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Ting Cheng

Revisiting the Buffers of Job Insecurity

Investigating New Buffering Factors between Perceived Job Insecurity and Employee Outcomes

JYVÄSKYLÄN YLIOPISTO

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ABSTRACT

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The buffering effects of coping resources, both personal (i.e., emotional intelligence, optimism, and coping strategies) and contextual coping resources (i.e., job control, social support, and leader-member exchange), were investigated in the context of job insecurity in Finland and China. Also investigated were a broader range of employee reactions in the occupational (i.e., work engagement, vigor at work, emotional energy at work, job satisfaction, and organizational commitment) and family (i.e., emotional energy at home, marital satisfaction, and work-family enrichment) realms as well as overall well-being (i.e., psychosomatic complaints). In order to examine the immediate and prolonged effects of job insecurity on employees as well as the sustained buffering effects of coping resources in this relation, both cross-sectional and longitudinal designs were applied. This investigation was conducted during a period when Finland was experiencing an economic downturn and China was undergoing economic reform. Three major findings emerged. First, job insecurity exerted not only immediate but also persistent detrimental effects on employee outcomes in Finland and China. Second, both personal and contextual coping resources were found to directly relate to positive employee reactions. Third, both personal coping resources (except for optimism) and contextual coping resources buffered the adverse effects of job insecurity on various employee outcomes. Employee outcomes at work (i.e., vigor, emotional energy, and organizational commitment) were most likely to benefit from both personal and contextual coping resources in mitigating the negative effects of job insecurity, whereas overall and family well-being benefited only from personal coping resources (i.e., emotional intelligence and symptom reduction coping strategy). In brief, although job insecurity was a severe work stressor relating to negative employee outcomes, it could be attenuated with appropriate personal and contextual coping resources. In conclusion, the conceptualization and measurement of job insecurity merit further examination, and cultural differences should be taken into account in future job insecurity research. Greater attention should be paid to encouraging employees to be optimistic and adopt the engaged coping strategies, enhancing their ability to handle emotions, and providing them with more job control, social support, and a quality relationship with supervisors at work.

Keywords: job insecurity, personal coping resources, contextual coping resources, employee outcomes, buffering effects

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1 INTRODUCTION

1.1 Background

Due to intensified competition in the global economy, downsizing, restructuring, mergers, acquisitions, and updating technology have been implemented in order to ensure organizational competitiveness, maximize profits and reduce costs (Hartley, Jacobson, Klandermans, & van Vuuren, 1991). This trend to organizational change has affected the global workforce (Probst & Lawler, 2006). Feeling threatened by job loss (i.e., job insecurity perception) has become a widespread and permanent phenomenon (Burchell, 2002) not only in developed economies (e.g., Finland) but also developing economies (e.g., China). Because of its detrimental effects on employee well-being and organizational effectiveness, job insecurity has been considered one of the most prominent stressors in work and organizational psychology (De Cuyper, Bernhard-Oettel, Berntson, De Witte, & Alarco, 2008) and also labeled as one of the most urgent issues in contemporary working life (Fernández-Ballesteros, 2002). In fact, job insecurity seems likely to increase further in the future as a result of the effects of globalization (Gunter & van der Hoeven, 2004). In light of the various adverse effects of job insecurity (for reviews, see Cheng & Chan, 2008; Sverke, Hellgren, & Näswall, 2002), a primary issue is how to prevent and reduce its deleterious consequences. Thus, the purpose of my research was to investigate selected personal (i.e., emotional intelligence, personal coping strategies, and optimism) and contextual coping resources (i.e., leader-member exchange, social support, and job control) that could mitigate the negative effects of job insecurity on employee outcomes in Finland and China. Since these countries have, at least to some extent, recently experienced either an economic downturn or economic reform that has brought a considerable amount of uncertainty into the labor market, job security has become less stable (Greenhalgh & Rosenblatt, 2010). The personal coping resources and one of the contextual coping resources (i.e., leader-member exchange) studied here have rarely been investigated in the context of job insecurity. In addition, none of the previous studies has examined

the longitudinal buffering effects of social support and job control in the job insecurity-employee outcome relationship. With both cross-sectional and longitudinal designs, it was possible to examine the immediate and prolonged effects of job insecurity on employees as well as the sustained buffering effects of coping resources in this relation. Finally, my research aimed to shed more light on the various effects of job insecurity, as a work stressor, on employee outcomes at work, such as vigor, work engagement, and emotional energy at work, and its spillover effects on family well-being, such as marital satisfaction, work-family enrichment, and emotional energy at home, which have rarely been examined, and even less investigated longitudinally, in previous studies.

Finland has one of the most extensive welfare systems in the world, one which includes free education, paid maternity leave, unemployment insurance, social aid and so forth. However, during the past two decades, Finland has experienced several economic downturns; these have, to some extent, affected the fairly established welfare structures, resulting in stronger perceptions of job insecurity among individuals. For example, the collapse of the Soviet Union and associated cross-border trade, and adjustment to the new liberal order of international capital movements in Western Europe in the early 1990s led the Finnish economy into a recession, as evidenced by an unemployment rate of 18 percent and decrease in GDP of over 10 percent during a period of just three years (Hjerppe, 2008). In a comparative study across the OECD (Organization for Economic Co-operation and Development) countries, Finland was above the average in the prevalence of job insecurity (OECD, 1997). Hence, researchers in Finland have started to focus on the effects of job insecurity on employee well-being and organizational outcomes since the early 1990s (Kinnunen, Mauno, Nätti, & Happonen, 1999; Kinnunen & Nätti, 1994; Mauno & Kinnunen, 1999a, 1999b).

The late 1990s witnessed an economic boom in Finland as a result of innovations that made Finland one of the world's leading high technology sectors. However, in addition to relying on foreign natural resources and on supporting revenue sources from exports, entry into the European currency grid and joining the European Economic and Monetary Union all led the Finnish economy to be very sensitive to changes at the international level. During the global economy downturn in the early 2000s, the Finnish economy was also strongly impacted, as evidenced by a GDP growth rate of 0.7 percent (the lowest in the euro zone) in 2001 and a 9 percent unemployment rate (above the average in the euro zone) (Hjerppe, 2008). Again, due to the worldwide economic slowdown in 2008, Finland experienced a decline in GDP and also increase in the unemployment rate from 6.4 percent to 8.2 percent in 2009 (OECD, 2009). My investigation in Finland was conducted during this latest economic downturn, which provided a suitable environment to examine the effects of job insecurity on employee reactions.

Although the economic situation is different in China, perception of a threat of job loss is also a serious concern due to the fundamental economic reform started in the late 1970s. Prior to this period, the Chinese government ex-

ercised authority to allocate every urban resident of working age to a work unit with permanent employment. In addition to lifetime employment, other benefits such as housing, medical care, welfare for the family, and a retirement pension were all offered in this package (China Labor Bulletin, 2007). This lifetime employment policy is well-known in China as the "iron rice bowl". Since the initiation of market reforms in 1978, China has shifted from a centrally planned economy to a market-based one (The World Bank, 2012). This reform has led not only to a growing diversification of enterprises, but also various types of non-permanent employment. As a result of this economic reform, an increasing number of state-owned or collective enterprises were privatized, and more and more private companies and joint ventures have emerged in China. Hence, it has also brought about a fundamental change in the employment relationship for the Chinese workforce. The centrally planned economy with the "iron rice bowl" has been replaced by a market-oriented one (Huang, Niu, Lee, & Ashford, 2012). The degree of change is drastic -- from the beginning of the economic reforms carried out between 1980 and 1992, the Chinese government has gradually abandoned its control of job allocation from 76 percent to 52 percent of the job market, and from 1992 to the present, has abandoned its responsibility to ensure full employment, allowing greater freedom in the labor market. As a consequence, the unemployment rate started to increase significantly from the end of the 1990s. Permanent employment is no longer guaranteed and more and more temporary or fixed-term employment contracts have been adopted by organizations. However, concern about the negative consequences of job insecurity has remained largely unexplored in the context of China, the majority of job insecurity research being conducted in a Western setting. Hence, my study in China was conducted during the implementation of this economic reform, which offered a relevant context to explore job insecurity and its effects on employees.

A multitude of previous empirical studies have shown that as a work stressor, job insecurity is associated with negative employee outcomes such as impaired mental health, decreased job satisfaction, organizational commitment, work involvement, and increased turnover intentions (e.g., Ashford, Lee, & Bobko, 1989; Kinnunen & Nätti, 1994; Mauno & Kinnunen, 1999a; for reviews, see Cheng & Chan, 2008; Sverke et al., 2002). Due to the interaction between work and family life, job insecurity may also affect family-related well-being. Few empirical studies have shown that the negative effects of job insecurity can spillover into the family domain (see e.g., Barling & MacEwen, 1992; Hughes & Galinsky, 1994; Mauno & Kinnunen, 1999a; Richter, Näswall, & Sverke, 2010). Thus, one purpose of my research was to gain further insights into the negative effects of job insecurity on family-related well-being as well as expand our understanding of its effects on broader work-related outcomes and overall well-being in both Finland and China.

