Study 3 looked further into these potential mechanisms by testing workload as a possible link between job insecurity and possible consequences. It investigated whether the perceived workload of employees mediates the association between job insecurity and the perceived balance between the work and non-work domains. Work–family conflict, an outcome that has begun to receive more attention rather recently, was also tested by including it as a potential consequence of job insecurity and testing the directionality of their association over time. Gender differences were tested by comparing the strength of the relationships between job insecurity and its outcomes among men and women.
Job Insecurity Defined

Individuals have probably been experiencing some form of job insecurity for as long as humans have been involved in specialized work. In recent years, due to changes in working life, brought on by organizations’ having to adjust to a more global context and especially the recessions that have hit many Western countries, job insecurity is now a major issue for many employees (Burke & Cooper, 2000). In the classic literature on motivation at work, job insecurity has only been considered indirectly. Both Herzberg (1959) as well as Maslow (1954) suggested that having secure employment motivates employees to perform and it has been considered, by them and others, as part of the basis for well-being of the workforce. Over time, the scientific focus has shifted from job security being a motivator to job insecurity being a work-related stressor (Ashford, et al., 1989; Herzberg, 1959; Maslow, 1954). The concept of job insecurity, as we know it today, has mainly developed out of research conducted over the last 30 years.

Job insecurity has been defined as the employee’s “perceived powerlessness to maintain desired continuity in a threatened job situation” (Greenhalgh & Rosenblatt, 1984, p. 438). The two key aspects affecting the experiencing and severity of job insecurity, as stressed by these researchers, are: (1) powerlessness, a feeling of not being able to change the situation; and (2) the perceived threat of job loss. Research on job insecurity is based on the assumption that a potential job loss is an undesired event, especially since employment provides income and financial security. Besides this obvious function, employment also provides one with a time structure, social contacts, a collective purpose, a social identity, status, and activities (Jahoda, 1982). According to Greenhalgh and Rosenblatt (1984), another important aspect that contributes to job insecurity perceptions is the perceived probability of job loss, which in combination with the powerlessness felt and the severity of the threat contributes to the strength of job insecurity experiences (Ashford et al. 1989; Greenhalgh & Rosenblatt, 1984; Kinnunen & Nätti, 1994). This shows that the individual’s interpretation is crucial to understanding the job insecurity experience.
In line with Greenhalgh and Rosenblatt’s (1984) definition, other scholars have defined job insecurity as “the subjectively experienced anticipation of a fundamental and involuntary event related to job loss” (Sverke et al., 2002, p. 243), “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 “expectations about continuity in a job situation” (Davy, Kinicki, & Scheck, 1997, p.133), as well as the “concern about the future permanence of the job” (van Vuuren & Klandermans, 1990, p.133). The common element of these definitions is that job insecurity is considered to be a subjective phenomenon based on the individual’s perception of the situation. Changes in the organization, such as downsizing or mergers, as well as conditions that might evoke the workforce’s suspicion about potential changes to the job have been associated with the increased perception of job insecurity (Hartley, Jacobson, Klandermans, & van Vuuren, 1991; Pfeffer, 1997). The relationship between such organizational changes, as well as other work circumstances such as the employment contract, and job insecurity have led some scholars to view job insecurity in objective terms rather than in terms of individuals’ perceptions. Pearce, for example, has presumed that employees who work under temporary contracts are experiencing job insecurity (Pearce, 1998), while other researchers have suggested that being employed in organizations undergoing downsizing or reorganizations results in job insecurity (Büssing, 1999; Roskies & Louis-Guerin, 1990). However, the experiencing of job insecurity has been found to be more complex, as studies show that individual employees working at the same organization experience different levels of job insecurity (De Witte & Näswall, 2003; Letourneux, 1998; Mauno, Kinnunen, Mäkikangas, & Nätti, 2005; Sverke et al., 2002; Virtanen, Vahtera, Kivimäki, Pentii, & Ferrie, 2002), which can be explained through inter-individual differences that may affect the perception of a common work situation (cf. Lazarus & Folkman, 1984). A study comparing subjectively to objectively defined insecurity found that individually perceived job insecurity was more strongly associated with negative consequences than were environmentally determined indicators of job insecurity such as temporary work (De Witte & Näswall, 2003). Thus, approaching job insecurity subjectively, through measuring employees individually, makes it possible to capture a greater variability in job insecurity perceptions.

Job insecurity, as based on the individual’s perception, is shaped by different aspects, such as the labor market situation, organizational and job-related factors, as well as individual characteristics such as the availability of resources, educational level, and age. In this thesis, a subjective
definition of job insecurity is used in order to capture all of these factors more inclusively. From a psychological perspective, it is important to consider the individual’s interpretation of the environment in order to understand the reactions and inter-individual differences, which will contribute to a more differentiated and complete description of the employees’ situation in the workplace. Stressing the interaction between the individual and the organizational contexts is essential to understanding why job insecurity perceptions arise, employee perceptions are seen as the link between the objective work situation and the negative consequences job insecurity has been associated with (Cheng & Chan, 2008; cf. Lazarus & Folkman, 1984; Sverke et al., 2002).

The variability of job insecurity within a group of employees may depend on aspects such as the availability of resources, type of work performed, or personal characteristics, such as age or educational level (Näsvall & De Witte, 2003). In terms of age, employees under the age of 35 typically report less job insecurity feelings even though they tend to be employed in less stable jobs. Possible explanations for the increase in job insecurity perceptions with age could be the increased financial and family responsibility as well as they may feel it becomes harder to find comparable jobs (De Witte, 1999). In addition, certain job types such as manufacturing, agriculture, and construction jobs have more frequently been associated with increased job insecurity (Galliem White, Cheng, & Tomlinson, 1998; Kinnunen, Mauno, Nätii, & Happonen, 1999; Näsvall & De Witte, 2003). Employees in these types of jobs usually have lower levels of education (Schauferi, 1992) and lower wage, which can make employees more dependent on their current job to guarantee financial security (Kinnunen, et al., 1999; Muñoz de Bastillo & de Pedraza, 2010). Both factors have been associated with increased job insecurity (De Witte, 1999; Muñoz de Bastillo & de Pedraza, 2010; Schauferi, 1992). Hence, there are inter-individual differences in the workforce that can affect job insecurity perceptions and these and similar kinds of factors should for that reason even be considered even when studying job insecurity in the future.

Job insecurity should not be confused with what is experienced when employees receive notice that they have been let go from their jobs or have lost their jobs already (De Witte, 1999; Hartley et al., 1991; Jacobson, 1991; Latack & Dozier, 1986). When employees are notified that they have lost their job, any uncertainty that they had been experiencing over their current employment situation will cease. Even though unemployment is a stressful condition, it is held that employees transition from the role of the employee to the unemployed role (Jacobson, 1991) and in
so doing they are prompted to set up a plan of action for seeking new employment as well as be eligible for institutional and organizational support (Schlossberg & Leibowitz, 1980). Since it involves the anticipation of job loss, job insecurity can only be experienced when in the employee role, which makes it hard to develop action plans for preventing potential job loss, which has not happened yet (Jacobson, 1991; cf. Lazarus & Folkman, 1984). Empirically, it has even been found that being uncertain about the employment situation over a longer period of time might have similar or stronger negative effects on the individual than an actual job loss (Dekker & Schaufeli, 1995; Latack & Dozier, 1986; Vastamäki, Wolff, Göritz, & Moser, 2011).

Even though job insecurity has been defined similarly in a lot of studies, there are different ways of measuring it. For instance, job insecurity has been separated into cognitive and affective dimensions (Borg & Elizur, 1992; Hartley et al., 1991). The cognitive dimension mainly refers to the reasoning that employees engage in over the likelihood of losing employment (Borg & Elizur, 1992), whereas the affective dimension concerns how employees are affected emotionally, typically through worrying and being afraid of possibly losing the job (Borg & Elizur, 1992; Jacobson, 1991). According to this operationalization, individuals, who perceive that there is a chance that they may lose their job, do not necessarily need to be emotionally affected by this as they might possess resources to resolve the situation (Borg & Elizur, 1992). As this thesis defines job insecurity as a subjective phenomenon and emphasizes the importance of the individual’s perception, the affective component seems to be more relevant when investigating job insecurity and the individual’s well-being.

Additionally, another way to measure job insecurity has been proposed by Greenhalgh and Rosenblatt (1984) as well as Ashford and her colleagues (1989) who suggested that job insecurity concerns not only job loss on the whole but also insecurity over losing important aspects of the job. These aspects can include career and development opportunities, valued colleagues, or valued job tasks. In order to obtain a more complete picture of the job insecurity phenomenon, it is important to take into account that organizational changes may affect valued employment features, in addition to the threats such changes may pose to the job itself, so it is important to even consider valued aspects of the job as possible objects to threat. Hellgren, Sverke, and Isaksson (1999) created a shorter scale for taking into account important job features as part of the overall job insecurity construct. They labeled this dimension qualitative job inse-
curity and used the term quantitative job insecurity to describe insecurity over job loss on the whole (Hellgren et al., 1999).

However to date, most research has still focused primarily on quantitative job insecurity and it is usually referred to by the term job insecurity. This thesis uses the term job insecurity when implying quantitative job insecurity and applies the more distinctive terminology of Hellgren and his colleagues (1999) when both dimensions are considered in one of the three specific studies. The job insecurity measures that have been used in this thesis primarily assess the affective component of qualitative and quantitative job insecurity forms as this component seems to be more relevant for the evaluation of for example negative consequences of job insecurity since it is closely related to the definition of job insecurity as a stressor.
Job Insecurity in the Stressor–Strain Relationship

Two complementary theoretical frameworks are used in this thesis for describing how job insecurity acts as a stressor that negatively affects individuals as well as organizations. These two theories, the transactional stress theory (Lazarus & Folkman, 1984) and the conservation of resources (COR) theory (Hobfoll, 1989), provide theoretical grounds for how the experiencing of stress can result in strain based on the individuals’ assessment of available resources. These theories comply with the subjective definition of job insecurity and are the framework for investigating the mechanisms that may lie behind the relation between job insecurity and its outcomes. Both theoretical frameworks complement each other (see Figure 2). The transactional stress theory focuses more on the individuals’ experiencing of stress and strain, which is important for understanding inter-individual differences (the green parts of the figure). The COR theory goes beyond that and takes into account various resources that can impact the handling of stressors (the light blue parts of the figure). In addition, COR theory proposes that in certain circumstances, such as when the situation is unambiguous and there is not much room for variation in the interpretation, the external environment should be considered as an additional component in the stress–strain relationship (Hobfoll, 2001; cf. Torkelson, Muhonen, & Peiró, 2007).

![Figure 2. Combination of the transactional stress model (green) (Lazarus & Folkman, 1984) and conservation of resources theory (light blue) (Hobfoll, 1989)](image-url)
The Transactional Stress Theory

The transactional stress theory emphasizes the subjectivity and individuality of the stress process by focusing on the interaction between the individual and the environment (Lazarus & Folkman, 1984). The framework implies that stress perceptions and consequences are part of a dynamic process that can vary between individuals due to their inter-individual differences (Cox & MacKay, 1981; Cox, Griffiths, & Rial-Gonzalez, 2000; Miller & McCool, 2003). The basic process underlying this theory is the individual appraisal. In this regard, appraisal is defined as “the process of categorizing an encounter, and its various facets, with respect to its significance for well-being” (Lazarus & Folkman, 1984, p. 31).

Also according to Lazarus and Folkman (1984), the appraisal process consists of a primary and a secondary appraisal phase. In the primary phase, individuals identify whether a situation they have encountered could have a significant impact on their well-being (primary appraisal). Situations can be evaluated in three different ways. First, it could be categorized as irrelevant for the individual’s well-being, implying that nothing could be gained or lost from the current situation. There would be no necessity to act, so no resources would be invested and the individual would have the chance to adapt to the situation. Second, a situation could be categorized as benign-positive, where a positive outcome such as maintained or increased well-being is likely; hence there is no stressful situation to adapt to. Third, a situation could be perceived as stressful and potentially threatening to the individual’s well-being. When a situation is appraised in this last way, according to Lazarus and Folkman (1984), it requires a further evaluation into the nature of the stressful situation, which can be categorized into one of three types. First, a stressful situation could have brought with it harm or loss, which implies that the stressful event has already occurred and cannot be influenced, such as with actual job loss. Second, a stressful situation could be perceived as a challenge, which may trigger positive emotions such as excitement or eagerness, and also implies that there is a possibility for growth and gain (Cudré-Mauroux, 2010; Folkman & Lazarus, 1985). For example, receiving a job promotion would typically be appraised as a stressful yet challenging situation. To handle the increased responsibility, one would be expected to develop new skills and knowledge and the outcome would include increased status and pay. Third, a stressful situation could be perceived as a threat to well-being and carry with it an anticipation of future harm or loss. A threat is usually associated with negative emotions such as fear or anxiety (Cudré-Mauroux, 2010; Folkman & Lazarus, 1985). For instance, hearing rumors about possible downsizing within an
organization can be perceived as a threatening situation since it would carry with it an anticipation of potential job loss. Such an experiencing of job insecurity is thus considered to be a threat according to the transactional stress theory. To conclude, during primary appraisal individuals evaluate to what extent situations affect their well-being.

During secondary appraisal, individuals further process situations that they have perceived as challenging or threatening, the coping strategies and available resources for handling a situation are evaluated along with whether these are likely to lead to a desired outcome (Lazarus & Folkman, 1984). According to Lazarus and Folkman (1984), stress perception is additionally dependent on the evaluation going on during the secondary appraisal process. In addition, two other aspects are important during secondary appraisal (Lazarus & Folkman, 1984). First, the individual tries to assess which coping strategies would actually lead to a desired outcome, known as outcome expectancy. Second, the individual’s expectation of their possibilities of successfully utilizing these coping strategies, known as efficacy expectation, is evaluated (Bandura, 1977, 1982). The appraisal process results in stress and strain when the demands of the situation are deemed to exceed the available resources and no coping strategies seem to be effective (Lazarus & Folkman, 1984; Miller & McCool, 2003).

As job insecurity consists of the uncertainty about the future, with the source of threat being unclear, it implies that coping strategies and resources are also unclear (De Witte, 1999). Possible coping strategies that employees may try to use include seeking new employment and working harder. For instance, employees experiencing job insecurity may feel a sense of relief from knowing that there are other jobs out there that suit them, which may also result in decreased stress and higher outcome expectancy. Regarding efficacy expectancy, employees would actually need to have the time and capacity to search for a new job in order to feel more secure through finding possible alternative jobs. In other cases, employees experiencing job insecurity may perceive that their resources and utilized coping strategies do not resolve the insecure situation, so employees cannot do anything about job insecurity and for that reason job insecurity is likely to be associated with negative consequences. To summarize, during secondary appraisal, individuals evaluate what they might be able to do to resolve a demanding situation. If they do not find a solution, strain is experienced and well-being is affected negatively.

According to the transactional stress theory, the interaction between primary and secondary appraisal determines to what extent the individual is affected by a stressor (Lazarus & Folkman, 1984; Lowe & Bennett, 2003). For example, ambiguous situations can be perceived as both
challenging and threatening during primary appraisal since it is not clear what these situations actually entail (Lazarus & Folkman, 1984). However, if new information is received about the situation, it is then evaluated as part of the overall appraisal, as the individual continues to try to determine if the encountered situation is threatening or can result in a gain. The appraisal process is believed to be ongoing. After the initial secondary appraisal, reappraisals occur as new external and internal information is acquired. Because the appraisal process is dynamic and flexible in this way, situations may be perceived differently over time (Lazarus & Folkman, 1984).

To conclude, according to the transactional stress theory, job insecurity can be conceptualized as a stressor. When the job or important job features are perceived to be at risk, it is most likely interpreted as a threat as employment provides salary, status, and a social network for individuals (cf. De Witte, 1999; Jahoda, 1984). In addition, uncertainty over future employment makes it hard to find and successfully utilize coping strategies during secondary appraisal as it is unclear which kind of coping strategies might lead to a positive outcome (cf. De Witte, 1999). It can therefore be assumed that job insecurity most likely exceed the employees’ available coping resources, leading to increased strain and decreased well-being.

The Conservation of Resources Theory

The second theoretical framework used in this thesis is the conservation of resources (COR) theory (Hobfoll, 1989), which is also based on the individual’s appraisal of situation but places more emphasis on specific resources than the transactional theory. It assumes that threats to specific resources can lead to stressful situations, and that these same types of resources can also be utilized to counteract stressors. Also, the social and cultural context is taken into consideration in COR theory, since resources have a sociocultural or more objective as well as an individual component. By taking the situational context into consideration, the appraisal process is more strongly connected to the environment individuals live in, compared to the transactional stress theory (Hobfoll, 2001, 2002). According to COR theory, there is a difference in how important the objective and subjective components of resources are during the stress appraisal. Unambiguous situations, for instance job loss, have a strong impact on key resources by posing a major threat to the individual’s self in relation to the social reference group. For these kinds of situations, COR theory suggests that it is the social and cultural context in the stress process that should be given more importance when investigating these kinds
of phenomena (Hobfoll, 2001). However, for ambiguous situations that can be interpreted in different ways, such as in the case of job insecurity, COR theory proposes that the subjective appraisal is more important than the social and cultural context (Hobfoll, 2001). People can differ in their perceptions of situations, which can depend on, for instance, their available resources, which implies that the characteristics of individuals should be considered when investigating job insecurity.

The basic assumption of COR theory is that individuals in all contexts strive to retain, protect, and gain resources for maintaining well-being (Hobfoll, 2001). Hence, well-being is influenced by the extent to which the resources pool changes, and it is not necessarily life events in general that affect well-being because they are too broad and unspecific to affect well-being as it is not clear to what extent they affect the resource pool (Hobfoll, 2002). For this reason, potential stressors are defined in terms of how they lead to the loss or gain of resources. Hence, the potential gain and loss of resources is the major mechanism in COR theory for explaining how individuals interpret situations and to what extent different situations affect their well-being.

In this theory, resources are valued entities having two functions. First, they serve an instrumental purpose. For instance, they can be utilized as tools for reaching goals, such as the gaining of new resources. Second, they also have a symbolic purpose, such as helping individuals to define who they are (Cooley, 1992). Not all resources are equally important to every individual, as it is the combination of an individual’s sociocultural context and his or her personal preferences that are held to determine the importance of resources (Hobfoll, 1989, 1988). Even though there are individual and cultural variations in what is considered to be a resource, four general categories can be established according to the COR theory (Hobfoll, 1989). First, there are objects, which are physical in nature. Objects are usually rare and expensive and are related to the socioeconomic status. They are material things such as a house, a car, adequate clothing, food or even, for example, expensive computer equipment. Second, there are personal characteristics, such as personal skills for instance occupational skills that can increase the individual’s stress resistance, or traits such as self-esteem, sense of commitment, hope, or optimism. Third, there are conditions, which can be used to deal with environmental threats. Examples of this type of resource are job tenure, friendship, marriage, and seniority. Fourth, there are energies, which here include, for example, income, savings, as well as knowledge and time that can be used to gain new resources.
Three types of circumstances are held to lead to stress perceptions according to COR. First, stress may be experienced when an employee expects to lose a resource. For example, individuals experiencing job insecurity would typically expect that a number of important conditions (e.g., employment, the social network) and energies (e.g., salary, saving) would likely be lost as a consequence of job loss. When income and financial security are at risk, objects such as housing, the car, or other, luxury items may become at risk as well (De Witte, 1999; cf. Jahoda, 1984). Second, the actual loss of resources, for instance job loss, can lead to stress. Third, failures to gain new resources through resource investment may constitute a stress source (Hobfoll, 1989). To illustrate, when trying to cope with job insecurity, a possible resource investment could, for example, involve searching for a new job or working longer hours. However, it could be argued that if the employee decides to stay with the organization the extra resource investments that have been done, in form of job search and increased work effort, might even have negative effects as job insecurity experience may not be affected by these strategies. In this case employees might have invested the additional resources without gaining or maintaining the current resource balance. In all three of these circumstances, individuals face the threat of decreased resources, such as through resource loss or unprofitable investment, in order to protect the current balance of resources (Hobfoll, 2001). To conclude, all encountered situations pose demands on individuals where resources are utilized as tools to adapt successfully to a situation in order to minimize resource loss and at the same time initiate resource gain. Events that are undesirable and threatening to valued resources lead to stress perception. Hence, the COR theory postulates that resource loss is something naturally occurring on a constant basis; maintaining well-being is a continuous concern for individuals (Hobfoll, 1989).

COR theory suggests that individuals try to deal with stressful situations by investing their current resources to offset further resource loss. Two specific strategies for facing threats to valued resources are those of reinterpretation and substitution (Hobfoll, 1989). With reinterpretation, employees try to reinterpret a threat by converting a potential loss into a possible gain; this could involve trying to look at the situation positively or, alternatively, devaluing the importance of the resources that are under threat. While the value of many resources can be pliable in this way, it is not possible to do so with all stressors. For instance, when the situation or the potential resource loss is too severe, it may not be possible to resolve it through reinterpretation (Hobfoll, 2001). For employees who are experiencing job insecurity, it might not be possible since the potential losses,
in terms of financial insecurity or status, are too detrimental. Another method of dealing with resource loss is to substitute the resources that are already lost. However, this is only possible if the lost resources are replaceable and if the new resources are highly valued (Hobfoll, 1989).

One important aspect of the COR framework is that not all individuals have access to the same amount of resources, and therefore individuals have different possibilities of handling stressful situations (Hobfoll, 1998). In addition, individuals, who have fewer resources, are said to be more vulnerable to additional resource loss. For example, older employees (Mohr, 2000) and those with low education (Kinnunen & Nätti, 1994) have in general fewer resources and have been associated with higher levels of job insecurity. This can easily lead to a spiral of resource loss. For example, to control potential resource loss, individuals with lesser resources may apply strategies which have high costs in themselves and poor chances of success, which may result into self-defeating consequences (Hobfoll, 1989). Furthermore, resources are to some extent interdependent in that certain resources do not exist in isolation but in aggregates, as so-called resource caravans (Hobfoll, 2001). These resource caravans seem to be stable over time, so if individuals did not have many resources at an earlier point, chances are high that they will still have fewer resources at a later time (King, King, Foy, Keane, & Fairbank, 1999). Conversely, young, highly skilled employees are more likely to get jobs with high pay, which would in turn typically provide them with opportunities to increase their object resources as well as improve their personal characteristics, such as self-efficacy.

Concluding Remarks

From the view of COR as well as the transactional stress theory, job insecurity can be conceptualized as a work stressor. In the transactional stress theory, it can be understood as a demanding condition. It places stress on employees if the resources demanded to resolve the ambiguous problem underlying an uncertain job situation exceeds what they are able to apply. Furthermore, there are considerable inter-individual differences in the workforce, and it is presumed that this diversity affects how job insecurity is perceived. The individual appraisal of a situation and the assessment of existing resources are the most important mechanisms in the process that determines whether the employee experiences stress in relation to a given situation. The COR theory helps explain why job insecurity can be perceived a stressor and why it is important to consider the resource pool of individuals in more detail. Both theoretical frameworks propose that
the subjective perception of individuals is essential, but according to COR theory, individuals differ in their resources. This suggests that it is likely that certain groups of employees may react more strongly to uncertainty at work, while others might feel less stressed. Job insecurity threatens specific resources, such as employment status, tenure, and financial security, whose loss would affect general well-being negatively. As resources are essential in the stress process and are utilized to resolve stressful situations, they can be investigated in order to shed light on how and why certain situations lead to negative consequences for individuals.
Job Insecurity and its Consequences

In recent decades, the effects of job insecurity have been receiving greater research attention, which has resulted in the growth of empirical knowledge in this area. Most of the results have been in line with the theoretical assumptions of the transactional stress theory (Lazarus & Folkman, 1984) and COR theory (Hobfoll, 1989), which predict that job insecurity can be perceived a stressor for employees which has been found to be related to negative consequences. Both theoretical frameworks propose that job insecurity depletes the individuals’ resources and demands more than their coping abilities can handle, which in turn affects the individuals’ well-being, behavior, and attitudes negatively.

The majority of studies on job insecurity have concentrated on the fear of losing the job itself (which is called “quantitative job insecurity” by Hellgren et al., 1999). For instance, the two meta-analyses that have been conducted on job insecurity are based on studies that have only investigated quantitative job insecurity (Cheng & Chan, 2008; Sverke, et al., 2002). Fewer studies have investigated the consequences of the threat to job features (which is called “qualitative job insecurity” by Hellgren et al., 1999); so there is little empirical evidence available on the consequences of this type of job insecurity. In the pioneering article on job insecurity by Greenhalgh and Rosenblatt (1984), it was suggested that the fear of loss of valued aspects of the job (qualitative job insecurity) may be less severe compared to the fear of losing one’s job (quantitative job insecurity). Since then, research comparing both types of job insecurity has produced differing results. For instance, Hellgren and his colleagues (1999) found that qualitative job insecurity had a stronger negative association with work attitudes than was quantitative, and also that qualitative job insecurity had a stronger positive relation to health-related complaints than qualitative job insecurity. Others, such as Ashford and her collaborators (1989), found that the strength of the association between the likelihood of losing important job features (as an approximation of qualitative job insecurity) and job and organizational attitudes as well as work-related behavior was similar to the strength of the association between the likelihood of job loss (as an approximation of quantitative job insecurity) and these outcomes. Neither of the two types was related to
somatic complaints or performance (Ashford et al., 1989). Qualitative job insecurity has also been found to be associated with decreased well-being (Kuhnert, Sims, & Lahey, 1989) and with more frequent doctor consultations than among employees who were afraid to lose their job (De Witte et al., 2010). This recent study by De Witte and his collaborators (2010) compared both job insecurity types and did not confirm the proposition that quantitative job insecurity was more harmful than qualitative job insecurity, as the latter was found to be also associated with several consequences related to the employee’s well-being. More similarities than differences in regard to the relation of the two job insecurity types and the outcomes were found, which included increased emotional exhaustion, depersonalization, psychological distress, psychosomatic complaints, and decreased personal accomplishment (De Witte et al., 2010). Such findings suggest that quantitative job insecurity is not more important than qualitative job insecurity as both job insecurity types can affect the well-being of employees negatively. As there have also been contradictory findings regarding the two types of job insecurity, qualitative job insecurity should be considered more in future research.

As job insecurity has been proposed to be one of the contemporary work stressors, a general categorization of stress reactions can be applied in the job insecurity context to structure the empirical evidence on potential consequences (see Figure 3) (Sverke et al., 2002). It has been suggested that stress reactions can develop over time and that they therefore can be seen as having short or long-term consequences (see vertical axis in the figure) (Lazarus & Folkman, 1984). In addition, possible consequences can have different foci, such as primarily affecting the individual or the organization (see horizontal axis in the figure) (Beehr & Newman, 1978). The combinations of these types of reactions and foci result in four different categories of potential outcomes. Regarding short-term reactions, the individual-focused consequences concern job attitudes (Quadrant 1 in figure 3), while the organization-focused consequences concern organizational attitudes (Quadrant 2). When it comes to the long-term consequences, the health (including well-being) of employees is the individual consequence (Quadrant 3), while work-related behavioral changes are an organization-focused consequence (Quadrant 4). This four-field categorization of potential outcomes has previously been successfully utilized in the context of job insecurity (Cheng & Chan, 2008; Sverke et al., 2002), and it will be applied in this thesis to structure the research on job insecurity’s consequences.
The two meta-analyses that have been conducted on job insecurity have summarized the most studied associations between job insecurity and its potential outcomes (Cheng & Chan, 2008; Sverke et al., 2002) (studied outcomes are depicted in Figure 3). For short-term outcomes, a negative association between job insecurity and job and organizational attitudes was found. Job satisfaction, job involvement, and organizational attitudes (organizational commitment and trust) were all observed to be negatively related to job insecurity. Regarding long-term consequences, job insecurity was found to be negatively associated with health (physical and mental health). Moreover, work-related behaviors were found to be affected, as increased turnover intention was associated with job insecurity (Cheng & Chan, 2008; Sverke et al., 2002). Regarding the association between job insecurity and performance, the findings of the meta-analyses differ. The earlier meta-analysis by Sverke and his colleagues (2002) did not find an overall significant relation between job insecurity and performance, although a negative relationship did appear between job insecurity and performance among manual workers. The most recent meta-analysis, however, found that job insecurity was associated with impaired performance among all of the occupational groups studied (Cheng & Chan, 2008). In addition to the outcomes that were dealt with in the meta-analyses, other potential consequences have been investigated over the years with mixed results.
Individual Short-Term Outcomes

According to the above framework of stress outcomes, job attitudes are assumed to change shortly after the stressor has been experienced and they are thought to primarily affect how individuals perceive their job. Job involvement, the degree to which employees identify with their job or wish to engage in their work (Kanungo, 1982), has been found to be related to job insecurity. This relationship has been found to differ in different studies. For instance, Kuhnert and Palmer (1991) and Ouyang (2009) detected a strong negative relationship between job insecurity and job involvement, whereas Hollenbeck and Williams (1986) did not find any. In relation to job satisfaction, job insecurity has been observed to have a negative association in a variety of cross-sectional studies (Büssing, 1986; Davy et al., 1991; Grunberg, Moore, & Greenberg, 1998; Lim, 1996; Roskies & Louis-Guerin, 1990). Similar results have been found for qualitative job insecurity, which has also been related to lower job satisfaction (De Witte et al., 2010; Hellgren et al., 1999).

Organizational Short-Term Outcomes

In this framework, changes in organizational attitudes are held to occur rather shortly after the exposure to stress. For example, certain types of organizational commitment, a psychological state that connects the individual to the organization and affects the employee’s subsequent actions (Allen & Meyer, 1990), have been found to be primarily negatively related to the experiencing of job insecurity. Several studies have found that affective commitment, the emotional attachment to the organization, has been negatively associated with job insecurity (Ashford, et al., 1989; Bernhard-Oettel et al., 2011; Berntson, Näswall, & Sverke, 2010; Davy et al., 1997; Hellgren et al., 1999; Rosenblatt et al., 1999). Moreover, job insecurity has also been related to the workforce’s increased resistance to change (Noer, 1993; Rosenblatt & Ruvio, 1996). Kalyal and her colleagues studied the relation between job insecurity and commitment to change and found results similar to those for the relation between job insecurity and organizational commitment (Kalyal, Berntson, Baraldi, Näswall, & Sverke, 2010). In this study, employees who experienced greater uncertainty about their job did not understand why the current organizational changes were needed (indicated by low affective commitment to change). Employees who perceived their job to be insecure reported less perceived duty to commit when changes were initiated (indicated by low normative commitment to change). Continuance commitment, a type of compliance to invest as little energy as possible, was also
found to be positively related to job insecurity as it may be perceived as a
good strategy for job insecure employees to keep the job (Kalyal et al.,
2010). Explanations for this finding in general might be that job insecuri-
ty is often associated with an unclear organizational environment and the
perception that the employer has let the workforce down. Strengthening
that reasoning, job insecurity has been found to be negatively related to
trust, a psychological state where vulnerability is accepted due to the
belief of good intentions from the other party (Ashford et al., 1989; Borg
& Elizur, 1992; Pearce, Branzyicki, & Bakasci, 1994; Rousseau, Sitkin,
Burt, & Camerer, 1998). In line with these findings, employees who re-
port increased job insecurity perceived that their organizations supported
them less compared to those that did not experience job insecurity (Ros-
enblatt & Ruvio, 1996).

Individual Long-Term Outcomes

Individual health is held to be affected by stressors in the long run ac-
cording to this framework. In addition to the findings of the meta-
analyses on the negative association of job insecurity and mental health
(Cheng & Chan, 2008; Sverke et al., 2002), job insecurity has been asso-
ciated with anxiety, psychosomatic complaints, emotional and physical
exhaustion, hostility, burnout, and depression (Barling & Kelloway,
1996; De Witte, 1999; Hellgren et al., 1999; Kuhnert et al., 1989; Mak &
Mueller, 2000; Mohr, 2000; Noer, 1993; Orpen, 1993; Roskies, Louis-
Guerin, & Fournier, 1993; Rothmann & Joubert, 2007; van Vuuren,

Somatic complaints have been found to be related to job insecurity
(Cheng & Chan, 2008; Sverke et al., 2002). For example, the increased
occurrence of ischemic heart disease (Siegriest, Peter, Junge, Cremer, &
Siegel, 1990), increased blood pressure (Ferrie, Shipley, Marmot, Stans-
feld, & Smith, 1998; Kasl, 1979) as well as increased neck and shoulder
pain (Lindström, Leino, Seitsamo, & Torstila, 1997) have been related to
job insecurity. Others have found job insecurity to be associated with
increased medical consultation, which can be seen as an indicator of im-
paired well-being. The negative health-related effects of prolonged job
insecurity have been found to be comparable to the health effects result-
ing from serious illness (Burgard, Brand, & House, 2006, 2009). Even
factors that are important in the recovery process – such as psychological
detachment, experiencing mastery, being able to relax, and feeling in
control – have been found to be negatively associated with job insecurity
(Kinnunen et al., 2010). In addition, employees experiencing job insecuri-
ty have expressed an increased need for recovery, and experienced great-
er exhaustion as well as lower vigor at work (Kinnunen et al., 2010). Moreover, other possible relations of job insecurity have been relations with work engagement and employability, which have been negatively related to job insecurity (De Cuyper, Bernhard-Oettel, Berntson, De Witte, & Alarco, 2008; Mauno, Kinnunen, & Ruokolainen, 2007; Vander Elst, Baillien, De Cuyper, & De Witte, 2010).