Considering that job insecurity has harmful effects on employee well-being, it is vital to consider what coping resources might directly help attenuate job insecurity or indirectly mitigate, that is, buffer, its negative effects. Various

personal coping resources, e.g., personality characteristics, and contextual coping resources, e.g., social support, leader-member exchange, may play a crucial buffering role in this respect. So far, the majority of job insecurity studies have focused only on direct effects of job insecurity (see Sverke, Hellgren, & Näswall, 2006), while potential indirect, e.g., moderator, relationships have remained largely underexplored. However, meta-analyses have shown that the considerable variation in the strength of the relations between job insecurity and different employee outcomes (Cheng & Chan, 2008; Sverke et al., 2002). Accordingly, more attention should be paid to identifying the factors that may explain these variations. Identifying potential moderating factors in the relation between job insecurity and its outcomes could shed more light on the underlying mechanisms of job insecurity and also lay a foundation for developing effective interventions for individuals with high level of job insecurity. Hence, the main purpose of my research was to examine the buffering role of personal (i.e., optimism, emotional intelligence, and coping strategies) and contextual coping resources (i.e., job control, social support, and leader-member exchange) in the job insecurity-employee outcome relationship.

Since the majority of previous studies have utilized a cross-sectional design in studying job insecurity, the question of whether job insecurity is a chronic or prolonged stressor, having long-lasting effects on employee outcomes remains open. It is also possible that due to the cross-sectional design in prior studies, the effects of job insecurity on well-being have been overestimated. Only few longitudinal studies have shown that job insecurity could have negative long-term effects on employee outcomes at work and overall well-being (e.g., Dekker & Schaufeli, 1995; Heaney, Israel, & House, 1994; Hellgren & Sverke, 2003; Hellgren, Sverke, & Isaksson, 1999; Mäkikangas & Kinnunen, 2003; Nelson, Copper, & Jackson, 1995; Richter et al., 2010). It should also be noted that earlier studies focusing on the effect of job insecurity on family well-being have rarely adopted longitudinal design (i.e., Ritcher et al., 2010). Thus, two-wave and three-wave longitudinal designs were applied in my research to gain further insight into the long-term effects of job insecurity as well as long-lasting buffering effects of coping resources on a variety of employee reactions. The general research model is illustrated below (see Figure 1).

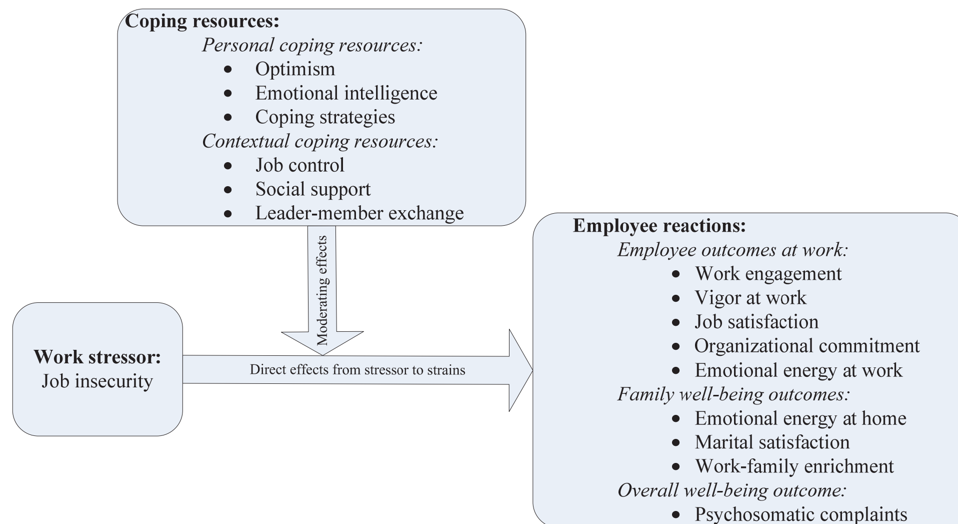

FIGURE 1 General research model

1.2 Two approaches to the concept of job insecurity

In psychology, job insecurity has been conceptualized from both global and multidimensional perspectives. Most commonly, researchers have defined and operationalized job insecurity from the *global* point of view, highlighting perceptions of the threat of job loss or the existence of current employment. For example, job insecurity has been defined as "the subjectively experienced anticipation of a fundamental and involuntary event related to job loss" (Sverke et al., 2002, p. 243), "the concern about the future permanence of the job" (van Vuuren & Klandermans, 1990, p. 133), "a discrepancy between the level of security a person experiences and the level she or he might prefer" (Hartley et al., 1991, p. 7), or "the expectations about continuity in a job situation" (Davy, Kinicki, & Scheck, 1997, p. 133). From a global perspective, job insecurity has been measured, for example, "How do you assess the probability of losing your job in the near future" (Mohr, 2000), "How large, in your opinion, is the probability that you will become unemployed in the near future" (De Witte, 1999), "How certain are you about what your future career picture looks like" (Caplan, Cobb, French, Van Harrison, & Pinneau, 1975), "To what extent in your opinion are you likely to lose your job in the near future" (Jacobson, 1991), or "I feel insecure about the future of my job" (De Witte, 2000).

In contrast, other researchers who have approached job insecurity from a *multidimensional* point of view have argued that job insecurity resides in the severity of the changes (i.e. the importance and the probability of losing a dimension of the total job or a job feature) and an employee's relative inability to con-

trol threats related to his/her job (Ashford et al., 1989; Greenhalgh & Rosenblatt, 1984; Kinnunen, Feldt, & Mauno, 2003). They have pointed out that not only the threat of unemployment but also the loss of certain valued dimensions of employment, such as the loss of promotion opportunity, salary increase, important job features, may also result in job insecurity. Accordingly, job insecurity was defined as the "perceived powerlessness to maintain desired continuity in a threatened job situation" (Greenhalgh & Rosenblatt, 1984). This definition emphasized that the overall concern about the likelihood of continuation of the current employment and the individual interpretation of the importance of certain job features and current employment as well as the perceived powerlessness to handle the threat of employment loss could be the determinants of job insecurity. From a multidimensional perspective, job insecurity has been measured, for example, by items such as "How likely is it that you will lose your job and be moved to another job at the same level within the organization", "I have enough power in this organization to control events that might affect my job", "How important to you personally is the possibility that you may be moved to a different job at a higher position in another geographic location", and "I have enough power in this organization to control events that might affect my job" (Ashford et al., 1989).

The common basis of these definitions, whether conceptualized from global or multidimensional perspectives, is that job insecurity is a *subjective* phenomenon, the individual's perception of the threat of job loss or a certain component of valued job features. In addition, *uncertainty* is inherent in job insecurity. Individuals perceive job insecurity when they are not sure about the financial situation of their organizations, about what might happen to their current job, or about what can they do to minimize the extent of the threat of job loss. Hence, uncertainty prevents people from utilizing active or effective coping efforts to combat a stressful situation. Its *involuntary* nature is another common feature of job insecurity. Perceiving the threat of job loss or the loss of valued job feature reflects a fundamental and involuntary change in the belief of employees that their future employment in current organizations is safe to a belief that this is no longer the case. It is suggested that job insecurity represents the extent of a discrepancy between the level of security individuals prefer and the level they experience (De Witte, 2005; De Witte, De Cuyper, Vander Elst, Vanbelle, & Niesen, 2012; Hartley et al., 1991; Sverke & Hellgren, 2002). The broader this discrepancy, the more serious the impact of job insecurity is. In another words, it is the environment, not personal choice, that enforces the change in the level of job security on individuals. Accordingly, job insecurity can be considered as a work stressor which may result in various negative consequences on employee outcomes, i.e., impaired well-being, attitudes and behaviors (Sverke et al., 2002). Thus, in my research, both global (Studies I and II) and multidimensional (Study III) approaches were employed to conceptualize and measure job insecurity. On the one hand, job insecurity is viewed as perceived uncertainty about the continuation of the current job. On the other hand,

from a broader perspective, job insecurity may result from the subjective anticipation of involuntary termination of one's job or part of important job features.

1.3 Theoretical framework

In my research, the *conservation of resources theory* (Hobfoll, 1989, 2001) was employed to justify how job insecurity exerts its negative effects on employee outcomes and whether personal and contextual coping resources could moderate the job insecurity-employee outcome relationship. The *spillover theory* (Leiter & Durup, 1996; Zedeck & Mosier, 1990), in turn, provided more specific explanations why the experiences of work stressors, here job insecurity, could carry over into the family domain. These two theories provided the theoretical grounds for investigating the underlying mechanism in the relation between job insecurity and its consequences.

1.3.1 The conservation of resources theory and spillover theory

The conservation of resources theory (Hobfoll, 1989, 2001) will be reviewed from two aspects. First, the general stress model proposed by the conservation of resources theory is presented. Second, the conservation of resources theory is applied in the context of job insecurity to see how it would explain the stressor-strain relationship in the given context. The basic assumption of the conservation of resources theory is that strain reactions can occur when individuals experience actual resource loss, a lack of subsequent resource gain after resource investment, or a threat of resource loss. Under any of these circumstances, individuals would tend to retain, protect and build resources that they value (Hobfoll, 1989). According to the conservation of resources theory (Hobfoll, 1989, 2002; Hobfoll & Shirom, 2001), resources refer to physical objects (e.g., housing), energy (e.g., knowledge), personal resources (e.g., optimism), and conditions (e.g., employment).

First, object resources are housing, clothing, and other physical property. These resources are important for individuals because of their physical nature or because of their symbolic meaning, such as their status value. For example, while basic clothing can keep people warm, fancy clothing has added value as an indicator of level of socioeconomic status. Second, energies, such as money, time, and knowledge, are important resources because they help individuals to obtain other resources. For example, when individuals are looking for job, knowing what organization has a vacancy, whether one's background matches the requirement for the position, and what the standard interview procedure is, are all critical for a successful outcome. Third, personality resources refer to personal traits/characteristics of individuals. The conservation of resources theory emphasizes that personality resources have a general tendency to enable better coping processes. For example, a positive orientation towards the world (i.e., optimism) (Scheier & Carver, 1985) guides individuals to believe that

events happen in a predictable manner and they can handle the situation under certain control (Mäkikangas, 2007). Fourth, condition resources refer to certain statuses that individuals have, such as marriage, employment, tenure, seniority, personal relationship, parenthood, and socioeconomic status. Condition resources and their quality are both important. For example, a quality relationship with one's supervisors (i.e., leader-member exchange) could facilitate improved work performance, enhance the possibility of promotion, or through good references, make it easier to find another job. In some situations, condition resources could aid stress resistance.

Based on the conservation of resources theory (Hobfoll, 1989), whether individuals feel stressful or enjoy good quality of life depends on their perception or appraisal of the loss or gain of these four kinds of resources. When they are not faced with stressors, individuals strive to develop resource surpluses for the purpose of offsetting the possibility of future resource loss. In contrast, while people are confronted with stressors (i.e., the threat of resource loss or real loss), they make efforts to maintain and protect their resources to minimize the net loss and prevent future resource loss. They make use of the resources that are available to them or that they possess to offset (or to cope with) net resource loss. When resource loss occurs, resource replacement can be done in either a direct or symbolic manner. For example, finding another job after losing a job is a direct resource replacement or compensation.

On the other hand, we need consider that employing resources for coping is also stressful. In general, *coping* refers to the attempt to manage the demands resulting from situations (e.g., the threat of job loss) that are appraised as taxing or exceeding an individual's resources (Lazarus & Folkman, 1984; Taylor & Stanton, 2007). Coping itself expends resources and if the resource spending in the coping process outstrips the resource gains, this implies that coping is not successful and may result in more negative consequences. Different individuals may adopt different coping resources to counteract stressors. *Coping resources* refer to a variety of cognitive and psychological resources, that individuals utilize to cope with stressors and to keep their life manageable (Kobasa, 1979; Mauno & Rantanen, 2013; Wheaton, 1983). Such resources comprise personal (e.g., personality characteristics) and contextual coping resources (e.g., social support, job control) (Billings & Moos, 1981; House, 1981; Mauno & Rantanen, 2013; Taylor & Stanton, 2007; Wheaton, 1983). For instance, in order to handle resource loss, individuals may shift their focus of attention away from the stressful situation. They might focus on what they could gain, instead of what they could lose. They may also reinterpret the meaning of resource loss as a challenge instead of a threat of more resource loss. In addition, individuals could reevaluate the importance (values) of resources that have been threatened or that have been lost. Simply altering one's interpretation of the events and their consequences can sometimes help counteract the stressor or endure the stress. Individuals tend to use these trait-like personal coping strategies in different stressful situations, including job insecurity. They may also seek contextual coping resources, such as social support from supervisors or colleagues, to

enhance their ability to deal with stressors. However, loss spirals may happen for individuals who experience resource loss but lack the resources required to offset that loss. These individuals are the most vulnerable to experience further or additional losses, because they lack the additional resources needed to offset resource loss. In this situation, individuals are more likely to adopt inappropriate forms of coping such as avoidance coping strategy (i.e., diverting attention from actively addressing the stressful situations).

I now turn to the case of job insecurity and consider how the conservation of resources theory (Hobfoll, 1989) can be applied to explain stress reactions and what kinds of coping resources might be able to facilitate stress resistance. According to the conservation of resources theory (Hobfoll, 1989), employment is a kind of condition resource which is highly valued by the majority of people. Thus, once there is a threat of job loss or loss of important job features (i.e., job insecurity), individuals would strive to maintain and protect this resource to minimize net loss. They may employ coping resources to combat the potential resource loss (i.e., being unemployed, experiencing other negative changes in job conditions). For example, in order to keep their present job, employees may devote more effort, work extra hours, and expend more energy to achieve maximal work performance to impress their employers. However, if these extra efforts consistently draw more energy from individuals than can be replenished, the outcome could be impaired somatic or psychological well-being. On the other hand, once they notice that they have no hope of keeping their current position no matter how much effort they expend on trying to keep it, or lack a clear view of their possible future employment and career development, employees will be disposed to withdraw from the current job that is making further demands on their resources (because coping also uses up resources), that is, invest less energy or make less effort. In order to develop resources to keep the employment resource, employees, especially highly competent ones, may consider job opportunities in other organizations (Sverke, Hellgren, Näswall, Chirumbolo, De Witte, & Goslinga 2004). All these phenomena imply that the experience of job insecurity tends to lead to a decrease in organizational commitment, in the emotional energy expended at work, and in engagement with the current position.

Furthermore, the threat of loss of employment or valued job features may also impact family-related well-being. Because the work and family domains are highly interdependent, positive or negative experiences in one domain (e.g., work) may have an impact on experiences in the other domain (e.g., family). This phenomenon is refered to as a *spillover* process (Leiter & Durup, 1996; Zedeck & Mosier, 1990). More specifically, according to spillover theory, the physical and emotional demands induced by the stress in the work and family domains can exceed the coping resources available the individual. Thus, strain or impaired well-being in one domain may also be experienced in the other domain (Zedeck & Mosier, 1990). Based on this reasoning, after substantial downsizing or lay-offs, both workload and working hours tend to increase because there are fewer remaining employees left to accomplish the same amount

of work (Sverke et al., 2002). Under this circumstance, employees need more time to recover once they get home. In addition, individuals may not feel energetic enough to interact with their family members and may have less energy to do household work. Along with this, worry about losing their job and their responsibility to fulfill their role as a parent and/or spouse may result in impaired marital and family outcomes, such as marital dissatisfaction (e.g., Larson, Wilson & Beley, 1994; Mauno & Kinnunen, 1999a; Voydanoff & Donnelly, 1988) and reduced *work-family enrichment* (i.e., the extent to which experiences in one role improve the quality of life in the other role, Greenhaus & Powell, 2006). In a word, the perceived threat of job loss or job feature loss is inherently stressful for employees.

However, when facing a situation threatening one of their resources or experiencing an actual resource loss, people are not solely helpless. Hobfoll (1989) argued that personal coping resources (i.e., personality characteristics) and contextual coping resources (i.e., social support) could have a stress resistance effect. The term *personal (or dispositional) coping resources* refers to personality (trait-like) resources, which individuals have a tendency to use across different contexts and which have been developed over the life course, and are therefore likely to be different across individuals. In contrast, *contextual coping resources* reside in and are derived from diverse contexts (e.g., work, family), and thus depend on the environment that individuals experience (Billings & Moos, 1981; Kobasa, 1979; Mauno & Rantanen, 2013; Taylor & Stanton, 2007; Wheaton, 1983). In another words, such resources have the potential to buffer (i.e., reduce) the loss effect of other resources. *Buffers* are factors that tend to alleviate the negative effects of stressors, in the present case job insecurity, on employee outcomes (Cohen & Edwards, 1989; Ingledew, Hardy, & Cooper, 1997). For example, viewing events as predictable and occurring under personal control, or having a strong ability to handle emotions may facilitate stress resistance. When confronted with job insecurity, individuals could appraise this stressor in a more positive way or react to it less emotionally. Moreover, in the presence of job insecurity (i.e., the threat of employment resource loss), individuals could employ other resources to help them cope. They may reinterpret the stressful situation as a challenge instead of threat, reassess the value of their current jobs, or directly change the situation by seeking other employment opportunities. However, a loss spiral may occur if individuals do not have resources to cope with job insecurity. Under this circumstance, individuals tend to use avoidance coping, which is most likely to be ineffective in stressful situations (Connor-Smith & Flachsbart, 2007; Penley, Tomaka, & Wiebe, 2002).

In addition to personal coping resources, contextual coping resources could be beneficial buffers, too. For example, a quality relationship with leaders and social support from supervisors could be resources for individuals to combat stress, as the support from supervisors could contribute to the maintenance of strong resource reservoirs (Hobfoll, 1989, 2001). When individual have quality relationships with their supervisors, this support could provide or facilitate the preservation of valued resource, as it provides for situational needs, and

promotes the view that one can master, or at least see through, stressful circumstances (Hobfoll, 1989). More specifically, on experiencing job insecurity, individuals with quality relationships with leaders may be able to receive updated information about the future development of the organization, and therefore, to some extent, gain certainty about whether they are likely to keep their current positions. Moreover, if they have authority to decide who can keep their positions in the organization, supervisors prefer to retain employees with whom they have good relationships. In addition, once a resource loss occurs, quality relationships with leaders could help to prevent further resource loss and contribute to replenishing the resource pool. For instance, despite being laid-off, employees with quality relationships with their supervisors may get better references, which in turn will help them to find new jobs in other organizations.