Organizational Long-Term Outcomes

In terms of job insecurity effects on the organization, it is work-related behaviors which are thought to change in the long-term. For instance, many studies have found that job insecurity has also been associated with increased turnover intention (Berntson et al., 2010; Cheng & Chan, 2008; Sverke et al., 2002). Studies that have investigated the relations between job insecurity and the aspects of work effort and job performance have reached differing results. Some studies, such as Abramis (1994) and Roskies and Louis-Guerin (1990) have found a negative relation between job insecurity and performance, while others did not find this association at all (Ashford et al., 1989; Hall & Mansfield, 1971). On the other hand, some scholars have found that job insecurity is positively related to performance and to work effort (Brockner, 1988; Staufenbiel & König, 2010), which is not in line with the meta-analytical results on the relation of job insecurity and performance, which found no associations (Sverke et al., 2002) and negative associations (Cheng & Chan, 2008). One possible explanation for these deviant findings of a positive relation between job insecurity and performance could be that employees who experience job insecurity wish to secure good recommendations for other employments or that they want to demonstrate their value to the organization. Job insecurity has also been negatively linked to creativity (Probst, Stewart, Gruys, & Tierney, 2007) and extra-role behavior such as organizational citizenship behavior (organizational beneficial behavior that is not included in the formal reward system) (Feather & Rauter, 2004; King, 2000). Moreover, employees, who experience job insecurity showed more withdrawal behavior, such as tardiness and work task avoidance (Probst, 2002) and providing less quality customer service (Reisel, Chia, & Maloles, 2005).

Another aspect that might be affected in the long-term is organizational safety. Job insecurity has been associated with decreased safety, a stronger inclination to accept risks at work, and a higher number of accidents (Probst & Brubaker, 2001; Probst, 2005). In line with that, job insecurity has also been related to the underreporting of accidents, which may be due to employees’ not wishing to put themselves in a worse position in
the eyes of their employer (Probst, 2006). Additionally, Størseth (2007) found that job insecurity was associated with increased risk taking and rule breaking behavior. In this study, decreased job satisfaction and lower work motivation were found to be an intervening variable relating job insecurity to decreased safety behavior. Moreover, job insecurity was found to be related to an increased amount of working hours (De Cuyper et al., 2008; Fischer, Oliveira, Nagai, Teixeira, & Júnior, 2005; Lewis & Cooper, 1999) as well as an increased absence from the job (Ashford et al., 1989; De Witte et al., 2010).

**Additional Outcomes of Job Insecurity**

In addition to job insecurity having consequences for the individual and the organization as outlined above, it may have broader effects that are not directly included in this classification. Although more research is needed, job insecurity may affect other areas, such as the family domain. Westman, Etzion, and Danon (2001), for example, found that a husband’s uncertainty about the future of his job can cross over to the wife and eventually affect her health negatively. Another study showed that the children’s grades were negatively affected by their parents’ job insecurity, as the parents’ negative moods and sense of injustice in the world were found to have influenced the children’s outlooks (Barling & Mendelson, 1999). It has also been observed that job insecurity is associated with decreased marital functioning (Barling & MacEwen, 1992) as well as with lower levels of life satisfaction (De Cuyper et al., 2008). Job insecurity may interfere with available resources in the non-work domain, leaving fewer resources to be used there. This can, for example, result in work-family conflict, a subjective perception that work affects the non-work domain negatively (Netemeyer, Boles, & McMurrian, 1996). Work-family conflict and stressors originating in the work domain (i.e., job insecurity) have been investigated in studies such as by Allen et al. (2000), Edwards and Rothbard (2000), and Batt and Valcour (2003), and it has been found that job insecurity is associated with work-family conflict cross-sectionally (Batt & Valcour, 2003; Wilson, Larson, & Stone, 1993). Even on a societal level there may be effects, as job insecurity has been found to be related to increased health care costs (cf. Matteson & Ivancevich, 1987) and reduced household consumption (Benito, 2006).

**Effects Over Time**

Most of these studies that have investigated job insecurity and the relation to potential wider outcomes have used a cross-sectional design. Those
studies that have investigated longitudinal effects have mostly concentrated on health outcomes, such as burnout (Dekker & Schaufeli, 1995), psychological well-being (Ferrie et al., 1998; Hellgren & Sverke, 2003), and somatic health (Ferrie et al., 1998; Nelson, Cooper, & Jackson, 1995). However, there is a need for a broader range of longitudinal studies when assessing stressors and its potential outcomes (Zapf, Dormann, & Frese, 1996) and especially when assessing less studied outcomes, such as the relation of job insecurity and work–family conflict. As it is assumed that stress reactions arise over time (Garst, Frese, & Molenaar, 2000; Lazarus & Folkman, 1984), cross-sectional findings can be different from longitudinal findings (Garst et al., 2000). For instance, in a longitudinal study by Garst and colleagues (2000), based on six waves of data over five years, they found that the levels of job insecurity seem to change over time, and that these different levels may be associated with different outcomes. It is also possible that the length of the time lag can affect the results that are obtained (Garst et al., 2000). More longitudinal data is needed in order to validate cross-sectional results regarding to the association of job insecurity and potential outcomes in order to gain a better understanding of the way certain stressors such as job insecurity develop with time. With longitudinal studies, the initial levels of the outcome can be controlled for and changes over time can be investigated, which will lead to more valid conclusions about the outcomes of job insecurity. Moreover, even though there are theoretical assumptions linking job insecurity to potential outcomes (Greenhalgh & Rosenblatt, 1984; cf. Lazarus & Folkman, 1984), cross-sectional studies cannot determine whether there are causal relationships, and in addition to that the issue of reversed causality should also be addressed more frequently using longitudinal studies (Sverke et al., 2002). For example, Hellgren and Sverke (2003) investigated the relation of job insecurity and health and even considered reversed causation. This test for reversed causation aimed at excluding the possibility that less healthy individuals may actually be those that are more likely to experience job insecurity instead of the proposed negative outcomes of job insecurity. Hellgren and Sverke (2003) found that job insecurity was related to subsequent decreased mental well-being, which supports the theoretical assumptions about potential consequences of job insecurity. Even if there are a few longitudinal studies that support the notion that job insecurity gives rise to negative consequences, there is a need for more longitudinal investigations, especially when considering less-researched outcomes such as work–family conflict.
Mechanisms in the Relations Between Job Insecurity and its Outcomes

Much has been learned throughout the years about the consequences of job insecurity (for overviews see De Witte, 2005; Greenhalgh & Rosenblatt, 2010; Reisel & Probst, 2010). In order to increase this knowledge and to fill one of the current gaps in job insecurity research, the issue of how and in what way job insecurity is associated with its consequences needs further attention (Sverke et al., 2010). In other words, the mechanisms that may further explain the effects of job insecurity need to be studied, as is supported by the results from two meta-analyses that have identified variations in the strength of the relationships between job insecurity and a variety of job insecurity outcomes (Cheng & Chan, 2008; Sverke et al., 2002). This suggests that the employee and organizational characteristics which may influence the extent to which job insecurity affects employees and organizations negatively need to be identified, in other words, the moderating variables. Moreover, it is important to identify the mediating factors that intervene between the experiencing of job insecurity and its consequences in order to understand the development of job insecurity consequences.

Moderation

Research on job insecurity has increasingly focused on the investigation of moderators, factors that potentially influence the relation between job insecurity and its outcomes, as they may help explain some of the individual differences in the strength of the relations between job insecurity and its outcomes (Sverke et al., 2010). The potential buffering factors, or factors increasing individual vulnerability, that have been previously studied have primarily concerned the employee’s work environment, such as occupational status or tenure, or consisted of individual characteristics such as age or personality.

Stronger relations between job insecurity and both performance and turnover intention have been found among manual workers compared to non-manual workers (Sverke et al., 2002). This result could potentially be...
explained by the differences in the educational levels of the occupational groups (Frese, 1985) as well as the differences in job tasks, affecting the level of control over decision making (Barling & Kelloway, 1996). It could also be explained by differing perceptions of employability (Gallie et al., 1998) and different salary levels between the groups, which may affect the employees’ financial dependence on the job (Kinnunen et al., 1999), and thereby their reactions to job insecurity. Moreover, meta-analytical results have shown that age can function as a moderator in the relationship between job insecurity and the aspects of turnover intention, psychological health, and physical health, where older employees were more vulnerable to job insecurity and reported lower health levels than the younger workers in relation to job insecurity (Cheng & Chan, 2008). The reason for this could be that it is perhaps more difficult for older unemployed workers to find equivalent employment (Cheng & Chan, 2008). Similar results were found for tenure, where the relation between job insecurity and ill-health was stronger for employees with longer tenure than for employees with shorter tenure (Cheng & Chan, 2008). Longer tenure is thought to be related to greater commitment and job involvement (Cheng & Chan, 2008) and for this reason the threat of potentially losing one’s job affects the health of employees with longer tenure more negatively. Younger employees experiencing job insecurity reported higher turnover intention, which is similar to employees with shorter tenure, among whom the relation between job insecurity and turnover intention was stronger than among employees who had longer tenure (Cheng & Chan, 2008). A potential explanation for this may be that younger employees and those with shorter tenure have invested less in the organization, and one way to reduce the stress of a situation associated with uncertainty may be to consider getting a new job (Cheng & Chan, 2008).

Another potential group of moderators of the effects of job insecurity is made up of personality dispositions. Among these, work locus of control (Ashford et al., 1989; König, Debus, Häusler, Lendenmann, & Kleinmann, 2010), organizational-based self-esteem and optimism (Hui & Lee, 2000; Mäkikangas & Kinnunen, 2003), as well as negative affectivity (Mak & Mueller, 2000) have been included in studies as potential moderating factors. König and colleagues (2010) found that when job insecurity levels were low, having an internal work locus of control was beneficial for self-rated task performance. This may be explained by an internal work locus of control being associated with the individuals’ belief that they can influence working conditions, and this may have contributed to them perceiving that they performed better (König et al.,
2010). Similarly, Näswall and colleagues (2005) found that an external work locus of control, the perception of not being able to influence events, was a vulnerability factor in the relation between job insecurity and mental health complaints. Employees who reported an external work locus of control reacted more negatively to job insecurity. It is plausible that these employees felt less in control over work events, which in turn made them more vulnerable to the negative impact of job insecurity (Näswall et al., 2005).

Optimism has also been found to be a moderator. It has been found among women that those with higher levels of optimism and who reported higher levels of job insecurity also reported more mental distress (Mäkikangas & Kinnunen, 2003). A potential explanation for this may be that optimists, who may have a different expectation of how life events should turn out compared to pessimists, might feel more threatened by a prolonged experiencing of job insecurity, especially since job insecurity is often related to structural factors, such as the economic cycle, which are beyond the personal control of individuals. Another factor which has been identified as a moderator in this context is organizational-based self-esteem, representing the self-perceived value of being a member of an organization and of importance to this group (Hui & Lee, 2000). Employees with low organizational-based self-esteem in combination with high job insecurity have been found to exhibit cognitive dissonance. In order for employees with high job insecurity and low organizational-based self-esteem to justify their remaining in the organization, they attributed internally, reporting higher intrinsic motivation compared to employees with higher organizational based self-esteem. Employees with low organizational-based self-esteem also responded to high job insecurity with increased absenteeism compared to those high in this type of self-esteem, which may be explained by individuals with low self-esteem generally reacting more strongly to negative cues from the environment (Hui & Lee, 2000). Moreover, Mak and Mueller (2000) found that negative affectivity moderated the relation between job insecurity and negative physical symptoms. For employees who were high in negative affectivity, the relation between job insecurity and physical strain was stronger than for employees who were low in negative affectivity.

Another group of moderating factors consists of different kinds of recovery experiences. In one study, employees who were not able to detach themselves from work and who also experienced high levels of job insecurity reported lower vigor at work compared to those who reported higher levels of detachment from work (Kinunnen et al., 2010). Also, when job insecurity levels were low, employees who perceived they had
control over their leisure activities reported lesser need for recovery compared to employees who felt less in control (Kinunnen et al., 2010). In addition to these factors, participation in a change process (Parker, Chmiel, & Wall, 1997) and the perception of control over work and work processes (Brandes et al., 2008) have been found to be factors that buffer against potential negative outcomes of job insecurity. Furthermore, social support has been found to be a buffering factor against job dissatisfaction, when job insecurity was high (Lim, 1996). Employability has also been found to be a buffering factor against certain negative consequences of job insecurity, such as decreased life satisfaction and decreased mental health (Silla, De Cuyper, Gracia, Peiró, & De Witte, 2009). It has also been found that among employees experiencing job insecurity, those reporting high employability also reported lower engagement in the organization compared to individuals reporting lower employability (Bertonson et al., 2010).

Other factors which may moderate the effects of job insecurity may concern how individual coping strategies or how financial or psychological dependence relates to different reactions to job insecurity.

**Coping**

In the transactional stress theory, coping is referred to as a means for individuals to deal with stressful events, and several types of coping strategies are described (Lazarus & Folkman, 1984). Little is known about how employees cope with job insecurity experiences, but since this is an essential part of the stress–strain process, coping with job insecurity is investigated in the present thesis.

Coping can be utilized as a collective or an individual effort to deal with problematic situations. Collective ways of dealing with job insecurity could involve joining a labor union or participating in union actions (Sverke et al., 2004; Van Vuuren et al., 1991). In this thesis, the focus lies on individual coping strategies that employees apply in stressful situations, such as when experiencing job insecurity. The aim is to investigate how employees try to deal with uncertainty about the future of their jobs in order to gain a better understanding of job insecurity on an individual level.

Coping can be defined as “the things that people do to combat stress, their thought and behavioral reactions, and particularly their guarding, investing and building of resources” (Hobfoll, 1998, p.121–122) or as “the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts” (Folkman & Lazarus, 1980, p.223). In the stress–strain process, according to transactional stress theo-
Coping occurs as a response to the stress appraisal process (Folkman & Lazarus, 1980). Hence, it is seen as a process that can develop over time, whereby individuals, depending on the available information and the evaluation of the situation, use different strategies (Lazarus, 1991). Apart from the situational evaluation, it may also be that individuals tend to favor a certain individual coping strategy, which may indicate some individual stability in the coping process (Vaillant, 1977).

Coping can be classified in several ways. Coping strategies have been distinguished according to whether they are cognitive or behavioral in nature, for example, and according to whether they are based on approaching or avoiding the problem (Holahan, Moos, & Schaefer, 1996; Suls & Fletcher, 1985). They can also be separated based on the methods used to reduce stress (Lazarus & Folkman, 1984), as is the case in this thesis. In this approach, coping efforts are divided into two groups – emotion-focused and problem-focused coping. These types of coping can be seen as dealing with the emotions that are evoked by a stressor, as a means of gaining control (Cox & Ferguson, 1991; Dewe, Cox, & Ferguson, 1993). They can also represent intentional activities that help individuals to adapt to a problematic situation (Rudisill & Edwards, 2002).

Emotion-focused coping is directed at changing the emotional reaction evoked by a stressor. Types of emotion-focused coping include emotional expression, emotional containment, avoiding thinking about the problem, devaluing the situation, blaming oneself or others, as well as denial and everyday behaviors such as physical exercise (Lazarus & Folkman, 1984). Problem-focused coping, however, aims at modifying the stress source. Typical strategies include planning, seeking information, or taking action (Carver, Scheiner, & Weintraub, 1989; Lazarus & Folkman, 1984).

Some scholars maintain that certain coping strategies have a general usefulness regardless of the stressor or the situation. As problem-focused coping is thought to be a more direct and active kind of coping, since it targets the source of the problem, it has been hypothesized that it should result in more beneficial outcomes. Being more active in order to address the problem has been assumed to be related to positive feelings and an increased perception of control over the situation (Pinquart & Silbereisen, 2008). On the other hand, emotion-focused coping is a type of inwardly directed coping as it attempts to regulate the emotional reaction to stressors. Being less active and more passive has often been associated with giving up (Pinquart & Silbereisen, 2008) and can easily be perceived as a source of disappointment and negative feelings (Pinquart & Silbereisen, 2008; Wrosch, Scheier, Carver, & Schulz, 2003). In comparison, prob-
lem-focused coping is thought to be generally more favorable as it is action-oriented. With respect to emotion-focused coping, studies have found it to be associated with depressive mood states (Matheson & Anisman, 2003) as well as with increased psychological distress (Waters & Moore, 2001). Problem-focused coping, on the other hand, has been related to increased subjective well-being (Thoits, 1995) and decreased depressive symptoms (Frone, Russell, & Cooper, 1995).

In addition, it has been proposed that coping may be more complex and that the effectiveness of emotion-focused and problem-focused coping strategies is dependent on the perceived stress source (Folkman, Schaefer, & Lazarus, 1979; Pinquart & Silbereisen, 2008). A distinction can be made between stressors that are diffuse and more complex, for which the source of the stressor is harder to identify, and those stressors for which the source of the problem is easy to identify. In those cases where the stress source is clear, it might be easier for employees to handle the stressor as employees might be able to do something about the stressor. If the source of the stressor is appraised as more controllable, it has been suggested that problem-focused coping may be more effective to buffer against it (Pinquart & Silbereisen, 2008). However, difficulties may arise in the long run when emotion-focused coping is used to handle stressors with a clear stress source that would actually be changeable (Pinquart & Silbereisen, 2008). Emotion-focused coping may only be effective in the short term, changing a person’s emotions toward the stressor, but since the stress source persists, stress experiences may remain in the long run.

Stressors with an unclear source of threat, such as job insecurity, are assumed to be better dealt with by using emotion-focused coping strategies because the stress source is assumed to be harder to identify and subsequently harder to change (Folkman et al., 1979). The use of problem-focused coping when dealing with stressors with an unclear stress source can result in a loss of resources because the stressor, in most cases, cannot be removed by any action as long as the stress source is not clear. Any resources invested in problem-focused coping in such a situation will most likely not produce successful long-term coping; instead, the resources invested in the coping will likely be lost and this loss is larger than any gain in the long run.

Individual coping with job insecurity has not yet received much research attention. Job insecurity can be considered a stressor with a rather unclear stress source as it is based on uncertainty, which makes this work stressor harmful and hard to deal with (Sverke et al., 2002). As there is no concrete stress source with job insecurity, it can be more difficult to use
problem-focused coping. Employees have very little or no influence over economic cycles, the economic situation of their company, or the decisions management makes to increase the profitability and competitiveness of the organization. Pinquart and Silbereisen (2008) have suggested that finding new employment might be a problem-focused coping strategy that may work for job insecurity; however, this is a strategy that may be associated with even more stress, for instance, if no new job is found or if the situation at the current workplace is negatively affected through the job search. Emotion-focused coping might function better as a buffer for job insecurity because at least the emotions associated with job insecurity can be modified even if the stress source cannot be eliminated. However, studies on work-related stressors with ambiguous stress sources have found that distancing, a form of emotion-focused coping, did not buffer against negative consequences but, rather, amplified them (Pinquart & Silbereisen, 2008). It seems that the importance of the stressor may influence the effectiveness of coping strategies. As having a job is central for the majority of employees because it provides them with financial security, status, routines, and a social network (cf. Jahoda, 1984), emotion-focused coping strategies, such as avoidance thinking, might not be optimal in all cases for buffering against the negative effects of stressors with an ambiguous stress source (Pinquart & Silbereisen, 2008).

Only a few studies have investigated the role of coping in the context of job insecurity or uncertainty in the workplace. For instance, in a study on downsizing survivors, Armstrong-Stassen (1994) found that control coping, similar to problem-focused coping, interacted with the perceived threat of job loss when turnover intention and performance were considered and that it reduced the negative effects of the perceived threat of potential job loss. When employees used escape coping, similar to emotion-focused coping, the negative relationships were found to be stronger for job insecurity and its outcomes as compared to individuals who did not use escape coping (Armstrong-Stassen, 1994). Individual coping strategies have also been addressed in relation to employment uncertainty, which includes the uncertainty about the current and the future job possibilities, making it relevant for employed as well as unemployed individuals (Mantler, Mateljicek, Matheson, & Anisman, 2005). Mantler and colleagues found that emotional avoidance, an emotion-focused coping strategy, affected the relationship between employment uncertainty and stress experience and that it was destructive for individuals. The employees who made more frequent use of this strategy also reported experiencing stress symptoms more often than the employees who did not use
avoidance coping, while those using problem-solving types of coping reported fewer stress symptoms.

To summarize, there are very few studies that have investigated coping in downsizing situations or situations with high employment uncertainty, which are situations likely to evoke feelings of job insecurity. These studies indicate that problem-focused coping may be more beneficial for reducing perceptions of uncertainty and also for buffering against its negative consequences. Emotion-focused coping, on the other hand, magnified the negative effects of employment uncertainty, although it needs to be noted that it was only studied in terms of avoidance coping. To conclude, there are different theoretically derived hypotheses about which type of coping might be best. However, empirical studies indicate that coping with job insecurity seems to be difficult, and there is a need to increase our knowledge in this area, for example, by studying other types of emotion-focused coping besides avoidance coping, and by directly assessing employees’ perceptions of job insecurity.

**Job dependence**

Another possibility when studying buffering or vulnerability factors in the context of job insecurity is to apply COR theory and investigate how individuals may be affected in different ways depending on how they perceive the circumstances they live in. Individuals who are dependent on certain resources to varying degrees could be expected to be affected by job insecurity in different ways; the more vulnerable employees would be, for example, those who are highly dependent on their salary or those who value their job because it has a high personal meaning for them. Hence, individual differences should be investigated regarding job dependence when considering the uncertainty about the future of the job.

The risk of losing one’s employment or of losing important features of the job is only perceived as threatening when the employment or the job features are valued and a loss of them would be involuntary (Sverke et al., 2002). Job dependence, to rely on or need the job for one reason or another (e.g., to need the resources that an employment provides), has therefore always been an implicit underlying assumption of job insecurity research. Job dependence includes a wide range of different factors that have been studied at some point of time in different areas related to work (e.g., socioeconomic status, work orientation, work engagement, over-commitment) (Oakes & Rossi, 2003; Schaufeli, Salanova, González-Romá, & Bakker, 2002; van Veghel, de Jonge, Dormann, & Schaufeli, 2005). COR theory proposes that the primary mechanism for understanding the stressor–strain relationship is the gain and loss of resources (Hob-
foll, 1989). These resources can be taken into consideration when studying job insecurity and its relation to job dependence. Quantitative and qualitative job insecurity present threats to a variety of these resources, which explains why job insecurity is stressful for employees. However, the importance of specific resources varies among individuals as well as what the loss of these resources would cause. On these grounds, it is assumed that individuals who are in greater need of a given resource (e.g., a steady income) will be more vulnerable to job insecurity than those individuals who are not in need of the resource. Two groups of job dependence are investigated in this thesis – financial dependence and work centrality.

Financial dependence

In their pioneering article on job insecurity, Greenhalgh and Rosenblatt (1984) mentioned that individuals who perceive themselves to be more dependent on their job are likely to suffer more from job insecurity as there is more at stake for them if they were to lose their job. One component of job dependence according to Greenhalgh and Rosenblatt (1984) is job-related economic insecurity, the perception of not being able to financially cover one’s living expenses in the event of job loss (Cheng & Chan, 2008). Employees who would have difficulties maintaining their current living standard if they lost their job or who are responsible for providing the majority of the family income are thought to be more dependent on and in need of their employment than individuals who are not responsible for the family income. Financial dependence is therefore a form of job dependence that might make employees more vulnerable to job insecurity consequences.

By studying financial dependence, it may be possible to identify different groups that might be more likely to suffer from job insecurity. The empirical evidence regarding job dependence as a vulnerability factor is limited and does not only apply to the context of job insecurity. In one study, among individuals who were not dependent on their jobs, job insecurity did not affect their work effort, while among the individuals who were dependent on their jobs, job insecurity was related to their work effort, but in a non-linear way (Brockner, Grover, Reed, & DeWitt, 1992). The employees experiencing low and high levels of job insecurity, in this study, exhibited lower effort than those experiencing medium levels of job insecurity. Socioeconomic status is another aspect that has been discussed as a vulnerability factor in relation to job insecurity (Frese, 1985; Kinnunen et al., 1999). Since employees with low status jobs or lower incomes, and therefore fewer financial resources, might have more
difficulties building up a financial buffer, the threat of income loss is most likely more severe for them than for employees who are able to save money over the years (cf. Näswall, 2004). The life cycle may also be an important factor in financial dependence (De Witte, 1999) because at some stages in life (e.g., during parenthood) it may be more important to earn money in order to be able to plan long-term. This is reflected in a statement from a qualitative study by Nolan (2009), where a male employee stated that job security is important since having a stable job situation goes hand in hand with creating a stable family situation, which indicates that job insecurity is perceived as a threat to economic stability.

Work centrality

In addition to the most obvious type of job dependence – financial dependence, this thesis investigates work centrality as another type of dependence, which may represent a more psychological type of dependence on work. Considering the changes that working life has undergone in the last decades, with more white-collar work, different work tasks, and with decreasing boundaries between the work and the family domains (Allvin, 2008; Burke & Cooper, 2000), work may have a different position in people’s lives today. Work is not perceived as just a means or earning money and providing for the family; instead, it is something more, which can be explained by the latent functions that work has, according to Jahoda (1982). Latent benefits of work include the contacts and social interactions employees have through work. Work is often linked to the individuals’ identity perceptions, especially in Western Society (Holm & Hovland, 1999). Therefore, work centrality is included in this thesis as an additional type of job dependence that may be a vulnerability factor in the context of job insecurity. It represents a different kind of factor, not necessarily an external force (e.g., salary) behind why employees are dependent on their work, but a factor that is linked to what makes people value work and like the job they have.

Employees who are experiencing job insecurity and those who perceive that their jobs have a high level of significance in their lives may constitute a group that runs a higher risk of suffering more from job insecurity. For example, Probst (2000) studied the role of job involvement as a potential factor for making employees more vulnerable to job insecurity and its negative effects. It was found that, among the individuals experiencing high job insecurity, those who were highly involved in their job reported worse health than those who were less involved. This finding is similar to those of studies on unemployment investigating job terminations where it was found that individuals who valued their job suffered
more from its loss (Jahoda, 1982; Leana & Feldman, 1990; Warr & Jackson, 1985). Charles and James (2003) conducted a qualitative study on job insecurity and work orientation that also includes the significance of work. They found that an employee’s own perception of job insecurity as well as those of others around him or her were related to how important the job was in general perceived to be as well as to how much he or she was involved in their job.

To conclude, it can be assumed that work centrality and perceived financial dependence on the job are two factors that can influence employees’ vulnerability to the negative consequences of job insecurity. As more knowledge in this area is needed, the two types of job dependence are investigated in this thesis.

Mediation

In addition to investigating individual differences regarding the strength of the relationship of job insecurity and its outcomes, another way of investigating job insecurity further is to study mediators that link job insecurity to its outcomes. The investigation of mediators has gained increasing attention in job insecurity research in recent years (Sverke et al., 2010). For instance, using samples from four European countries, Chirumbolo and Hellgren (2003) tested if short-term consequences, according to the classification of long- and short-term stress consequences by Sverke et al. (2002), actually mediated the effects of job insecurity and explained long-term outcomes. They found that the short-term consequences of decreased job satisfaction and organizational commitment mediated the effect of job insecurity on turnover intention and partly mediated the effect on mental health (Chirumbolo & Hellgren, 2003). In line with this, Reisel and colleagues (2010) found that job satisfaction is an important mechanism that can explain the association between job insecurity and negative consequences such as lower organizational citizenship and more deviant behavior as well as why employees reported more anxiety and anger when experiencing job insecurity (Reisel, Probst, Chia, Maloles, & König, 2010). In addition, Probst and Brubaker (2001) found that job satisfaction was an intervening factor explaining the relations between job insecurity and the aspects of safety knowledge, safety motivation, and reported compliance with safety policies.

A study that investigated the effects of job insecurity on resigning from union membership, another type of outcome, found that this association could be explained by the employees’ feeling of being less supported by the union (De Witte et al., 2008). In addition, Bernhard-Oettel and her colleagues (2011) found that the negative effects of job insecurity
on well-being were mediated by the perception of unfairness. More complex relations were found for organizational outcomes, where perceived unfairness was as an explanatory factor for the relations between job insecurity and both increased turnover intention and lower organizational commitment, although only among employees who perceived that job security was part of their psychological contract (Bernhard-Oettel et al., 2011). Similar to perceived unfairness, breach of the relational psychological contract has been found to explain the associations between job insecurity and psychosocial outcomes such as job satisfaction and organizational commitment (De Cuyper & De Witte, 2007, 2008). Furthermore, a recent study by Vander Elst, De Cuyper, and De Witte (2011) found that perceived control was a mechanism that explained the relations between job insecurity and the aspects of decreased job satisfaction, affective organizational commitment, psychological distress, and increased turnover intention. These results were in line with previous studies that had identified perceived control as a factor that mediated the effects of qualitative job insecurity on psychological strain (Bordia et al., 2004; Bordia, Hunt, Paulsen, Tourish & DiFonzo, 2004). Also, perceived control has been found to be a link between job uncertainty, the inability to predict consequences of decisions or choices in the job context, and both job satisfaction and emotional exhaustion (Paulsen et al., 2005). Another potential factor which might mediate the relations between job insecurity and its outcomes might be perceived workload, which is a response to job insecurity that may change as a result of events in the workplace.

**Workload**

According to COR theory, one way of handling stressful situations is to invest one’s remaining resources to avoid further losses of resources (Hobfoll, 1989). In the context of job insecurity, one way of investing resources is to work more and work harder to try to resolve the situation and secure one’s position in the organization (cf. Staufenbiel & König, 2010), which aims to counteract the uncertainty and convince management of one’s value to the organization (cf. Bergman & Wigblad, 1999). This was observed in a study by Van Vuuren and her colleagues (1991) who found that employees believed that increasing their work effort protected them against involuntary job loss. Moreover, Fischer and colleagues (2005) as well as De Cuyper and colleagues (2008) found that job insecurity was associated with an increased number of working hours. This could be related to an increased effort to promote organizational success, which employees may believe to possibly result in more employment security in the long run (Gilboa, Shirom, Fried, & Cooper,
In turn, it is plausible that employees using these strategies as a response to job insecurity may experience a higher workload. This reasoning is in line with Ladipo and Wilkinson’s (2002) interpretation of the context that employees experiencing job insecurity work in, which was primarily characterized by an intensification of work intended to establish organizational flexibility and thus improve competitiveness.

In addition, work situations can be perceived as more demanding in stressful situations; a relation has, for example, been found between perceived workload and the aspects of stress levels, fatigue (MacDonald, 2003), and work-related stress (Smith & Bourke, 1992). An explanation for this could be that employees in stressful situations perceive that their regular workload is greater. Hence, workload might be one of those factors within organizations that may change in times of job insecurity and that can be used when investigating potential mechanisms mediating the effect of job insecurity.
Gender equality has been a fundamental goal of the European Union (EU, 2010), as the participation of men and women in the European labor market has increasingly moved towards a more equal gender distribution. As of 2008, the employment rate (the percentage of employed individuals between the ages of 15 and 64) for EU’s women was still lower, 59% for women compared to 72% for men. However, there is a large variation within the EU countries regarding the labor market participation of women; for instance, in Sweden the female employment rate is 70% and the male employment rate is 74% (Eurostat, 2010). Similar to Sweden, the female employment rates in Denmark, and the Netherlands are found to be higher compared to other European countries with around 70% of the women compared to approximately 80% of men working in relation to other countries such as Italy with a female employment rate of around 45% and male employment rate of around 70% (Acker, 1994; EU, 2010; Eurostat, 2010; Melkas & Anker, 1997). There has been an overall growth in female work participation of 7.1% in the EU over the last decade (Eurostat, 2010), which is a positive sign for gender equality. The changing gender composition of today’s working life as it undergoes a number of other important changes, as previously discussed, makes gender a relevant topic to consider when investigating work and work stressors.