Moreover, having support from colleagues and the perception of having control over one's job could also help to attenuate the negative effects of job insecurity. For example, support from coworkers can help individuals to complete their work on time, reduce the impact of work overload on strain, and eventually achieve work goals and maintain a good quality of life (van der Doef & Maes, 1999). Job control shows beneficial effects because having autonomy over one's work allows individuals to minimize their exposure to work stressors, provides them with more opportunities to cope with stressful situations, and enables them to employ more active coping strategies (see Jenkins, 1991; Karasek, 1998).

Based on the above theoretical reasoning, I argue that both personal coping resources (i.e., emotional intelligence, optimism, and personal coping strategies) and contextual coping resources (i.e., social support from supervisors and colleagues, leader-member exchange, and job control) buffer the deleterious effects of job insecurity on employee outcomes. These resources may counteract loss or aid resource gain or net increase of resources.

1.4 Job insecurity in the stressor-employee outcome relationship

1.4.1 Job insecurity and employee reactions

A growing body of studies has indicated that job insecurity can have negative effects on employee reactions. Researchers emphasized that *employee reactions* refer to the consequences/ outcomes of the stressor, here job insecurity, for psychological well-being, behaviors, and attitudes (De Witte, 1999; Klandermans, Van Vuuren, & Jacobson, 1991; Sverke et al., 2006, 2002; Van Vuuren, 1990). *Well-being* has been defined as a general and cognitive judgment of what individuals experience in their lives in a mostly positive manner as well as their affective reactions (Dagenais-Desmarais & Savoie, 2012; Diener, 1984; Diener, Suh, Lucas, & Smith, 1999). Here I specifically focused on overall (i.e., psychosomatic complaints), work (i.e., work engagement, vigor at work, and emotional energy at work), and family (i.e., marital satisfaction, work-family enrich-

ment, and emotional energy at home) well-being as well as work attitudes (i.e., job satisfaction and organizational commitment). Two recent meta-analyses have shown that the perceived threat of total job loss resulted in decreased job satisfaction, organizational commitment, and psychosomatic complaints (e.g., Ashford et al., 1989; Kinnunen & Nätti, 1994; Mauno & Kinnunen, 1999a; for meta-analyses, see Cheng & Chan, 2008; Sverke et al., 2002). The conservation of resources theory (Hobfoll, 1989) also indicated that feeling threatened by potential employment resource loss could, due to their uncertainty about the future, induce employees to invest less energy and devote less effort in their current job to prevent further resource losses. In the meantime, individuals may also start a job search during their working time instead of concentrating on the present job (König, Debus, Hausler, Lendenmann, & Kleinmann, 2010). These coping behaviors imply that job-insecure employees become less engaged in the current position (*work engagement*, referring to 'a positive, fulfilling work-related state of mind characterized by three related dimensions: vigor, dedication and absorption'; see Mauno, Kinnunen, Mäkikangas & Feldt, 2010; Schaufeli & Bakker, 2010; Schaufeli, Salanova, Gonzalez-Romá, & Bakker, 2002) or have less *vigor at work* (i.e., a key component of work engagement, referring to 'energy and mental resilience at work and the willingness to invest high effort in one's work'; see e.g., Kinnunen, Mauno, & Siltaloppi, 2010; Mauno et al., 2010), and tend to have less *emotional energy at work* (i.e., a component of vigor, referring to the positive feeling of emotional energy and affective responses to one's ongoing interactions with significant elements in one's work environment; see Shirom, 2003).

Due to the strong connection between work and family life, it is possible that job insecurity may also affect family-related well-being (Barling, 1990; Staines, 1980; Zedeck & Mosier, 1990). There is limited empirical evidence to show that the negative effects of job insecurity could affect the experiences in the family domain such as increased marital tension (Hughes & Galinsky, 1994) and work-family conflict (Batt & Valcour, 2003; Richter et al., 2010; Wilson, Larson, & Stone, 1993), poorer family interactions (Barling & MacEwen, 1992; Hughes & Galinsky, 1994; Mauno & Kinnunen, 1999a) and decreased marital and family satisfaction (Larson et al., 1994). However, these spillover effects of job insecurity have not received sufficient attention so far. Accordingly, one purpose of my research was to shed more light on the negative consequences of job insecurity for marital and family well-being such as marital satisfaction, emotional energy at home, and work-family enrichment, which I investigated as family-related outcomes (Study I and Study II).

There is also some evidence for the long-term negative effects of job insecurity on employee outcomes. For example, in a follow-up study, chronic job insecurity, defined as the persistent perception of a high level of threat of job loss, was associated with lower job satisfaction and increased physical symptoms (Heaney et al., 1994). Other studies have also shown that the long-term negative effects of job insecurity are positively related to job dissatisfaction (Ferrie, Shipley, Marmot, Stansfeld, & Davey-Smith, 1998; Mäkikangas & Kin-

nunen, 2003) and that prolonged job insecurity is associated with somatic health (Ferrie et al., 1998; Hellgren & Sverke, 2003). In a follow-up over about eight years, acute job insecurity, as compared to other work stressors, deteriorated mental health in terms of increased psychosomatic complaints and anxiety (Mohr, 2000). In addition, two longitudinal studies have indicated that the prolonged (lasting about either two months or six months) job insecurity was associated with increased turnover intention (Dekker & Schaufeli, 1995; Stiglbauer et al., 2012) which implied impaired organizational commitment.

In contrast, previous studies on job insecurity have rarely explored its chronic, long-term effects on family well-being. For example, job insecurity was positively related to subsequent negative work spillover into parenthood among females in a one-year follow-up study (Mauno & Kinnunen, 1999b). In another two-wave study, perceived job insecurity was significantly related to work-family conflict among males (Richter et al., 2010). Taken together, job insecurity could be a chronic work stressor and exert long-lasting negative effects on employee outcomes. Thus, a longitudinal design was adopted in my research (Study II and Study III).

1.4.2 Coping resources in the context of job insecurity

Compared to the main effects discussed above, limited attention has been paid to the moderator effects between job insecurity and employee reactions. A moderator is a qualitative (e.g., gender, race) or quantitative (e.g., level of social support, degree of job control) variable that influences the direction and/or strength of the relation between an independent/predictor variable and a dependent/criterion variable (Baron & Kenny, 1986). In another words, the effects of an independent variable on a dependent variable vary according to the level of a third variable, that is, a moderating variable (Edwards & Lambert, 2007), which could either strengthen or weaken the strength of the relation between an independent variable and a dependent variable, or even change the direction of this relation. When a moderating variable acts to reduce the negative effects of stressors, here job insecurity, on employee outcomes, it is typically known as a (stress) *buffer* (Cohen & Edwards, 1989; Ingledew et al., 1997).

In my research, I specifically focus on the buffering effects of personal and contextual coping resources in the relation between job insecurity and employee outcomes. Hence, the earlier buffering studies are summarized in Tables 1 (personal coping resources as buffers) and 2 (contextual coping resources as buffers). As can be seen in Tables 1 and 2, more studies have focused on contextual coping resources, such as social support (Bussing, 1999; Dekker & Schaufeli, 1995; Kinnunen & Nätti, 1994; Lim, 1996, 1997; Mohr, 2000; Mak & Mueller, 2000; Schreurs, van Emmerik, Guenter, & Germeys, 2012), job control (Armstrong-Stassen, 1994; Barling & Kelloway, 1996; Brockner, Grover, Reed, & Dewitt, 1992; Brockner, Spreitzer, Mishra, Hochwarter, Pepper, & Weinberg, 2004; Probst, 2005; Roskies, Louis-Guerin, & Fournier, 1993; Schreurs, Van Emmerik, Notelaers, & De Witte, 2010), employability (Berntson, Näswall, & Sverke, 2010; Kalyal, Berntson, Baraldi, Näswall, & Sverke, 2010; Silla, De

Cuyper, Gracia, Peiro´, & De Witte, 2009), job involvement (Preuss, 2002; Probst, 2000; Stiglbauer et al., 2012), justice (Cheng, Huang, Li, & Hsu, 2011; Kausto, Elo, Lipponen, & Elovainio, 2005; Sora, Caballer, Peiro, Silla, & Gracia, 2010; Wong, Wong, Ngo, & Lui, 2003), flexibility (Otto, Hoffmann-Biencourt, & Mohr, 2010), communication (König, Debus, Hausler, Lendnmann, & Kleinmann, 2010; Vander Elst, De Cuyper, & De Witte, 2010), country-level social safety net (Debus, Probst, König, & Kleinmann, 2012), employment dependence (Ito & Brotheridge, 2007), and organizational cynicism (Brandes et al., 2008). However, fewer studies have investigated the moderating role of personal coping resources such as coping strategies (Armstrong-Stassen, 1994; Mak & Mueller, 2000; Mantler, Matejicek, Matheson, & Anisman, 2005), positive/ negative affectivity (Mak & Mueller, 2000; Näswall, Sverke, & Hellgren, 2005; Roskies et al., 1993), self-efficacy (Schreurs et al., 2010), optimism (Mäkikangas & Kinnunen, 2003), self-esteem (Hui & Lee, 2000; Orpen, 1994), recovery experiences (Kinnunen et al., 2010), need for closure (Chirumbolo & Areni, 2010), job security expectation (Bernhard-Oettel, De Cuyper, Schreurs, & De Witte, 2011), locus of control (Näswall et al., 2005), and cultural values (Probst & Lawler, 2006).