In addition to the changing percentages of women participating in the labor market, the types of positions that women and men are working in also matter. Even though women are more educated than men (59% of university graduates in 2006 were women in the EU (EU, 2010)), this trend is not reflected in the distribution of responsibility at work, and is especially evident in the fact that few women are in high-level management positions. When it comes to higher organizational positions, women are still underrepresented, which suggests that it is harder for women than for men to advance in the organizational hierarchy. This phenomenon is often referred to as vertical segregation (Hull & Umansky, 1997) or the “glass ceiling” effect (e.g., England, Herbert, Kilbourne, Reid, & Megdal,
1994; Hultin, 1998). Comparing the U.S., Britain, and Sweden, it has been pointed out that Sweden is a country with very few women at the top of the organizational hierarchies (Bihagen & Ohls, 2006; cf. Charles, 2003; Petersen & Meyersson, 1999, 2001). In the 1990s, only 22% of the 100 biggest organizations in Sweden had female members on the board of directors as compared to 95% in the U.S. and 41% in Britain (SOU, 1998). More recent statistics show that the overall numbers of female employees in leadership positions have increased; in 2001 approximately one fourth of the leadership positions were held by women whereas in 2009 it is one third of all leadership positions (SCB, 2010). Additional structural differences that are associated with the positions men and women work in are, for example, differences in career prospective, salary, and bonuses (Arai, Nekby, & Skogman Thoursie, 2004; Birkelund, 1992; Kilbourne, England, Farkas, Beron, & Weir, 1994; Petersen & Morgan, 2008; Reskin & Bielby, 2005).

In addition to gender differences in regard to hierarchical positions within an organization, gender segregation has been detected in the types of sectors men and women work in. Today, the majority of women are still working in traditional female work sectors, such as education, health, and care occupations (Charles & Grusky, 1995, 2004; Nermo, 2000). 60% of all working women in Europe work within six sectors (health care, social services, retailing, education, public administration, business activities, and hotels and restaurants), whereas only 31% of all men are employed in these sectors (Eurofund, 2008). In Sweden, in spite of having a rather gender equal labour market with high female participation, the labour market is strongly gender segregated, with women representing a large part of the employees in the public sector, especially in the care and education sectors (Hakim, 2000; cf. Hultin, 2003; Nermo, 2000; Rosenfeld & Kalleberg, 1990). Moreover, large differences have been found between the sectors in terms of the number of female employees holding leadership positions and being at the top level of the organization’s hierarchy (SCB, 2010).

These distributional differences meant that men and women were affected differently during the economic crisis in 2008–09. For instance, it has been found that men’s unemployment rate was increasing faster than the women’s during this period (EU, 2010). This is possibly due to the fact that job loss was initially higher in male-dominated sectors, such as construction, which then had a chance to recover, whereas the unemployment rate of women had remained higher because female-dominated sectors, such as the public sector, had been affected by more long-lasting changes, including severe budget cuts to save public sector organizations.
This development has been in line with previous observations, showing that women generally have greater difficulties than men with finding new jobs or re-employment after periods of unemployment (McMullin & Berger, 2006; Weller, 2007). It has been suggested that women have more difficulties because of their social network being more related to the home (Russell, 1999) as compared to the men’s network, which is more focused on work contacts and therefore facilitative when male employees seek to end their unemployment (Smith, 2009). Moreover, the position of women in the labor market has been disadvantaged due to the fact that they tend to be more involved in precarious and non-standard types of work, including part-time work, which are often associated with lower pay, insecurity, and poor career possibilities (Petrongolo, 2010; Weichselbaumer & Winter-Ebmer, 2005). Indeed, within the EU for example, the number of women working in part-time positions was four times greater than the number of men, which can affect the social security protection and pensions of women in the long term (EU, 2010).

In addition to the more directly work-related issues that have been observed to differ between men and women, differences in the distribution of family-related responsibilities have also emerged. In many cases, women carry a higher overall workload, as they take on a larger portion of family duties along with their full-time job responsibilities (Blau, Ferber, & Winkler, 1997), which can negatively affect their career opportunities and participation in the labor market (Lundberg & Frankenhaeuser, 1999). In a recent report on gender equality in the EU, it was found that women with children were on average less active in paid work than were women without children, while the men with children, on the other hand, engaged in paid work more than the women, which shows that the gap between men and women is still there. It has been suggested that women’s greater involvement in part-time work is an indication of their greater responsibility for childcare, and that this situation can negatively affect the career opportunities of women (EU, 2010). The structural changes that have shaped the labor market more recently have been regarded by some as being positive for women in that the greater flexibility in the market should translate into more opportunities to combine family and career (Pink, 2001). However, this outlook on the merits of flexibility, which has also been characterized in terms of the “portfolio career” (Kirkpatrick & Houque, 2005), where employees are free agents in the labor market who are thought to develop their human capital continuously in order to find new jobs, does not take into consideration that the double burden of family and work may prevent women from spending human and social capital on work in the way that it is assumed (Kelan, 2008).
The persistence of such gender differences in relation to work and the labour market indicates that full gender equality has not yet been reached in this area and that the aspect of gender is still an important factor and one which needs to be considered when studying job insecurity.

When looking at gender differences in relation to work and especially in relation to job insecurity, there are two theoretical frameworks that are commonly used. First, there is the male breadwinner model (e.g., Lewis, 2001) which focuses on the traditional way of looking at gender and the role distribution of men and women in regard to the work and family domain. Second, there is the multiple role model (e.g., Barnett & Hyde, 2001), which takes into account gender equality in terms of men’s and women’s participation in the work and family domains.

The Male Breadwinner Model

The male-breadwinner model (e.g., Lewis, 2001) proposes that the family represents an economic unit in which different members take on different roles to optimize family and work life. The human capital of men and women is thought to focus on different domains, where the woman is assumed to channel her resources into the family domain and the man into the work domain (Becker, 1991; Mincer & Polachek, 1974). This is in line with gender role theory, which assumes that men and women take on different roles and therefore have different sources for their self-esteem and identity (Gaunt & Benjamin, 2007). Women are thought to be primarily involved in the mother and spouse roles, which is said to be central to their identity, whereas men are thought to be primarily involved in, and identify with, their work role. Men’s focus on and identification with the work role positions them as the main breadwinner of the family (Barnett, Raudenbush, Brennan, Pleck, & Marshall, 1995; Gaunt & Benjamin, 2007). Moreover, a man’s accomplishments at work have also been seen to be related to his success at home. Being successful at work was assumed to be the prerequisite of being a good husband and father, as it enables him to provide for his family (Barnett et al., 1995). Even though women also work, it was believed that being a wife and a mother was the main factor contributing to the psychological health and well-being of women (Barnett et al., 1995).

The assumption that men and women gain their sense of importance and identity from different domains (Barnett & Baruch, 1987; Menaghan & Parcel, 1990) has implications for potential sources of stress and well-being. Some scholars have suggested that men’s well-being is largely dependent on factors in the work-domain, and that stressors from the work domain can be most stressful for them, affecting their well-being.
negatively (Aneshensel & Pearlin, 1987; cf. Cinamon & Rich, 2002; Schwarzer & Dytell, 1996). On the other hand, women’s well-being has been thought to be primarily affected by factors in the family domain and, furthermore, stressors from this domain have been thought to be able to have an especially negative effect on women (Barnett, Marshall, & Singer, 1992; Schwarzer & Dytell, 1996).

Today, the male breadwinner model, as presented above, does not represent society accurately with the increasing participation of women in the labor market, especially in the Nordic countries. However instead of different roles for men and women, it has been suggested that men and women are still affected by a masculine breadwinner perspective describing the ideal employee as an independent and individualistic employee focusing on full-time work and free from commitments other than work (Crompton, 2006; Crompton & Harris, 1998; Halford, Savage, & Witz, 1997; Hochschild, 1989, 2001; Kelan, 2008).

The Multiple Role Model

Another model, which takes the participation of both men and women in the work as well as the family domain into account, is the multiple role model (Barnett & Hyde, 2001). This model might be more appropriate for the situation in the Nordic countries as it proposes that individuals can take on two or more roles, such as the work and the family roles, which is not accounted by the male breadwinner model. This can be advantageous because individuals can learn and profit from engaging in multiple roles and carry over their experiences from one role to another (Barnett & Hyde, 2001). This model assumes that the work and the family roles are essential for the well-being of men and women, and that they can be both satisfying and stressful for both men and women alike; a gender difference is not assumed (Schwartzberg & Dytell, 1996).

When an individual’s participation in the work role benefits his or her performance in the family role, it is known as work–family facilitation. A positive spillover takes place where performance in one role is enhanced by the other role (Barnett & Hyde, 2001; Carlson, Kacmar, Wayne, & Grzywacz, 2006). Participation in several roles is thought to produce an increased resource pool since it can allow individuals to enhance their self-esteem in different contexts, which can provide more buffers and support (Marks & MacDermid, 1996; Sieber, 1974; Thoits, 1983). When holding several roles and the work role interferes negatively with the family role, individuals experience work–family conflict (Greenhaus & Beutell, 1985). This phenomenon presumes that since individuals have a finite energy pool that is distributed between their different roles, the
energy invested in the work domain is thus not available for investment in the family domain (Greenhaus & Beutell, 1985; Rothbard, 2001).

**Gender in the Context of Job Insecurity**

In line with the traditional male breadwinner model, it has been assumed that men suffer more from job insecurity since job loss is a threat to their role as the breadwinner. It has been suggested that women have alternative identities they may take on in case of job loss, such as the family role, so a potential job loss is thought to be less threatening to their well-being compared to men (Burchell, 1994; Russell, 1999; Wajcman & Martin, 2002). According to the multiple role model, on the other hand, there should not be any specifically gender-related differences when it comes to who experiences more job insecurity or who suffers more from it.

Studies that have investigated gender differences in the context of job insecurity have shown mixed results. In line with the assumptions of the male breadwinner model, some studies have found that the relation between job insecurity and stress has been stronger for men than for women (De Witte, 1999; Ferrie, Shipley, Marmot, Stansfeld, & Smith, 1998; Mauno & Kinnunen, 1999; Näswall, Sverke, & Hellgren, 2001; Rosenblatt et al., 1999). Other studies have found that it is primarily single women as well as those women who are the breadwinner of the family, who report suffering more from job insecurity (cf. De Witte, 1999; Warr, 1984). These results seem to be more in line with the predictions of the multiple role model, where it is not gender per se but the role that individuals take on that is the best predictor of who suffers most.

Several studies have found inconclusive results that do not fit into either of these models, with the effects of job insecurity not differing according to gender. For instance, Rosenblatt et al. (1999) found that for female teachers, job insecurity was more strongly associated with a decrease in work attitudes than it was for the men. In addition, in a sample of health care employees, it was found that job insecurity had a longer lasting negative effect on women’s well-being than on the men’s (Mauno & Kinnunen, 1999). In a study by Gaunt and Benjamin (2007), they found that among the men and women who held more traditional ideological views on gender, the men experienced more job insecurity. Men and women, who perceive the work and the family role as equally important, reported to experience similar levels of job insecurity (Gaunt & Benjamin, 2007).

To conclude, gender is a factor that is not fully understood in the context of job insecurity; it is suggested that further investigations are needed, especially when there are factors involved that have also shown to be
different for men and women, as for instance, coping (Tamres, Janicki, & Helgeson, 2002) and job dependence that is closely related to the breadwinner status (Charles & James, 2003). Hence, gender is considered to be an important factor when investigating the mechanisms of the relations between job insecurity and its outcomes.
Method

This thesis is based on three studies which make use of data from two projects that have been conducted in Sweden by questionnaire surveys. The samples are described followed by a brief description of the national context and the Swedish social security system as the national context has been found to be important when studying job insecurity. A description of the measures and an explanation of the statistical analysis is included as well.

Samples

The samples that have been included in this thesis have been taken from a larger longitudinal project called “The salaried employee in the modern working life: threats and challenges” (for the technical report see Näswall, Baraldi, Richter, Hellgren, & Sverke, 2006) and its follow-up project “Job insecurity from a gender perspective” (for the technical report see Näswall et al., 2010). Both projects have been conducted in Sweden with the aim of investigating the effect of the modern working life on employees. The first project, containing four different occupational groups, was conducted between 2004 and 2006 and its follow-up project, with only one occupational group from the first project, was conducted between 2007 and 2009 (see Figure 4).

In the first project four samples were included (administrative employees from a manufacturing firm, accountants, administrative personal from a municipality and teachers employed by the same town). All employees received their questionnaires to their home addresses and the accountant sample received a movie ticket (sponsored by their employer) as a reward for their participation. Two reminders were sent to those that had not yet participated. Two waves of data collection were conducted with a year time lag in-between.

In the follow-up project only the accountant sample was studied. This data was collected in an organization operating all over Sweden with their headquarters in Stockholm. Four waves of data were collected within a period of three years following the same procedure used in the first project (see Figure 4). Except for the recession of 2008, affecting the organi-
zation with a small lay off, which could be noticed during the measurement 2009, the organization was economically stable and had a good position in the market. Due to their work with taxes employees have had in general a period of increased workload during April till May.

Figure 4. General description of the structure of the two projects which has been data source for this thesis (light blue background indicates a measurement).

This thesis made use of data from the second project for two studies (Study 1 and 2). Descriptions for the data sets used in the two studies can be found in Table 1. Different cross-sectional data sets were used from the accountants’ sample (see Figure 4). Study 1 used data collected during April and May 2008, in order to capture a period of increased workload and stress due to the work with taxes compared to the rest of the year. 799 employees received the questionnaire whereof 579 answered (response rate of 72.5%). The effective sample size consisted of 558 individuals after excluding individuals with missing data. More detailed information on the sample characteristics, such as age and education can be obtained from Table 1. In Study 2 data was used that was collected in August 2009 in order to capture the effects of the recession from 2008,
where 806 employees were sent the questionnaire, and 579 answered (response rate of 72%). The effective sample size consisted of 555 individuals after excluding individuals with missing data. More detailed information on the sample characteristics, such as age and education can be obtained from Table 1.

For Study 3 this thesis made use of data from the first project. Longitudinal data of two waves with one year time lag was used from the sample of teachers in order to include a sample different from the accountants (see Figure 4). During the first time point, in January 2005, the questionnaire was send to 619 employees where 443 participants answered (72%). During the second data collection wave, January 2006, questionnaires were sent to 593 employees and 359 participants answered (61%). In total 343 employees participated at both time waves (longitudinal response rate of 78%). The effective sample size consisted of 316 individuals after excluding individuals that had missing data. More detailed information on the sample characteristics, such as age, living status and children living at home can be obtained from Table 1.
Table 1. Description of Study 1–3.

<table>
<thead>
<tr>
<th></th>
<th>Study 1</th>
<th>Study 2</th>
<th>Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original sample size</td>
<td>799</td>
<td>806</td>
<td>619 (Time 1) 593 (Time 2)</td>
</tr>
<tr>
<td>Usable response (Response rate)</td>
<td>579 (72%)</td>
<td>579 (72%)</td>
<td>443 (72%) (Time 1) 359 (61%) (Time 2)</td>
</tr>
<tr>
<td>Effective sample size after listwise deletion</td>
<td>558</td>
<td>555</td>
<td>316</td>
</tr>
<tr>
<td>Women (Men)</td>
<td>63% (37%)</td>
<td>62% (38%)</td>
<td>74% (26%)</td>
</tr>
<tr>
<td>Age Women (Men)</td>
<td>39 (42)</td>
<td>40 (42)</td>
<td>50 (51)</td>
</tr>
<tr>
<td>University education Women (Men)</td>
<td>64% (88%)</td>
<td>62% (85%)</td>
<td>-</td>
</tr>
<tr>
<td>Cohabitating/Married Women (Men)</td>
<td>-</td>
<td>-</td>
<td>89% (88%)</td>
</tr>
<tr>
<td>Children at home Women (Men)</td>
<td>-</td>
<td>-</td>
<td>58% (54%)</td>
</tr>
</tbody>
</table>

The samples that were used in the three studies are fairly similar, in all three studies more women than men participated. Employees participating in the three studies were highly educated. The teachers were slightly older than the accountants.

**National Context – Sweden**

For a long period of time, Sweden has represented a country with highly efficient industries, valuing the participation of its employees, high wages, little wage difference and extensive welfare and family policies (Andréß, Borgloh, Bröckel, Giesselmann, & Hummelsheim, 2006; Marklund & Härenstam, 2010; Wikman, 2010). During the 1950s and 1960s Sweden gained worldwide attention as it provided economic equality for its citizens, which has been known as the ‘Swedish Model’ (Meidner, 1997). The aim of the ‘Swedish Model’ was to offer employees a more humane way of capitalism, which is based on social equality, compared to other market-driven countries (Blomqvist, 2004; Freeman, Topel, & Swedenborg, 1999). A well-functioning welfare system has been established, with a focus on high employment levels, a strong public sector aiming at establishing increased equality through extensive public and social services (Meidner, 1997).

The macro level changes of the last decades, such as an increased globalization and the economic turbulences, affecting working life all over the world, have not spared Sweden, leading to an adaption of the Swedish labor market to the other western and European nations (Marklund & Härenstam, 2010). With the deregulation of the financial market and the recession hitting Sweden in the 1990s, the Swedish wel-
fare system as well as the public sector have had to undergo changes as a means to reduce public costs (Lindbom, 2001; Wikman, 2010). Parts of the public sector have become privatized (Blomqvist, 2004), compared to other EU countries but today privatization is still low in Sweden. Other changes have concerned the values behind the social system, such as creating social equality; these values do not longer exist in the original form (Blomqvist, 2004). Unemployment rates rose in Sweden and have caught up with those of the other Western countries as there were fewer jobs available (Wikman, 2000) (1990: 1.5%; 2000: 5.9%; 2010: 8.9% [Eurostat, 2010]).

As a consequence to all those changes, many organizations had to restructure to survive and employees had a worse negotiation position (Wikman, 2010). Temporary work agencies, which were illegal in Sweden until 1992 (Storrie, 2003), have gained more influence since the recession in the 1990s, reflecting the organizations’ need for flexibility of their work force (Wikman, 2010). Wage differences have increased in Sweden during the recent decades (OECD Employment Outlook 2004/2007; Wikman, 2010) and perceived stress levels have constantly been rising as a result of the many organizational transformations that employees have had to experience (Wikman, 2010).

Sweden still is a country with a fairly developed welfare systems including social aid, unemployment insurance, free education and available childcare for the majority of the population (Isaksson, Johansson, Lindroth, & Sverke, 2006; Gonäs, 1999). Additionally, paid and job-protected parental leave is available supporting the dual earner family to encourage women to take part in the labor market (Andreß et al., 2006). Hence, employees are relatively protected in Sweden, in terms of a social security system, which might make job insecurity less of a problem. However, a recent cross-national study by König and his colleagues (2011) has found that those countries with a stronger social security net are countries that have in general higher uncertainty avoidance (House, Hanges, Javidan, Dorfman, & Gupta, 2004) and are more likely to experience job insecurity in spite of their good social security system compared to nations with no governmentally implemented social security systems.

Measures

The measures that were used to investigate job insecurity and its potential outcomes as well as possible underlying mechanisms that are thought to explain the relation of job insecurity and its outcomes are summarized in Table 2. In the table an example item from each scale is given, the relia-
bility as well as the origin of the scale is named. All three studies include age and education as control variables as well as the same measure of quantitative job insecurity is used in all three studies (Hellgren et al., 1999). Study 2 included in addition to quantitative job insecurity also qualitative job insecurity (Hellgren et al., 1999). Regarding potential outcomes, different factors that concern the organizational well-being as well as the individual well-being have been considered.
Table 2. Overview of variables used in the present thesis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of items</th>
<th>Scale range</th>
<th>Source of scale</th>
<th>Example item</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Background</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td></td>
<td>Study 1–4 coping study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1–5 years</td>
<td>Study 2–4 job dependence study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1</td>
<td>1 = university, 0 = lower than university</td>
<td>Study 3–4 workload study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family status</td>
<td>1</td>
<td>1 = married/cohabitating, 0 = no partner</td>
<td>Study 3–4 workload study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children living at home</td>
<td>1</td>
<td>1 = yes, 0 = no</td>
<td>Study 3–4 workload study</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Job insecurity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative job insecurity</td>
<td>3</td>
<td>1–5</td>
<td>Hellgren et al. (1999)</td>
<td>‘I worry about being able to keep my job’</td>
<td>α = .90</td>
</tr>
<tr>
<td>Qualitative job insecurity</td>
<td>4</td>
<td>1–5</td>
<td>Hellgren et al. (1999)</td>
<td>‘I worry about getting less stimulating work tasks in the future’</td>
<td>α = .78</td>
</tr>
</tbody>
</table>

(cont’d)
<table>
<thead>
<tr>
<th>Mechanisms</th>
<th>Scale</th>
<th>Range</th>
<th>Measure</th>
<th>Description</th>
<th>Reference</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workload</strong></td>
<td>3</td>
<td>1–5</td>
<td>Beehr, Walsh, &amp; Taber (1976)</td>
<td>‘I often have too much to do in my job’</td>
<td>α = .80 at T1 and α = .82 at T2</td>
<td></td>
</tr>
<tr>
<td><strong>Change coping</strong></td>
<td>3</td>
<td>1–5</td>
<td>Guppy et al. (2004)</td>
<td>‘I try to change the situation to get what I want.’</td>
<td>α = .82</td>
<td></td>
</tr>
<tr>
<td><strong>Devaluation coping</strong></td>
<td>3</td>
<td>1–5</td>
<td>Guppy et al. (2004)</td>
<td>‘I tell myself the problem wasn’t so serious after all’</td>
<td>α = .85</td>
<td></td>
</tr>
<tr>
<td><strong>Avoidance coping</strong></td>
<td>3</td>
<td>1–5</td>
<td>Guppy et al. (2004)</td>
<td>‘I try to keep my mind off the problem’</td>
<td>α = .84</td>
<td></td>
</tr>
<tr>
<td><strong>Subjective financial</strong></td>
<td>4</td>
<td>1–5</td>
<td>Clark (2005)</td>
<td>My income from my job in this organization is important to me (and my dependents)</td>
<td>α = .83</td>
<td></td>
</tr>
<tr>
<td><strong>Family contribution</strong></td>
<td>1</td>
<td>1–5</td>
<td>-</td>
<td>(‘To what extent does your salary contribute to your overall household income?’</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Work centrality</strong></td>
<td>4</td>
<td>1–5</td>
<td>Kanungo (1982)</td>
<td>The most important things that happen in life involve work</td>
<td>α = .63</td>
<td></td>
</tr>
<tr>
<td>Consequences</td>
<td>N</td>
<td>Scale</td>
<td>Measure</td>
<td>Description</td>
<td>T1</td>
<td>T2</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----</td>
<td>-------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>3</td>
<td>1–5</td>
<td>Hellgren, Sjöberg, &amp; Sverke (1997)</td>
<td>I am satisfied with my job’</td>
<td>α=.88</td>
<td>α=.89</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>4</td>
<td>1–5</td>
<td>Allen &amp; Meyer (1990)</td>
<td>‘I have a strong sense of affinity to the organization I work for.’</td>
<td>α=.68</td>
<td></td>
</tr>
<tr>
<td>Turnover intention</td>
<td>3</td>
<td>1–5</td>
<td>Sjöberg &amp; Sverke (2000)</td>
<td>‘I am actively looking for other jobs’</td>
<td>α=.87</td>
<td></td>
</tr>
<tr>
<td>Mental health complaints</td>
<td>12</td>
<td>0–3</td>
<td>Goldberg (1979)</td>
<td>‘During the last two weeks have you suffered under strain?’</td>
<td>α=.83</td>
<td>α=.83</td>
</tr>
<tr>
<td>Physical ill-health</td>
<td>10</td>
<td>1–5</td>
<td>Isaksson &amp; Johansson (1997) based on Andersson (1986)</td>
<td>‘During the last 12 months have you suffered under neck/shoulder pain?’</td>
<td>α=.73</td>
<td></td>
</tr>
</tbody>
</table>
Data Analysis

To test the different research questions, different statistical analyses have been used to test main effects (Study 1–3), moderating effects to investigate individual differences for job insecurity with its relation to potential outcome variables (Study 1 & 2), and mediation effects to study in what way job insecurity is associated to certain outcomes (Study 3).

Main Effects

Main effects were investigated in two ways in this thesis. For the cross-sectional studies regression analysis in SPSS was used (Study 1 and 2) and for longitudinal studies structural equation modeling in LISREL was used (Study 3).

Regression analysis is one of the first generation multivariate methods that is used to predict variance in a continuous dependent variable (Guarino, 2004; Tabachnick & Fidell, 2001). Single or groups of independent variables can be added in stages in multiple regression analysis to investigate the specific amount of variance that is explained by each variable or variable group. This technique is called hierarchical multiple regression. Main effects are investigated that represent the changes in explained variance in the dependent variable through the use of independent variables.

In Study 1, the main effects of the control variables (age and education) as well as job insecurity and the three coping variables (devaluation, avoidance and change coping) were investigated in relation to five dependent variables (job satisfaction, affective organizational commitment, turnover intention as well as somatic and mental health complaints). In Study 2, the main effect of the control variables (age and education), qualitative and quantitative job insecurity in addition to the job dependence indicators (financial job dependence, family contribution and work centrality) were tested in relation to job satisfaction and mental health complaints.

Structural equation modeling (SEM) belongs to the second generation of multivariate methods (Fornell, 1984; Chin, 1998). In comparison to the first generation of multivariate methods, SEM provides the possibility of testing more complex models, instead of running separate models with one dependent variable such as in regression. In addition, measurement error is taken into consideration, which eliminates the bias created by this type of error, and makes relationship estimations more accurate (Bollen, 1989).

To investigate longitudinal data as in Study 3, a cross-lag design was chosen where all variables were measured at two time points in order to control for the previous levels of the dependent variable (work–family conflict) and take the stability of the investigated constructs into account. Four control variables (age, education, family status and children living at home) were included. To assure that the measured constructs were the same over time a
longitudinal factor analysis was conducted (Brown, 2006), restricting the constructs to be equal over time, to test for factorial invariance. To test the study hypotheses, two theoretical models (null model vs mediation model) were compared in order to find the best fit between the proposed models and the data set. To account for gender differences, the models for men and women were compared in a multiple group test.

Moderation

Moderation analysis investigates if there are variables that can affect the sign and/or strength of the relationship between the independent and dependent variable (Baron & Kenny, 1986; MacKinnon, 2008; Sharma, Durand, & Gur-Arie, 1981). In statistical terms, an interaction effect represents a moderating effect, and is tested by creating a new variable by multiplying the independent and the moderating variables (Cohen, Cohen, West, & Aiken, 2003). Hence moderator variables can provide information about variation in the relationship between the independent and dependent variable (Cohen et al., 2003). In line with the recommendation of Cohen and colleagues (2003), the independent and moderator variables were first centered to improve interpretability and reduce multi-collinearity before multiplied. The significant interaction effects can be plotted at one standard deviation above and below the mean in order to facilitate interpretation (Cohen et al., 2003).

In Study 1, it was investigated if the relationship between job insecurity and well-being changes depending on the use of different coping styles. After the variables, testing the main effects, were entered, the last step of the multiple regression analysis included the three interaction terms of the centered job insecurity variable multiplied by each of the three coping variables. Five different regressions were run to investigate the effect of job insecurity, coping and the interaction on the outcomes (job satisfaction, affective organizational commitment, turnover intention as well as somatic and mental health complaints). Significant interaction effects were plotted for an easier interpretation. Regression analyses were run separately for men and women.

In Study 2 the two job insecurity types were related to job satisfaction and mental ill-health and it was tested if different indicators of job dependence influenced this relationship. After the variables, testing the main effects, were entered, the last step of the multiple regression analysis included entering the interaction terms of the two types of job insecurity as well as the three indicators for job dependence. Two regression analyses were run separately for men and women to investigate the main and interaction effects on the two outcomes (job satisfaction and mental health complaints). Significant interaction effects were plotted for an easier interpretation. To investigate potential gender effects, multiple group analysis in LISREL was conducted in Study 2 comparing coefficients of the model for men and women.
in order to see if there were more similarities or differences between the sample of men and women.

Mediation

Mediation analysis provides the statistical answer to the question of how two things are related (MacKinnon, 2008). In statistical terms a mediator represents a variable that transmits the effect of the independent variable onto the dependent variable; hence, the mediator accounts for the relationship of the independent and dependent variable (Baron & Kenny, 1986; MacKinnon, 2008). This implies that a mediator is an intervening variable in a causal sequence. This causality assumption differentiates a mediator from other variables, such as confounders, which potentially can explain a relationship between two variables (MacKinnon, 2008).

To analyze mediation effects in Study 3, where it was investigated if work load mediates the relationship between job insecurity and work–family conflict over time, structural equation modeling was used with a longitudinal data set. This study utilizes a ‘semi’-longitudinal model, where the predictor is measured at Time 1, whereas the measures of the mediator and the outcome are from Time 2 as suggested by Cole and Maxwell (2003). A procedure that was proposed by Brown (1997) was applied in order to investigate mediation. With the use of LISREL the direct, total and total indirect effects were assessed for the mediation model. From this model three conditions are relevant and need to be fulfilled in order to identify mediation (Brown, 1997). First the direct effect between the independent variable and the mediator is assessed, followed by the assessment of the relation between the mediator on the dependent variable. Finally in the last condition, the direct effect of the independent variable on the dependent variable, controlling for the mediator, is investigated. In the tested model, the direct effect is compared to the total effect of the independent onto the dependent variable and in case of mediation the direct effect should be lower when the mediator is included, hence the direct effect should be smaller than the total effect. To increase the interpretability of the mediation results a ratio can be calculated expressing the proportion of mediation by assessing the ratio of the direct effect to the total effect in this model (Brown, 1997). To test for gender differences the analyses were run separately for men and women; a multiple-group test was conducted, which allowed for a comparison of the results for men and for women.
Summary of Studies

Study 1– Is Coping with Job Insecurity Possible? Exploring Effects on Health and Organizational Outcomes as well as Gender Effects

Background and Aim

With job insecurity having been associated with a variety of negative consequences in previous research, closer attention can now be turned to the moderating variables that influence the relations between job insecurity and these outcomes and especially how individuals deal with job insecurity on an individual basis. Therefore, the aim of the first study was to investigate three different coping strategies in the context of job insecurity. Two strategies of emotion-focused coping (devaluation and avoidance coping) were examined along with one strategy which relied on problem-focused coping (change-oriented coping). With respect to the consequences under investigation, job
satisfaction and organizational commitment were selected as the short-term consequences, as the former represented effects at the individual level and the latter the organizational level. In terms of long-term consequences, mental and somatic health complaints were chosen to represent consequences affecting the individual, while turnover intention represented the organizational long-term outcome. As gender research on job insecurity and coping has produced inconclusive results for both men and women, gender was also taken into consideration in this study.

Methods

The data came from a cross-sectional data set from the follow-up project “Job insecurity from a gender perspective” (Näswall et al., 2010). Utilizing the fourth wave of data, gathered in 2008, a listwise deletion of missing data produced an effective sample size of 558 participants. To estimate the potential moderator effects of the three coping strategies, hierarchical regression analysis was applied with the demographic variables controlled for in the first step. Five separate regressions were run as there were five dependent variables being tested (job satisfaction, affective organizational commitment, turnover intention, and mental as well as physical health complaints). Analyses were run separately for men and women in order to investigate potential gender differences.

Findings and Conclusions

Job insecurity was unrelated to commitment and physical health symptoms for both men and women. For both men and women there was a positive association between job insecurity and mental health complaints. The rest of the findings of the study showed gender differences. There were differences in the main effects; for example, job insecurity was found to be related to decreased job satisfaction and increased turnover intention for women but not for men.

It was predicted that primarily emotion-focused coping would buffer against the negative outcomes of job insecurity. Contrary to the hypothesis, avoidance coping functioned as a vulnerability factor for men. However, this effect was only observed for job satisfaction and mental health complaints; the moderating effect indicates that those who were experiencing higher levels of job insecurity and who used avoidance coping to a higher degree also reported lower levels of job satisfaction and higher levels of mental health complaints compared to individuals who did not use avoidance coping when job insecurity was high. Change-oriented coping was only found to be a moderator for women for the relation between job insecurity and job satisfaction, and between job insecurity and turnover intention. For those using more change-oriented coping, lower turnover intention and higher job satis-
faction were only reported among those who also reported experiencing low job insecurity, which was in line with the hypothesis.

The results indicate that there were gender differences regarding the relation between job insecurity and known outcomes such as turnover intention and job satisfaction, which is not in line with findings from a recent meta-analysis (Cheng & Chan, 2008), implying that gender should be further investigated to increase our knowledge about who suffers more from job insecurity. Emotion-focused coping was not related to more positive attitudes or to health, which is contrary to what was predicted by the hypothesis, and it had an adverse moderation effect for men in regard to job satisfaction and mental health. A potential explanation might be that job insecurity is too severe of a threat to important resources such as financial security, and therefore cannot be successfully handled by ignoring or re-evaluating it. For women, change-oriented coping was only related to less negative reactions in cases of low job insecurity, so for those with high levels of job insecurity, coping by trying to change the situation was not an effective strategy.