In addition, it should be noted that among these studies, few have adopted a longitudinal design (Brockner et al., 2004; Dekker & Schaufeli, 1995; Mäkikangas & Kinnunen, 2003; Mohr, 2000; Schreurs et al., 2012). It was only found that job control had lagged buffering effects on job performance (Brockner et al., 2004) and well-being (Schreurs et al., 2012). Social support also showed prospective buffering effects on mental health in one study (Mohr, 2000). The remaining studies have failed to identify buffering effects of the coping resources studied (Dekker & Schaufeli, 1995; Mäkikangas & Kinnunen, 2003). Hence, this leaves open the question of whether these coping resources could have persistent buffering effects against job insecurity, and so protect an even broader range of employee outcomes. Thus, my investigation utilized both cross-sectional and longitudinal designs to explore the immediate and long-lasting buffering role of personal and contextual coping resources against job insecurity on employee outcomes at work as well as overall and family well-being (Figure 1, p. 17). Next, I review the earlier studies on the above-described buffering effects in more detail, focusing specifically on the personal and contextual coping resources that I studied.

TABLE 1 Summary of studies on personal coping resources in the job insecurity-employee outcome relationship

Authors (Year)	Participants and study design	Independent variables	Moderators	Dependent variables	Major analysis method	Main results regarding moderator effects
Armstrong-Stassen, 1994	200 U.S. employees in a cross-sectional survey study	Perceived threat of job loss and powerlessness	Control and escape coping	Organizational commitment, turnover intention, and job performance	Multiple moderated regression analysis	Employees who used control coping reported higher job performance and lower turnover intentions. However, escape coping counter-buffered against the negative effect of the threat of job loss on these two outcomes.
Bernhard-Oettel et al., 2011	559 Belgian employees in a cross-sectional questionnaire study	Job insecurity	Job security expectation	Well-being (i.e., job satisfaction and general health) and organizational attitudes (i.e., organizational commitment and turnover intention); perception of fairness as both mediator and outcome in the moderating process	Hierarchical regression analysis in mediated moderation model	Job security expectation counter-buffered against the negative effects of job insecurity on attitude outcomes (i.e., organizational commitment and turnover intention) and fairness perception, but had no effect on well-being outcomes.
Chirumbolo & Areni, 2010	287 Italian employees in a cross-sectional questionnaire study	Job insecurity (quantitative and qualitative)	Need for closure	Job performance and mental health	Hierarchical moderated regression analysis	The need for closure buffered against the negative effects of quantitative job insecurity on job performance and mental health. However, the need for closure impaired job performance and mental health in the context of high qualitative job insecurity.
Hui & Lee, 2000	378 employees in a cross-sectional survey study	Job insecurity and anticipated organizational change	Organization-based self-esteem	Intrinsic motivation, organizational commitment, and absenteeism	Hierarchical moderated regression analysis	Organization-based self-esteem buffered against the negative effects of job insecurity on intrinsic motivation and absenteeism.

Kinnunen et al., 2010	527 Finnish employees in a cross-sectional survey study	Job insecurity	Recovery experience(i.e., psychological detachment, relaxation, mastery, and control during off-work time)	Job exhaustion, vigor at work, and need for recovery	Moderated regression analysis	Relaxation buffered against increased need for recovery from work in higher job-insecure situation. Control at leisure time did not buffer against the increased need for recovery in the presence of high job insecurity. Psychological attachment exaggerated the negative effects of job insecurity on vigor at work.
Mäkikangas & Kinnunen, 2003	457 Finnish employees in a longitudinal survey study	Job insecurity, time pressures at work, lack of control, and poor organizational climate	Optimism and self-esteem	Job satisfaction, emotional exhaustion, mental distress, and physical symptoms	Hierarchical moderated regression analysis	Job insecurity had a positive main effect on levels of mental distress among high optimism but not for low optimism females. In other words, the negative effect of job insecurity on mental well-being was more detrimental for high levels of optimistic female employees than low-level ones.
Mantler et al., 2005	140 employed and 206 unemployed Canadian workers in a cross-sectional survey study	Employment uncertainty (rated by the employed and unemployed individuals)	Coping strategies (i.e., problem solving, emotional expression, and emotional avoidance)	Stress	Multiple moderated regression analysis	The more emotional avoidance was used by employees, the more stress they reported when perceiving high employment uncertainty.
Näswall et al., 2005	400 Swedish employees in a cross-sectional survey study	Job insecurity	Negative/ positive affectivity and external locus of control	Mental health complaints, job dissatisfaction, and job-induced tension	Hierarchical moderated regression analysis	Individuals with a greater level of external locus of control reported more mental health complaints in the presence of a high level of job insecurity than those with a low level of external locus of control.
Orpen, 1994	129 Australian employees in a cross-sectional survey study	Job insecurity	Self-esteem and internal locus of control	Psychological well-being	Hierarchical regression analysis	Self-esteem and internal locus of control buffered against the negative effects of job insecurity on psychological well-being.

Probst & Lawler, 2006	Study 1: 141 U. S. employees; Study 2: 633 employees from China and 457 participants from U.S. Two cross-sectional questionnaire studies.	Job insecurity (measured by job security)	Study 1: Cultural values (collectivism VS. individualism). In Study 2, cultural values were measured by the country of origin (China VS. U.S.).	Study 1: Job satisfaction, negative affective reactions, and job stress. Study 2: Job satisfaction, turnover intentions, and work withdrawal.	Multiple moderated regression analysis; multivariate multiple regression analysis; univariate analysis	STUDY 1: Employees with collectivist cultural values tended to have lower job satisfaction, reported more job stress, and reacted more negatively to perceived job insecurity than those with individualist cultural values. STUDY 2: Chinese (i.e., collectivist) employees reacted more negatively to job insecurity than their US (i.e., individualist) counterparts. Chinese employees tended to have less job satisfaction, a higher tendency to turnover and withdrawal from work than their US counterparts in the presence of a high level of job insecurity.

Notes: The studies are presented in alphabetic order.

TABLE 2 Summary of studies on contextual coping resources in the job insecurity-employee outcome relationship

Authors (Year)	Participants and study design	Independent variables	Moderators	Dependent variables	Major analysis method	Main results regarding moderator effects
Barling & Kelloway, 1996	187 South African gold miners in a cross-sectional survey study	Job insecurity	Workplace control perception	Individual outcomes (i.e., blood pressure, health problems, and negative mood) and organizational outcomes (i.e., turnover intentions and organizational commitment)	Hierarchical moderated regression analysis	Control perception buffered against the negative effects of job insecurity on blood pressure and psychosomatic symptoms, but not negative mood, turnover intentions, or organizational commitment.
Berntson et al., 2010	725 Swedish white-collar employees in a cross-sectional questionnaire study	Job insecurity	Employability	Exit, voice, loyalty, and neglect	Hierarchical moderated regression analysis	Employees with a high level of employability tended to have stronger reactions to job insecurity in terms of higher intention to exit, less voice and lower levels of loyalty than those with a low level of employability.
Brandes et al., 2008	129 U.S. employees in a cross-sectional survey study	Job insecurity	Organizational cynicism	Work effort	Hierarchical moderated regression analysis	Cynical individuals tended to show greater work effort when they perceived a high level of job insecurity than when they perceived a low level of job insecurity.
Brockner et al., 1992	597 U.S. employees in a cross-sectional survey study	Job insecurity	Perceived control and economic need to work	Work effort	Hierarchical moderated regression analysis	Perceived threat of layoff and perceived control interacted to have an impact on work effort. Economic need to work moderated the effect of perceived threat and control on work effort.

Brockner et al., 2004	Study 1: 350 participants from downsizing site and 787 from non-downsizing site in a cross-sectional study. Study 2: 103 participants in a 6-month longitudinal survey study	Job insecurity	Perceived control	Study 1: Affective organization commitment; Study 2: Job performance (measured 6-month after layoff witness)	Hierarchical moderated regression analysis	Perceptions of job control alleviated the negative effects of a threatened job situation on organizational commitment and job performance.
Bussing, 1999	123 German steel employees in a cross-sectional survey study with quasi-experimental field design	Job insecurity	Social support and perceived control	Job satisfaction, irritation/strain, and psychosomatic complaints	Hierarchical moderated regression analysis	(1) Support: Support from supervisor and from colleagues significantly moderated the relationship between job insecurity and job satisfaction. Support from friends buffered against the negative effect of job insecurity on job satisfaction and irritation/ strain. (2) Control: Individual control and collective control mitigated the negative effect of job insecurity on job satisfaction and irritation/ strain. In addition, wish for control and alternatives on the labor market also buffered against the negative effects of job insecurity on irritation/ strain and psychosomatic complaints.
Cheng, Huang, Li, & Hsu, 2011	17,042 Taiwanese employees in a cross-sectional survey study	Employment insecurity	Workplace justice	Burnout	Multivariable regression model	The association of employment insecurity and burnout was stronger for employees who had lower levels of workplace justice perception than those with higher levels.

Debus et al., 2012	15,200 employees from 24 countries in a cross-sectional survey study	Job insecurity	Country-level enacted uncertainty avoidance; country's social safety net	Job satisfaction and organizational commitment	Multilevel modeling and hierarchical linear modeling analyses	Both enacted uncertainty avoidance and social safety net buffered against the cross-level effects of job insecurity on job satisfaction and organizational commitment.
Dekker & Schaufeli, 1995	95 Australian public employees in a 2-month longitudinal survey study with quasi-experimental design	Job insecurity	Social support from colleagues, management, and union support	Withdrawal from job and organization; psychological distress and burnout	MANOVAs	Social support from union and coworkers, as well as management did not buffer against the negative effects of job insecurity on employee well-being.
Ito & Brotheridge, 2007	600 Canadian civil servants in a cross-sectional survey study	Cognitive and emotional job insecurity	Employment dependence	Intention to search job	Hierarchical moderated regression analysis	The positive relation between cognitive job insecurity and intention to job search became weaker when individuals reported higher employment dependence.
Kalyal et al., 2010	149 public servants from Pakistan in a cross-sectional survey study	Job insecurity	Employability	Affective, continuance, and normative commitment	Hierarchical moderated regression analysis	The negative relation between job insecurity and affective (but not continuance and normative) commitment was stronger for people with lower employability than those with high employability.
Kausto et al., 2005	1,443 Finnish employees in a cross-sectional survey study	Job insecurity	Procedural and interactional justice	Emotional exhaustion and stress symptoms	Hierarchical moderated regression analysis	Employees perceiving more interactional and procedural justice, even in the context of high job insecurity, tended to report less emotional exhaustion and stress symptoms.

Kinnunen & Nätti, 1994	3,503 Finnish employees in a cross-sectional questionnaire study	Job insecurity	Social support from supervisor and colleagues	(1)Health-related outcomes: psychosomatic symptoms, and various aches and pains; (2) Work-related outcomes: job satisfaction, organizational involvement, psychological withdrawal, and intentions to quit.	MANOVAs	Social support buffered against the negative effects of job insecurity on job satisfaction and involvement with work, but not against other outcomes.
König et al., 2010	311 Swiss employees in a cross-sectional survey study	Job insecurity	communication, occupational self-efficacy, and work locus of control	Task and contextual performance via self-rated and supervisor rating	Hierarchical moderated regression analysis	Work locus of control and communication moderated the relationship between job insecurity and self-rated task performance.
Lim, 1996	306 MBA graduates in USA in a cross-sectional questionnaire study	Job insecurity	Work-based support from supervisors and colleagues, and non-work-based support from friends and family	Work-based outcome (i.e., job dissatisfaction, non-compliant job behavior, and proactive job search), and nonwork-based outcome (i.e., life dissatisfaction)	Hierarchical moderated regression analysis	Social support at work buffered individuals against job dissatisfaction, proactive job search, and noncompliant job behaviors when job insecurity was at stake. Support from family and friends may buffer individuals against life dissatisfaction related to job insecurity.
Lim, 1997	306 MBA alumni in USA in a cross-sectional questionnaire study	Job insecurity	Supervisor and coworker support	Job dissatisfaction and noncompliant job behavior	Hierarchical moderated regression analysis	Support from supervisors and coworkers significantly buffered against the negative effects of job insecurity on job dissatisfaction and non-compliant job behaviors.
Loi et al., 2011	184 Chinese employees in a cross-sectional questionnaire study	Job insecurity (measured by job security)	Leader-member exchange	Altruism and performance (measured by 25 supervisors)	Hierarchical linear modeling analysis	Leader-member exchange mitigated the negative effects of job insecurity on altruism, but not on work performance.
Mak & Mueller, 2000	222 Australian public servants in a cross-sectional questionnaire study	Job insecurity	Coping resources (e.g., social support, rational/ cognitive coping) and personality (i.e., affectivity)	Personal vocational, interpersonal, psychological, and physical strain	Hierarchical moderated regression analysis	Negative affectivity and self-care moderated the relation between job insecurity and physical strain. Social support did not buffer against the negative effects of job insecurity on any personal strain.

Mohr, 2000	110 German steel workers in a 8-year longitudinal survey study with a quasi-experimental field design	Job insecurity	Social support, opportunities in the labor market, duration of contract in the company, trade-union involvement, collective control, and hope for control	Irascibility, anxiety, self-esteem, psychosomatic complaints, and depression	Hierarchical moderated regression analysis	Social support from supervisors and coworkers buffered against the effects of job insecurity on mental health. So also did the perception of opportunities in the labor market and duration of contract in the company.
Otto et al., 2010	244 German employees in a cross-sectional survey study	Objective and subjective job insecurity	Flexibility	Job attitudes (i.e., job involvement, career satisfaction, and readiness to make concessions) and work-related strain	Hierarchical moderated regression analysis	In a high unemployment rate region, employees with low flexibility tended to be more involved with their job, have more career satisfaction, and be more ready to make concessions, but reported more work-related strain. In the presence of high quantitative job insecurity, individuals with high flexibility reported less work-related strain. In the presence of high qualitative job insecurity, those with low flexibility were less satisfied with their career.
Preuss, 2002	1,700 U.S. hospital employees in a cross-sectional survey study	Objective and subjective job insecurity	Employee involvement	Job satisfaction and organizational commitment	Hierarchical regression analysis	Employees in organizations with a stronger job security policy tended to be more committed to the organization than those at the workplaces with a weaker security policy.
Probst, 2000	260 U.S. employees in a cross-sectional survey study	Job insecurity	Job involvement	Job satisfaction, job security satisfaction, affective reactions, commitment, health conditions, psychological distress, job withdrawal, and work withdrawal	Multivariate analysis of variance	Individuals with high job involvement responded more negatively to job insecurity than those with low job involvement, such as lower promotion, supervisor, and job security satisfaction, poorer health status, and more psychological distress.

Probst, 2005	807 employees from USA and China in a cross-sectional survey study	Job insecurity	Opportunity for participating decision-making (PDM)	Satisfaction with coworker, supervisor, and work; turnover intention; and work withdrawal	Hierarchical moderated regression analysis	PDM mitigated the negative effects of job insecurity on employee outcomes (i.e., satisfaction with coworker, supervisor, and work; turnover intention; and work withdrawal).
Roskies et al., 1993	Two cross-sectional questionnaire studies in Canada: 93 participants in an acute job insecurity study; 1,297 participants in a long-term job insecurity study	Job insecurity (i.e., the threat of imminent job loss OR the threat of long-term job security)	Coping resources, coping strategies, personality (i.e., affectivity).	Psychological distress	Hierarchical moderated regression analysis	In the acute job insecurity study, the interaction of job insecurity and personality significantly contributed to psychological distress. But the interaction of perceived job insecurity and coping (strategies and resources) was not significant. In the long-term job insecurity study, the interaction of perceived job insecurity and coping contributed significantly to psychological distress but not the interaction of job insecurity and personality.
Schreurs et al., 2010	1,368 Belgian workers in a cross-sectional questionnaire study	Job insecurity	Job control and job self-efficacy	Recovery and impaired general health	Hierarchical moderated regression analysis	Job control, but not job self-efficacy, buffered against the negative effects of job insecurity on need for recovery and impaired well-being.
Schreurs et al., 2012	56 Belgian employees in a 3-week diary and questionnaire study	Job insecurity	Work-based support from supervisor and coworkers	Employee extra-role and in-role performance	Hierarchical linear modeling	Supervisor support moderated the intra-individual relationship between job insecurity and in-role performance, but not extra-role performance.
Silla et al., 2009	639 Belgian employees in a cross-sectional survey study	Job insecurity	Employability	Cognitive and affective well-being	Hierarchical moderated regression analysis	Employability moderated the effect of job insecurity on cognitive well-being (i.e., life satisfaction) but not on affective well-being (i.e., psychological distress).