Study 2– Job Insecurity, Well-being, and Gender – The Moderating Role of Job Dependence
Background and Aim

Since individuals’ access to resources may affect their appraisals of situations, inter-individual differences are thought to play a role in the potential consequences associated with job insecurity. Individuals may differ in how dependent they are on their job, depending on their financial needs and personal preferences, which might affect how they react to job insecurity.

The aim of this study was to investigate what role this job dependency has in the relationship between job insecurity and two of the most studied outcomes of job insecurity – job satisfaction and mental health complaints. It was hypothesized that financial dependence on the job would be a moderator for job insecurity and its relation to the two outcomes. Work centrality as a form of psychological dependence was additionally thought to be a moderator for job insecurity and the relation to its outcomes. Gender was taken into account, as large gender differences have previously been observed in regard to job dependence from the perspective of traditional gender roles (Gaunt & Benjamin, 2007).

Methods

The data set for this study came from the sixth wave of data, collected in 2009, from the follow-up project “Job insecurity from a gender perspective” (Näswall et al., 2010). After listwise deletion of the missing data, a sample of 567 participants was used for the analysis. To estimate the potential moderating effects of the two types of job dependence, hierarchical regression analysis was applied. Financial dependence was measured by two scales (subjective financial dependence and one item measuring family contribution of the salary to the household income). In addition, work centrality was measured by one scale representing a form of psychological dependence. Qualitative and quantitative job insecurity were included and job satisfaction and mental health complaints were utilized as approximations for well-being. In the first step of the regression analysis, demographic variables were controlled for. Two regressions were run for both men and women as there were two dependent variables that were tested. Gender differences were studied with multiple group comparisons in LISREL.

Findings and Conclusions

In line with previous studies, quantitative and qualitative job insecurity were both found to be negatively associated with job satisfaction and positively associated with mental health complaints among both men and women. With regard to the interaction effects, no moderations were found for the subjective financial dependence, which represented a form of financial dependence. The family contribution of the salary, which was the other indicators of financial dependence, was a vulnerability factor, in line with our prediction.
Men who were responsible for a larger proportion of the family income, reported less job satisfaction and more mental health complaints when quantitative job insecurity was high, compared to those men who did not contribute so much to the family income. Among women, it was found that the contribution to the family income was a moderator for the relation between qualitative job insecurity and job satisfaction. In this case, the contribution to the family income functioned as a vulnerability factor; those female employees who experienced high qualitative job insecurity as well as were responsible for a larger proportion of the family income reported less job satisfaction than those who did not rate their salary as so important for the household income. In testing the hypothesis that work centrality would also act as a moderator for qualitative and quantitative job insecurity, moderating effects were only found among women in this study. Contrary to the hypothesis, work centrality did not function as a vulnerability factor. Women who experienced either low or high qualitative or quantitative job insecurity were more satisfied when they experienced high work centrality. The multiple group comparison comparing the magnitude of the interaction effects between men and women showed gender differences for the moderation of contribution to the family income on the relation between quantitative job insecurity and the two outcomes.

To conclude, gender differences were found and job dependence appeared to be a vulnerability factor primarily for men that were responsible for a larger proportion of the family income. The women who valued their job highly seemed to be more satisfied in general, regardless of their job insecurity levels. One possible explanation is that those who value their job have more tolerance for stressors at the job. Work centrality can be seen as a general buffering factor that protects individuals to a certain extent from the negative effects stressors are associated with.
Study 3 – Job Insecurity and its Relation to Work–Family Conflict: Mediation with a Longitudinal Data Set

**Background and Aim**

In addition to job insecurity being a potential threat to the employee’s organizational attitudes and behaviors as well as their well-being, it may further decrease the employee’s availability in the life outside of work as well as influence effective performance of the non-work role (Voydanoff, 2004). When off of work, or in other words, in the non-work domain, employees can still suffer from job insecurity when work stress spills over into other domains. Hence, job insecurity can interfere with a healthy non-work life through affecting perceived work–family conflict. The first aim of this study was to establish work–family conflict as a potential new consequence of job insecurity. The second aim was to explore the direction of the relationship between job insecurity and work–family conflict, since previous research has only investigated this relation cross-sectionally (e.g., Batt and Valcour, 2003). Moreover, the third aim of the study was to test workload as a mediating variable and investigate how job insecurity might be related to work–family conflict. The role of gender was considered as well by testing the models separately for men and women.
Method

The data for Study 3 came from “The salaried employee in the modern working life: threats and challenges” project (Näswall et al., 2006). A longitudinal sample of Swedish teachers was used which resulted in an effective sample size of 316 individuals after listwise deletion of the missing data. A non-response analysis, comparing those answering on both measurement times to the non-respondents at Time 2, was conducted and only found differences in the respondents’ age, with non-respondents being slightly younger. To analyze the data, structural equation modeling in LISREL was used. Following a recommendation by Cole and Maxwell (2003), mediation was modeled using two data waves with job insecurity measured at Time 1 and workload and work–family conflicted measured at Time 2. To establish a good basis for testing the hypothesis, a longitudinal factor analysis was conducted to ensure that the constructs were the same over time (Brown, 2006). The longitudinal factor analysis supported invariance, indicating that the measurement model was stable over time. To test for the actual mediation effect, a procedure by Brown (1997) was applied where three conditions were estimated and a ratio was calculated to estimate the mediation effect. A multiple group analysis was conducted to test if there were gender differences in the mediation model.

Findings and Conclusions

Mediation was only found for men. For male employees, job insecurity at Time 1 predicted increased workload one year later and workload was positively related to work–family conflict. Workload explained nearly half of the effects of job insecurity on work–family conflict one year later. For women, no mediation was found, indicating that there were gender differences in the mechanisms relating job insecurity to work–family conflict.

An explanation for these gender differences could be the nature of the sample. Since men were the minority group in the teacher sample, this may have made them more vulnerable. Another explanation could relate to the status of men in society. The traditional breadwinner role may still be primarily taken on by men and therefore job insecurity may be a larger problem for men than for women. As a contribution to job insecurity literature, this study demonstrated that there was a relation between job insecurity and work–family conflict over time. In addition, it indicates that workload is another factor that may help explain why job insecurity can affect the perception of the balance between work and family life negatively for men.
This thesis has aimed to increasing our understanding of the relations between job insecurity and its consequences by addressing several research gaps. The first research aim focused on a potential broader consequence of job insecurity, which was addressed by studying the relation between job insecurity and work–family conflict. In order to investigate the directionality of job insecurity and work–family conflict, the study was conducted over time. The second research aim addressed mechanisms of the job insecurity–outcome relations. Factors that could make employees more vulnerable to or buffer against the negative effects of job insecurity were studied in order to take individual variations in the relations between job insecurity and its consequences into account. In this context, coping with job insecurity was investigated as an individual factor, and two forms of job dependence were studied as further individual factors that may account for individual differences in the relation of job insecurity and its outcomes. Moreover, workload was investigated as an intervening variable (or mechanism) between job insecurity and its outcomes. The third research aim addressed gender and its role in the relations between job insecurity and its outcomes as well as when potential mechanisms were studied, which was investigated in all three studies.

Examining a further Consequence of Job Insecurity and Investigating Directionality

In order to study the first aim of this thesis, the relationship between job insecurity and work–family conflict over time was investigated in Study 3. It was found that job insecurity affected work–family conflict one year later, but only among men. Several explanations are conceivable for these results. In general, the findings seem to be in line with an assumption based on the COR theory, where it is suggested that employees may reduce resource investment in the non-work domain in order to save their energy for the job (Hobfoll, 1989). When experiencing job insecurity, employees may put greater effort into their work in order to counteract the threat of a potential job loss (Hobfoll, 1989; Staufenbiel & König, 2010) and by that, the satisfactory performance of the non-work role might not be possible (cf. Hobfoll, 1989). Another explanation could be that stress reactions are spilling over from one domain to the other. It has been observed, for instance, that work-
related affective and cognitive states, such as negative emotions or worry, are not restricted to the workplace, but affect the non-work domain and, by that, the non-work role as well (Hill, Ferris, & Märtinson, 2003; Zedeck, 1992). Results from Study 3 showed that job insecurity was related to work–family conflict in the short term, which is in agreement with previous research (e.g., Batt & Valcour, 2003), and also in the long term, which demonstrates that job insecurity is a powerful stressor with potentially long-lasting effects. The results of Study 3 are thus in line with research that found long-lasting effects of job insecurity when other outcomes were investigated, such as mental health complaints (Burgard et al., 2009).

Several conclusions can be drawn from these results. First, when considering the results of previous studies (Barling & Mendelson, 1999; e.g., Batt & Valcour, 2003) along with those of Study 3, there is more empirical support for job insecurity being associated with consequences beyond work, which may spillover to domains outside the workplace, in comparison to just outcomes that primarily affect the individual or the organization. Second, these findings support the notion that job insecurity is the predictor and not the outcome of work–family conflict. This brings some clarification to the chronological order of job insecurity and work–family conflict, at least for the men in the studied sample. Moreover, it is plausible that job insecurity may pose a threat to successfully managing several roles since job insecurity affects the perception of balance between work and the non-work domain negatively.

Since only a few studies have investigated outcomes that go beyond the known categorization of job insecurity consequences (Lazarus & Folkman, 1984), one theoretical implication of this thesis is that it supports a broadening of the categorization of stressor outcomes. Examples of outcomes that concern consequences in the non-work domain include job insecurity crossover to the spouse (Westman et al., 2001), negative consequences for the children of employees experiencing job insecurity (Barling & Mendelson, 1999), as well as the cross-sectional (e.g., Batt & Valcour, 2003) and longitudinal results of work–family conflict from this thesis. In light of such findings, a third category may be called for to include the consequences of job insecurity that affect the non-work domain in the short- and long-term. Other researchers, such as Sverke and Hellgren (2002) and Sverke and his colleagues (2004), have previously suggested extending the categorization but they primarily focused on job insecurity outcomes that were related to the unionization of the workforce.

The job insecurity–outcome classification utilized in previous research (e.g., Sverke et al., 2002) could thereby be expanded as depicted in Figure 5. The short-term consequences in the non-work domain concern primarily the spillover of consequences from one domain to the other, such as negative mood stemming from job insecurity transferring to the non-work domain. Long-term effects in the non-work domain are suggested to primarily con-
cern the cross-over of negative consequences from one person to another. Based on the results of this thesis, alongside those of previous studies, it is suggested that work–family conflict can be a short-term as well as a long-term outcome of job insecurity. In future research, other, less traditional potential consequences of job insecurity should be explored and tested in both the short- and long-term. Moreover, research should make more attempts to approach job insecurity from different angles, such as by also targeting persons around the main subjects who may have insight into how job insecurity may be affecting their non-work roles.

**Figure 5.** Broadening of the categorization of stressor consequences.

Moreover, it is still unclear how long it takes for the development of, for instance, the short and long-term consequences of job insecurity in the tradition classification (cf., Sverke et al., 2002). Future research should focus on how reactions may develop differently over time by conducting longitudinal studies using different time lags; for example, shorter time lags such as in diary studies might be useful (cf. Garst et al., 2000). In addition, seeing as the results concerning the relation between job insecurity and work–family conflict over time differed between the men and women in this thesis, gender may have a notable role in how job insecurity reactions develop over time. Future research should therefore consider gender when investigating how long it takes for job insecurity consequences to develop, even when considering the more investigated and established outcomes of job insecurity.
Moderating Factors

Even though research has shed a great deal more light on job insecurity in recent decades, fairly little is known about how differences in individuals’ resources may affect their experiencing of job insecurity and its outcomes or about why there are variations in the strengths of associations between job insecurity and its consequences. In order to address the second research aim of this thesis, mechanisms of the job insecurity–outcome relation were investigated in Study 1 and 2, where factors that may make employees more vulnerable to or buffer against the negative effects of job insecurity were studied. This thesis investigated how employees try to cope with job insecurity and how their economic circumstances and ascribed importance of work might affect the job insecurity–outcome relationship.

Coping with Job Insecurity

Study 1 of this thesis investigated how employees try to cope with job insecurity and how coping may affect the relations between job insecurity and several outcomes. The results showed that problem-focused coping did not function as a buffer. It was only beneficial in regard to the relation between job insecurity and job satisfaction and to the relation of job insecurity and turnover intention among female employees reporting low job insecurity.

There are several potential explanations for these results. It is possible that in cases of low job insecurity, employees may not experience so much stress, and the problems might not be so difficult to resolve, which could be the reason for why problem-focused coping might be beneficial in cases of low job insecurity. However, problem-focused coping was not a buffer in cases of high job insecurity, which was in line with the theoretical assumptions of this thesis. The sources of job insecurity are difficult to pinpoint, which makes it a problem because it is difficult for employees to address. Since this is the aim of problem-focused coping, this type of coping might be less applicable in the context of job insecurity. However, different kinds of problem-focused coping styles should be tested in relation to job insecurity, such as job seeking behavior or seeking social support from the manager, which may be more beneficial than the change coping scale that has been used in this thesis. This scale represented a more general problem-focused coping approach, investigating to what extent the source of the stressor was addressed. Thus, other kinds of problem-focused coping styles that might relate more to the work context should be investigated in the future to increase our understanding of how useful problem-focused coping is in the context of job insecurity.

Contrary to what was predicted, devaluation coping and avoidance coping, the two types of emotion-focused coping studied, did not function as a buffers. Unexpectedly, avoidance coping was found to be a vulnerability
factor for men in the relation between job insecurity and job satisfaction as well as in the relation between job insecurity and mental health complaints. Men who used avoidance as a coping strategy reported lower job satisfaction and more mental health complaints when job insecurity was high. One explanation for devaluation coping not acting as a buffer could be that the employment was too important of a resource to effectively devaluate, given that it is connected to many parts of an employee’s life (Jahoda, 1982), so any attempts that might have arisen to convince themselves that its loss would not be so serious would not have taken root. This may mean that in addition to knowing whether the source of the threat is unclear, it might also be important to take into account the importance of the object under threat in order to evaluate the effectiveness of different coping strategies (Mattlin, Wethington, & Kessler, 1990). Moreover, some researchers have differentiated between emotional coping styles in regard to their outcomes. For instance reappraisal strategies were related to more positive outcomes (Parkes, 1990; Strentz & Auerbach, 1988; Vaillant, 1976) whereas coping strategies that avoided the problem were related to more negative outcomes (Ingledew, Hardy, & Cooper, 1997; Koeske, Kirke, & Koeske, 1993). Hence, avoiding the problem has been suggested to be related to more negative consequences (Bowman & Stern, 1995). This could explain why the employees in this study who used avoidance coping when dealing with job insecurity were suffering more from negative consequences of job insecurity and, in turn, were more vulnerable. Along with what has been found in previous studies, it could be suggested that employees having to deal with job insecurity should not use avoidance coping and try to avoid the stressor because it seems to make individuals more vulnerable, as was found among the men in particular in this sample. Similar results have been found in other studies, such as those of Latack (1986) and Stern and Zevon (1990), which found that emotion-focused coping did not reduce but actually exacerbated the negative effects, which is contrary to the theoretical assumptions on emotion-focused coping (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984).

As it has been found that coping skills can be trained (cf. Lazarus & Folkman, 1984), it is essential to increase our knowledge of the effectiveness of coping techniques used by individuals experiencing job insecurity. This knowledge could aid in the development of useful intervention programs for helping employees and organizations to deal with job insecurity. Seeing as none of the studied coping strategies worked particularly well in this thesis, it might be useful to study coping using a contextual approach, where situation-specific coping strategies are investigated (Folkman & Moskowitz, 2004). As coping with job insecurity is a rather new research area, a first step to investigating situation-specific coping might be to use interview studies to identify coping strategies that employees use when dealing with job insecurity along with testing different kinds of coping strategies, such as active job searching or the utilization of social support from the manager. In
addition, the development of job insecurity coping should be investigated over time. It has been suggested in other research areas that the use of coping strategies is dynamic and varies over time as individuals’ perceptions of their environment changes. For instance when grieving for a lost one, emotion-focused coping is often used in the initial phase of grieving, before more active kinds of coping are utilized in later phases (Folkman & Moskowitz, 2004).