Sora et al., 2010	942 Spanish employees in a cross-sectional questionnaire study	Job insecurity	Organizational justice and organizational justice climate	Job satisfaction, intention to leave, and well-being (i.e., anxiety and depression)	Multilevel analysis, hierarchical multiple regression analysis, and ordinary least squares regression	Both organizational justice and organizational justice climate buffered against the negative effects of job insecurity on job satisfaction and intention to leave, but not on well-being, i.e., anxiety and depression.
Stiglbauer et al., 2012	178 Germany participants in the cross-sectional and longitudinal survey studies	Job insecurity (cognitive)	Work involvement	Cognitive (i.e., life satisfaction) and affective well-being (i.e., psychological distress)	Hierarchical moderated regression analysis	Work involvement moderated the short-term effect of job insecurity on the cognitive aspect of well-being (i.e., life satisfaction) at both Time 1 and Time 2, but not in the longitudinal study. Work involvement did not buffer against the negative effect of job insecurity on affective well-being.
Vander Elst et al., 2010	3,881 Belgian employees in a cross-sectional questionnaire study	Job insecurity	Organizational communication and participation	Work engagement and need for recovery	Hierarchical moderated regression analysis	Individuals with more organizational participation tended to be more engaged at work, even when experiencing a high level of job insecurity, than those with less participation.
Wong et al., 2003	295 and 253 Chinese supervisor-subordinate dyads in a cross-sectional survey study	Job insecurity	Trust in management	Supervisor-rated organizational citizenship behavior and performance	Hierarchical moderated regression analysis	The interaction effect of job insecurity and trust in management was significant on both organizational citizenship behavior and performance.

Notes: The studies are presented in alphabetic order.

1.4.2.1 Personal coping resources as buffers against job insecurity

The conservation of resources theory (Hobfoll, 1989, 2001) has indicated that personal coping resources such as personality characteristics could assist stress coping since they may affect how people evaluate and cope with the threat of job resource loss. Individuals tend to use personal coping resources across different contexts because of their trait-like nature (Haan, 1969; Mauno & Rantanen, 2013; Vaillant, 1977). For example, coping strategies, as a form of personal coping resources, could facilitate stress resistance (Carver et al., 1989; Lazarus & Folkman, 1984). *Coping* refers to 'the constantly changing cognitive and behavioral efforts to manage the internal and external demands of transactions that tax or exceed a person's resources' (Folkman, Lazarus, Dunkel-Schetter, Delongis, & Gruen, 1986). *Coping strategies* refer to the various methods that an individual may use in managing stressful circumstances (Folkman & Lazarus, 1984; Myendeki, 2008). In this research, I approached *coping strategies* (i.e., changing the situation, devaluation, accommodation, symptom reduction, and avoidance; Study I) as an effort to reduce or eliminate the negative effects of stressors on employee reactions. The cybernetic stress theory (Edwards, 1988) suggests that stress can be minimized through various coping efforts to actively solve problems, including changing the stressful situation to meet a person's desires (changing the situation), adjusting desires to match the situation (accommodation), lowering the importance related to the discrepancy between perception and desires (devaluation), enhancing perceptions of well-being directly (symptom reduction), or diverting attention away from the situation (avoidance) (Edwards, 1988). In this theory, only avoidance is a disengaged coping strategy; the other four are the engaged ways to cope with stressful situations (see Skinner, Edge, Altman, & Sherwood, 2003). However, I moved beyond this general two-fold taxonomy by exploring the independent contributions of these five coping strategies in attenuating the negative effects of perceived job insecurity. This is also consistent with the recommendations in current coping researches (Lazarus, 2006; Skinner et al., 2003); coping strategies should be studied beyond narrow taxonomies by investigating different subscales of coping.

The engaged coping focuses on managing and altering the sources of stress and responses to them. Thus, it functions as a protective factor, whether through direct positive effects on employee reactions or as a buffer of the relationship between job insecurity and employee responses (Carver & Connor-Smith, 2010; Skinner et al., 2003). Empirical studies suggest that the engaged coping results in positive outcomes, whereas the disengaged/avoidance coping often leads to negative outcomes (e.g., Day & Livingstone, 2001; Dewe, Cox, & Ferguson, 1993; Penley et al., 2002; Suls & Fletcher, 1985). Previous studies have also shown an association between active problem-solving coping and enhanced well-being, such as reduced anxiety and less dissatisfaction related to role stressors (Latack, 1986), and between positive reappraisal coping strategies and greater marital satisfaction (Nelson, 2008). In contrast, the disengaged cop-

ing (i.e., avoidance) tends to distract attention from direct problem solving (Amiot, Terry, Jimmieson & Callan, 2006; Carver & Cannor-Smith, 2010). Empirical studies have found a negative association between avoidance coping and well-being in terms of increased psychological distress (Tyler & Cushway, 1995), a high level of somatic complaints (Snow, Swan, Raghavan, Connell, & Klein, 2003), and reduced marital satisfaction (Nelson, 2008).

Findings on the moderating/buffering role of the engaged coping in the relation between job stressors and employee reactions are inconsistent, while only little evidence exists in the context of job insecurity. In some studies the engaged coping mitigated the adverse effects of work demands or job stressors on mental health or job-related outcomes (Bhagat, Allie, & Ford, 1995; Koeske, Kirk, & Koeske, 1993; Shimazu & Schaufeli, 2007), whereas in others the more frequent the use of the engaged coping (i.e., problem-solving coping), in a high work stress context, the greater was the distress reported (for a review, see Dewe et al., 1993). However, the buffering role of the engaged coping in the relation between job insecurity and well-being outcome has rarely been examined. In a pioneer study of layoff survivors, Armstrong-Stassen (1994) found that employees who used the engaged coping (i.e., control coping) reported higher job performance and lower turnover intentions. However, this study covered only two general types of coping strategies (control and avoidance copings). In addition, a recent investigation failed to find a buffering role of problem-solving coping in the relation between employment uncertainty (reported by both unemployed and employed individuals) and stress reactions (Mantler et al., 2005).

There is little empirical evidence to support the moderating role of the disengaged/avoidance coping in the context of job stressors (Snow et al., 2003). Some studies have reported that the disengaged coping (i.e., defensive coping) may strengthen the relation between work role overload and well-being (Fortes-Ferreira, Peiró, González-Morales & Martín, 2006; Parasuraman & Cleek, 1984), whereas others have failed to detect any moderating effects of avoidance coping in the stressor-strain relationship (Koeske et al., 1993; Parkes, 1990; Tyler & Cushway, 1995; Yip, Rowlinson, & Siu, 2008). Again, only some relevant evidence has been found for job insecurity. For example, avoidance coping strengthened the negative effects of the perceived threat of job loss on work performance and turnover intentions (Armstrong-Strassen, 1994) and exaggerated the deleterious effects of employment uncertainty on perceived stress (Mantler et al., 2005). The general implication from these studies is that if job insecurity is perceived, the engaged coping strategies (i.e., changing the situation, accommodation, symptom reduction, and devaluation in my study) could mitigate its harmful consequences, whereas, the disengaged coping (i.e., avoidance) may strengthen the negative effects of job insecurity on employee work (i.e., work engagement and emotional energy at work) and family (i.e., marital satisfaction and emotional energy at home) outcomes.

Optimism (Study II), which refers to the generalized outcome expectancies for the future and describes one's relation to the outside world and expectations

of success (Scheier & Carver, 1985), has been widely studied in global stress research. Many empirical studies have shown that optimism relates to positive outcomes and human adaption. In relation to these outcomes, which were also studied here, it has been found that optimism positively associates with job satisfaction and work-family enrichment (Dyson-Washington, 2006). In a two-year longitudinal study, optimism predicted work engagement over time (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). However, my specific focus is vigor at work which is a key component of work engagement (Demerouti, Mostert, & Bakker, 2010).

In a situation of job insecurity, optimists may be expected to be more persistent in their coping and more likely to use adaptive coping strategies (Carver et al., 1993), because they believe that they can handle the stressful situation appropriately, such as making more efforts to keep their current job or looking for alternative job. However, only one earlier empirical study has focused on the moderating role of optimism in the context of job insecurity. In this one-year longitudinal study, Mäkikangas and Kinnunen (2003) found that among female employees, optimism moderated the relationships between job insecurity and mental distress. The negative effects of job insecurity on mental well-being were more detrimental for highly optimistic women, although the overall level of mental distress was higher for low optimists (direct positive effect). The reason that optimism did not act as a buffer could be that the accumulation of negative events, such as a prolonged threat of losing one's job, can be even more disturbing for optimists than for pessimists due to their different expectations of life events. However, based on the conservation of resources theory (Hobfoll, 1989), it can be assumed that optimism is a buffering resource against life stress (Carver & Connor-Smith, 2010; Carver et al., 1993), including job insecurity.

Emotional intelligence (Study III), referring to a set of abilities to accurately perceive, utilize, understand, and manage emotions, might also facilitate the management of job insecurity. In a conceptual paper, Jordan, Ashkanasy, and Hartel (2002) proposed a model where emotional intelligence buffered the relation between job insecurity and its emotional and behavioral reactions. It was argued that all four components of emotional intelligence contribute to the complex relationship between job insecurity and employee reactions and help to buffer an employee's negative emotional reactions, which includes decreased affective commitment and increased job-related attention. Huy (1999) also suggested that emotional intelligence facilitates individual adaption to organizational change. Previous studies have indicated a high level of emotional intelligence is associated with better well-being outcomes, such as reduced somatic complaints (Slaski & Cartwright, 2002) and also attitudinal outcomes, such as high affective commitment (Carmeli, 2003). However, to date, the moderating role of emotional intelligence has not been empirically examined. To address this gap, my study examined whether emotional intelligence can help to prevent further decline in organizational commitment and mitigate the health risks, defined as psychosomatic complaints, related to job insecurity.