**Job Dependence**

Study 2 in this thesis investigated if employees who were more dependent on certain resources were more vulnerable to qualitative or quantitative job insecurity. It was predicted that the relative contribution to the household income, as an indicator of financial dependence, would function as a vulnerability factor and that those with higher levels of this type of dependence would suffer more from job insecurity, and this was found in Study 2. The men who experienced quantitative job insecurity were more vulnerable to job insecurity when they were the primary contributor to the household income. They reported lower job satisfaction and more mental health complaints as compared to those men who did not contribute as large of a portion to the household income. A larger relative contribution to the household income was considered an indicator of financial dependence, but it may also be an indicator of breadwinner status, which has been shown to be important in the context of job insecurity (Brockner, 1988; Charles & James, 2003). In Charles and James’ study (2003), it was found that the men who were the main breadwinners of the family took a more active part in the provider role when they experienced job insecurity (Charles & James, 2003). Another indicator that job dependence might influence how employees react to job insecurity was found in a study by Brockner (1988), where it was observed that job dependence can affect the employees’ job insecurity experiences and, in turn, may make them more vulnerable to the consequences of job insecurity. In line with this, Greenhalgh and Rosenblatt (1984) suggested that job dependence may be a potential moderator for job insecurity and its outcomes and their assumption could be supported by the present results regarding the relative contribution to the household income. In line with the results of previous studies (Brockner, 1988; Charles & James, 2003), the current results can be taken as an indication that the relative contribution to the household income might be an important moderating variable for men experiencing quantitative job insecurity. The breadwinner status may be an indicator that can assist in the identifying of risk groups that suffer more from job insecurity than other employees.

The results concerning subjective financial dependence, measuring to what extent employees were dependent on their income in order to maintain their current living standard and financial commitments, showed that this
type of dependence did not make the employees more vulnerable to the negative outcomes of job insecurity. One explanation for why there were no moderating effects could concern the national context the study was conducted in. Employees who lose their jobs in Sweden receive a high degree of public support, typically in the form of unemployment benefits, which generally allows the unemployed to cover their most important financial commitments.

For work centrality, a more psychological type of job dependence, moderating effects were found for women. Higher levels of work centrality combined with either quantitative or qualitative job insecurity was related to higher levels of job satisfaction, while lower work centrality in combination with job insecurity was related to lower levels of job satisfaction. Work centrality seemed to function as a buffer against the negative effects of job insecurity and these results were contrary to the prediction that work centrality would be a vulnerability factor. One possible explanation for these findings is that the employees who perceive work to be central in their life might also tend to believe that they are good employees who are attractive to other organizations and that they would be able to find a new job quickly if they needed to – which might make job insecurity less problematic. Another explanation could be that work centrality reflects a more general belief about the importance of work in life and is therefore not necessarily related to the current job in particular, which is a notion arguably supported by a previous study which found that work centrality was related to civic virtue, representing the macro level interest of the employee in the organization (Diefendorff, Brown, Kamin, & Lord, 2002). It may just be that these individuals are in general more positive towards their work and, for that reason, may not be so easily affected by work stressors such as job insecurity. A study by Bernhard-Oettel and colleagues (2008) found a similar effect among employees who involuntarily worked in temporary employment, where work involvement functioned as a buffer against the negative effects that involuntary temporary work was expected to have.

Several conclusions can be drawn from the results of this study. The relative contribution to the household income seems to be a vulnerability factor for men. Work centrality, on the other hand, was beneficial for women, since those reporting higher levels perceived less negative consequences compared to the women who reported lower levels of work centrality. Future research should investigate why work centrality can have these buffering effects. Moreover, it should be investigated if other mechanisms might lie behind the varying results for men and women regarding the two types of job dependence. Considering the dissimilarities in the moderating effects between the two types of job dependence, more research is needed to determine which types are more salient, in order to eventually establish a classification of how the dependence types affect job insecurity and its outcomes. These research efforts will help to clarify why certain dependence types act as buffering or
vulnerability factors in the context of job insecurity, which is information that could help organizations recognize which employees might be most likely to suffer from job insecurity.

Mediating Factors

In order to further address the second research aim as well as the research gap concerning the mechanisms of the job insecurity–outcome relationship, a potential mediating variable was investigated. Workload was tested as a potential mediating variable between job insecurity and a specific outcome.

Workload

The results of Study 3 showed that workload contributed to the explanation of what mechanism connected job insecurity to work–family conflict one year later, but only for men. For women, workload did not act as an intervening factor between job insecurity and work–family conflict, nor were there any bivariate relations between job insecurity and workload. The findings concerning workload as a mediator for men were in line with the present theoretical assumptions, suggesting that job insecurity perceptions cause employees to invest resources in their job in order to increase their security by showing their importance to the employer (cf. Bergman & Wigblad, 1999; cf. Staufenbiel & König, 2010). However, this increased investment in the work domain may at the same time increase the perceived workload and may result in fewer resources being available for investment in the non-work domain, which in turn might lead to employees experiencing an imbalance between the work and the family domains (Hobfoll, 1989). One explanation for the gender differences in the mediation results may be that job insecurity may have different outcomes for men and women or it may be that different intervening variables might be relevant for men and women. Another way to explain the results perhaps is to consider the differences in the gender role expectations of men and women. From the perspective of traditional gender roles, men are thought to be more vulnerable to job insecurity because they are assumed to have the role of family breadwinner which would constitute a reason for them to react more strongly to job insecurity than women (Lewis, 2001). This might explain why job insecurity was related to increased workload among the men and not the women and also why workload was not a mechanism among the women.

A conclusion that can be drawn from this study is that, among men, workload can act as an intervening factor between job insecurity and the perception of imbalance between the work and non-work domains. Future research should study the mediating role of workload further when investigating the relations between job insecurity and other outcomes. Future research should also investigate different kinds of mechanisms, especially organizational
factors, since they may reveal how job insecurity relates to work–family conflict and other outcomes. This is important in order to better understand how negative consequences develop and the first step in the development of intervention programs. For organizations, such programs might enable them to influence the degree to which employees suffer from the potential negative consequences of job insecurity, which could benefit both the employees and the organization. In order for an intervention program to succeed, it might first try to change the perceptions of job insecurity in general. However, if this is not successful, it might be possible to try to change intervening factors such as workload in order to decrease negative outcomes of job insecurity.

**Gender**

The aspect of gender was investigated in all three of the studies of this thesis in order to explore its role in the relation between job insecurity and its outcomes and the potential mechanisms of this relationship. In order to understand potential gender differences, the male breadwinner model (Lewis, 2001) as well as the multiple role model (Barnett & Hyde, 2001) have been used as two different theoretical frames of reference.

The association between job insecurity and work–family conflict was only found among men. Also, when investigating coping, men constituted the group that exhibited the most negative reactions to job insecurity when using emotion-focused coping. In addition to these results, the men reported more negative reactions to job insecurity when they were the primary contributors to the household income. Overall, it seems that the men were more negatively affected by job insecurity than the women, which is in line with the male breadwinner model, since it predicts that men will suffer more from job insecurity since their well-being is primarily dependent on their work role – and job insecurity constitutes a threat to that role (Gaunt & Benjamin, 2007). These results could be an indication that a male breadwinner mentality is still prevalent, despite increased gender equality, or, alternatively, that men might feel more pressure to successfully combine both the work and family roles since they place an importance on fulfilling both roles. In accordance with the multiple role model, where no differences in job insecurity experiences and the reaction to job insecurity would be expected, it was found that job insecurity was related to similar outcomes for both men and women, including turnover intention, job satisfaction, and well-being, which is also in line with previous research (Sverke et al., 2002).

Similar to previous research taking gender into consideration, contradicting results were found in this thesis as well. On the one hand, it seems that the men are more affected by job insecurity, as was found in the studies on job dependence and work–family conflict. On the other hand, it was also found in Study 1 that job insecurity was associated with more of the known
outcomes among women, such as decreased job satisfaction and increased turnover intention. This is not in line with either the male breadwinner model or the multiple role model. Moreover, it was found that work centrality was a buffering factor for women but not for men. One explanation for the findings regarding work centrality for women could be that women might perceive the work role in general to be more important than men do, which may be reflected by work centrality.

The national context could explain some of the unexpected findings, such as that job insecurity did not affect work–family conflict among women. Due to the shift that has taken place from men and women primarily holding only one role each (family or work role) to being part of a dual-earner society where each individual has to incorporate several roles, men might experience new challenges. Nowadays, men are expected to take on family responsibilities, which can lead to difficulties over being able to satisfactorily fulfill several roles (Nolan, 2009). If men perceive their job to be at risk, increased strain may arise when torn between knowing that spending more time at work would likely help secure their employment and feeling that they also need to put the time or efforts into maintaining their family responsibilities satisfactorily. Moreover, national context might have also had an influence on the findings regarding work centrality as a potential mediator. With their generally more egalitarian views on gender roles, the Nordic countries may be more conducive to women taking on the work role, which might explain the buffering effect of work centrality that was detected in this thesis.

In addition, the particular occupational group that was investigated may have influenced the results in this area. Since the educational sector is female dominated, male educators may perceive that their jobs are more threatened as they represent the minority group, resulting in more negative effects for men. Women might find stressors other than job insecurity to be more salient, since they, in part, experience different stressors than men. For example, women experience problems such as proving that they are as good as their male colleagues (Lundberg & Frankenhausener, 2000) and therefore their reaction to the uncertainty about their job might not be as strong.

It seems that a combination of the male breadwinner model and the multiple role model may best represent the situation of men and women in terms of their behavior and experiences in current working life. It should also be noted that it may not be the biological gender per se but rather the beliefs about how men and women are assumed to behave in certain situations which might affect how individuals actually behave. These beliefs can explain individual differences in the behavior of men and women (Gaunt & Benjamin, 2007; Hochschild, 1989). Even though some results are in line with the male breadwinner model, there are other findings that suggest that the male breadwinner model needs to be expanded towards the multiple role model and that the breadwinner role can be taken on by both men and women today. More knowledge is needed regarding gender in order to fully un-
nderstand its role in relation to job insecurity. For this reason, it should be explicitly tested which kind of a role perceptions men and women have with the aim of differentiating the biological sex from gender roles. For instance, masculinity and femininity are aspects that can be taken on by both men and women and this as well as the question of gender role ideology should be included in future studies.

Methodological Considerations

All of the studies in this thesis are based on questionnaire data, and the use of this method alone has been associated with a risk for inflated associations due to common method variance (Podsakoff, MacKenzi, Lee, & Podsakoff, 2003; Schwarz, Schwarz, & Rizzuto, 2008; Spector, 2006). Common method variance can partly be explained by transient or more stable mood states, which can affect how respondents view themselves as well as the world around them (Podsakoff et al., 2003). It has been suggested that one way to reduce this bias is by collecting data using a multi-trait, multi-method approach (Campbell & Fiske, 1959). However, this is not always possible, for example, in a study such as this which investigates job insecurity as a subjective phenomenon and relates it to attitudinal outcomes that only the individual can give information about (cf. Rindfleisch, Malter, Ganesan, & Moorman, 2008). In such cases, different methods of separation can be used to reduce the common method variance, such as a temporal separation when there is a time lag between different measurements, which was used in one of the studies in this thesis. Also, the use of proximal separation is a way to reduce potential bias, and to increase this type of separation in this thesis different sections of the questionnaire were dedicated to different constructs and were introduced by a short text to help employees transition from the previous section (Podsakoff et al., 2003). However, recent studies indicate that the effects of common method variance are not as great as suggested and that correlations based on the same method are fairly accurate estimations of the true-score relations (Conway & Lance, 2010, Lance, Dawson, Birklbach, & Hoffman, 2010). This suggests that the associations between the variables in the present thesis may be considered acceptable estimates.

Another potential limitation of the present thesis is that two of the three studies included are based on cross-sectional data. Since cross-sectional data only represents a snapshot of the current situation, causal inferences cannot be tested. One way to handle this lack of causal inference is to rely on theories about the chronological order and causal relationships between the studied variables. The predictor and outcome roles of the studied constructs are therefore based on theoretical assumptions in cross-sectional studies. Cross-sectional studies can be particularly useful when investigating research gaps and where associations need to be identified first before being tested more rigorously in longitudinal studies (Mann, 2003; Spector, 2006). As of yet
little is still known about the role of coping or job dependence as a vulnerability factor in relation to job security, and by using cross-sectional studies it has been possible to identify important relationships that should be tested further.

As causality implies a chronological order, with the predictors coming before the outcomes, it is also important to utilize an appropriate time frame. The development of the outcomes needs to be captured in order to study the effects of a predictor (Davis, 1985; Ettlie, 1977; Fleischman et al., 2008). Thus far there is little knowledge on the development of job insecurity and its consequences over time. It is not yet clear how long it takes for job insecurity to influence outcome variables such as work–family conflict. Usually a time lag of one year is chosen to keep seasonal influences constant (Kenny, 1975), which has been done in this thesis. Other options that have been used in the context of job insecurity include the sleeper model (Garst et al., 2000), in which there is a long incubation time of the consequences after the exposure to the stressor, as well as the short-term reaction model (Garst et al., 2000), with immediate consequences. If the time lag is too short or too long, the changes in the outcomes are not captured and false conclusions may be drawn from the results (James & James, 1989; Leventhal & Tomarken, 1987; Menard, 2002; Mitchell & James, 2001; Taris & Kompier, 2003). Future research on job insecurity needs to identify how job insecurity and its consequences develop in order to choose appropriate time lags. The use of shorter time lags as well as diary studies would be helpful for following the immediate development of job insecurity outcomes. This is especially important when investigating mediating effects, which are based on a causal chain of events and should be measured with three time waves to measure the predictor, the mediator, and the outcome at separate time points. However, as only two data waves were available with the variables included in Study 3, which investigated mediation, a modeling strategy suggested by Maxwell and Cole (2003) was applied. This strategy made it possible to model mediation with two data waves, which is preferable to just using cross-sectional data.

Regarding the external validity of the three studies, it has to be kept in mind that all of the samples are from Sweden, which would require that further research be conducted in order to investigate how generalizable these results are to other countries (Calder, Phillips, & Tybouit, 1982; King & He, 2005). Many countries with well-developed social security systems have been found to have a rather low tolerance for ambiguity, which might make job insecurity experiences more severe (König et al., 2011). The present results might be generalizable to at least other countries that have similar social security systems and tolerance for ambiguity.

Moreover, only two occupational groups (accountants and teachers) were investigated and the levels of job insecurity were rather low in the three studies. The employees were in general rather satisfied and healthy, and did not
experience high levels of job insecurity, but there were still variations between individuals, indicating that job insecurity was experienced even if there were no major external threats to the organization. In addition, the current results were in line with what previous research on job insecurity has found (Cheng & Chan, 2008; Sverke et al., 2002), making it plausible that the findings of the present thesis have some generalizability. Further research is needed to investigate how generalizable these results are to other occupations (Calder et al., 1982; King & He, 2005).

Concluding Remarks

Job insecurity is a stressor that more and more employees and organizations have to deal with today. For this reason, this thesis aimed at increasing our understanding of job insecurity and its relations with its consequences by investigating individual differences as well as factors that may mediate the effects of job insecurity.

The results of this thesis showed that job insecurity is related to work–family conflict, which can be considered a broader consequence. When investigating the directionality of the relationship, work–family conflict was found to be a short- as well as long-term consequence of job insecurity among men. This might be an indication that job insecurity may pose a threat to satisfactorily performing the non-work role, which should be further investigated in future studies.

In order to identify potential risk groups as well as identify intervening variables that linked the negative effects of job insecurity to subsequent consequences, coping, job dependence, and workload were studied to increase our knowledge in this area. The results of this thesis show that individual coping with job insecurity seems to be difficult and that the coping strategies that were studied did not help employees deal with job insecurity. On the contrary, the use of avoidance coping functioned as a vulnerability factor. Coping with job insecurity should be further investigated in order to help employees as well as organizations deal with this work stressor.

The background and situation of employees was also tested in order to identify groups that might suffer more from job insecurity. It was found that financial dependence on the job was important when considering job insecurity and its known outcomes. Male employees who contributed a major part of their household incomes were more vulnerable to the negative consequences of job insecurity and thus represented a risk group. Work centrality seemed to function as a buffering factor however, and the female employees did not respond so negatively to job insecurity as compared to the employees who did not perceive work to be important in their lives. Moreover, workload was found to be a link between the negative effects of job insecurity and work–family conflict.
Since previous gender research has produced inconclusive results in regard to job insecurity, it was considered in this thesis. Gender differences were found in all three studies, where men seemed to suffer more from job insecurity, according to the summarized results from all three studied. It is recommended that gender be considered in future studies in order to further investigate how and why it affects perceptions of job insecurity and its consequences.

Overall, this thesis has identified job dependence and coping as two important variables that can modify the relationships between job insecurity and its outcomes. Moreover, workload was found to be an intervening variable in the job insecurity context, and gender was found to be an important factor when investigating these more complex relations. All in all, these results indicate that there are important areas for future research to investigate; new moderators and mediating variables should be identified in order to be able to understand inter-individual differences as well as the underlying mechanisms of job insecurity. This can help organizations to understand and create a healthy work environment for their workforce when dealing with increased competition and uncertainty.
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