1.4.2.2 Contextual coping resources as buffers against job insecurity

In addition to the buffering effects of personal coping resources against the negative consequences of job insecurity on employee reactions, contextual coping resources such as social support at work and a good quality of the relationship with supervisors could also be beneficial on the basis of the conservation of resources theory (Hobfoll, 1989). I investigated job control, social support, and leader-member exchange as contextual coping resources of this kind, and these will be focused on next. *Job control* (Study II) refers to the capability of individuals to control their own tasks, goals, and general work activity (Karasek & Theorell, 1990). Since job control is usually regarded as an important work-based resource, has been widely studied, and has been found to be related to positive employee outcomes. In relation to the outcomes examined in my study, other researchers have reported both immediate and lagged effects of job control on increased job satisfaction (e.g., Johnson et al., 1995; Noblet, Rodwell, & Mcwilliams, 2006), vigor at work (e.g., Mauno et al., 2010; Mauno et al., 2007; for a review, see Halbesleben, 2010), and work-family enrichment (e.g., Mauno & Rantanen, 2013; Siu et al., 2010). Since job control means that employees have some autonomy over their work (see Jenkins, 1991; Karasek, 1998), it is possible that job control could buffer against the harmful effects of job insecurity. In earlier empirical studies, individuals with more job control reported high job satisfaction and better psychological well-being (e.g., Probst, 2005; Schreus et al., 2010), even when confronted with high job insecurity. Despite the lack of empirical studies on the buffering effects of job control on the relation between job insecurity and employee reactions in terms of vigor at work and work-family enrichment, it is reasonable to assume that job control could reduce the adverse effects of job insecurity on these employee outcomes.

Social support (Study II) refers to the "availability of helping relationships and the quality of those relationships" (Leavy, 1983, p. 5). There is a long tradition, showing that social support alleviates the level of stress or strain (e.g., Cohen & Wills, 1985). Many empirical studies have reported that social support contributes to increased job satisfaction (e.g., de Jonge, Dormann, Janssen, Dollard, Landeweerd, & Nijhuis, 2001), vigor at work (e.g., Rothmann & Joubert, 2007; for a review, see Crawford, LePine, & Rich, 2010), and higher work-family enrichment (e.g., Mauno & Rantanen, 2013). *The leader-member exchange* (i.e., different types of exchange relationships between leaders and their subordinates) (Study III) has also been found to be associated with higher organizational commitment and reduced work-related stress (Golden & Veiga, 2008). However, limited empirical evidence has been found for the buffering role of social support against job insecurity on employee outcomes. For example, in the presence of high job insecurity, employees with more social support tended to report more job satisfaction (Bussing, 1999; Kinnunen & Nätti, 1994; Lim, 1997). However, longitudinal studies on social support, focusing on these positive indicators of employee outcome (i.e., job satisfaction, vigor, and work-family enrichment), are lacking. In one cross-sectional study, it was found that a quality rela-

tionship with supervisors (i.e., leader-member exchange) buffered against the effects of job insecurity on altruism, but not on work performance (Loi, Ngo, Zhang, & Lau, 2011). However, based on the conservation of resources theory (Hobfoll, 1989), it is reasonable to propose that social support and leader-member exchange mitigate the deleterious effects of job insecurity on employee reactions.

In sum, personal (i.e., emotional intelligence, personal coping strategies, and optimism) and contextual coping resources (i.e., leader-member exchange) have either never or rarely received attention in empirical research on job insecurity. Although some previous studies have investigated the buffering role of job control and social support, none have explored their lagged moderating effects on a broad range of employee reactions, including family-related outcomes. By examining the buffering role of these coping resources in the relation between job insecurity and employee reactions, my investigation sought to shed new light on the underlying mechanisms of job insecurity and also to lay a foundation for developing effective interventions for individuals with a high level of job insecurity.

1.5 Purposes and hypotheses of the present study

My research utilized both cross-sectional (Study I) and longitudinal designs (Studies II and III) in examining the buffering roles of personal and contextual coping resources against the negative effects of job insecurity on employee outcomes. More specifically, I explored the direct and indirect (i.e., moderating) relation between job insecurity, coping resources, and employee reactions in both the occupational and family domains. The following specific research questions for each study were as follows (for an overview, see Figure 2):

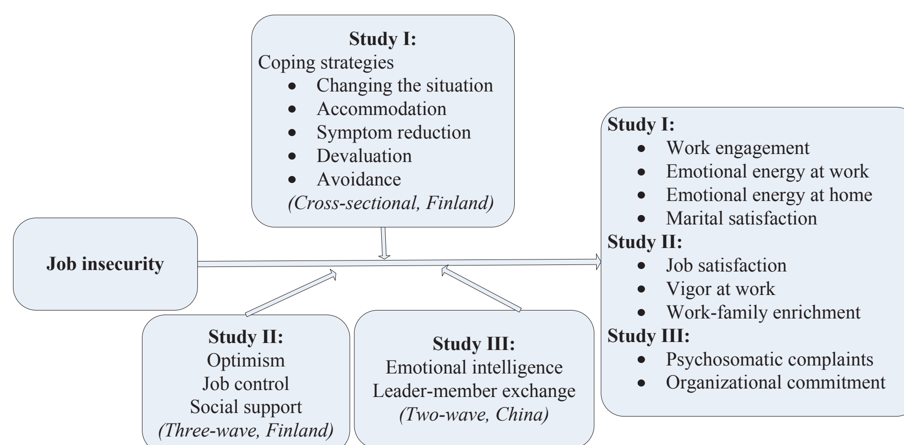

FIGURE 2 Research models for studies I-III

Study I: The buffering effect of coping strategies in the relationship between job insecurity and employee well-being

1. Is job insecurity associated with work-related employee outcomes (i.e., work engagement and emotional energy at work)? (Direct effects of job insecurity)

2. Do the negative effects of job insecurity spillover into family-related well-being (i.e., emotional energy at home and marital satisfaction)? (Direct effects of job insecurity)

3. Are coping strategies related to these employee reactions? (Direct effects of coping strategies)

4. Are different types of coping strategies beneficial in buffering against the negative effects of job insecurity on employee work- and family-related outcomes? (Moderating effects of coping strategies)

The following hypotheses were proposed in Study I:

H1. Job insecurity exerts negative effects on work engagement and emotional energy at work. This hypothesis is largely based on the findings from two meta-analyses (Cheng & Chan, 2008; Sverke et al., 2002), showing that job insecurity associates with negative employee and organizational outcomes.

H2. The negative effects of job insecurity can also spillover into the family domain, relating to lower marital satisfaction and emotional energy at home. This occurs because, in insecure settings, employees' workloads may increase (Sverke et al., 2002). Moreover, employees' anxiety about their future employment and financial resources to support their family could negatively affect the perception of their ability to fulfill their role as spouses or parents. In addition, a few previous empirical studies have shown job insecurity to be associated with marital and family dissatisfaction, and with work-family conflict (e.g., Kinnunen & Mauno, 1998; Larson et al., 1994; Mauno & Kinnunen, 1999a; Richter et al., 2010; Voydanoff & Donnelly, 1988).

H3. The engaged coping strategies (i.e., changing the situation, accommodation, devaluation, and symptom reduction) are positively, and the disengaged coping, such as avoidance, negatively associated with work- and family-related employee outcomes. Because the engaged coping aims to manage and alter the sources of stress and responses to them, it functions as a protective factor, whether through direct positive effects on employee reactions or as a buffer in the relationship between stressors and employee reactions (Carver & Connor-Smith, 2010; Skinner et al., 2003). In contrast, the disengaged coping (i.e., avoidance) tends to divert attention from direct problem-solving options (Amiot et al., 2006; Carver & Connor-Smith, 2010). Hence, an avoidance coping strategy usually relates negatively to employee reactions (Penley et al., 2002; Snow et al., 2003; Tyler & Cushway, 1995). Therefore, I expected that the engaged coping strategies to operate as stress buffers against job insecurity.

Study II: Do job control, support, and optimism help job insecure employees? A three-wave study of buffering effects on job satisfaction, vigor and work-family enrichment

5. Does job insecurity have long-term effects on work- (i.e., job satisfaction and vigor at work) and family-related (i.e., work-family enrichment) employee outcomes? (Direct lagged effects of job insecurity)

6. Are personal (i.e., optimism) and contextual coping resources (i.e., job control and social support) longitudinally related to these employee reactions? (Direct lagged effects of coping resources)

7. Do personal and contextual coping resources buffer against job insecurity over time in relation to employee reactions? (Lagged buffering effects of coping resources)

8. Do personal and contextual coping resources buffer equally against the chronic negative effects of job insecurity on employee reactions? (Comparing the relative importance of coping resources over time)

The following hypotheses were proposed in Study II:

H4. Job insecurity has long-term negative effects on job satisfaction, vigor at work, and work-family enrichment. Researchers have pointed out that job insecurity may be a difficult stressor to cope with because the job-insecure situation is often uncontrollable and unclear (De Witte, 1999), implying that job insecurity will have negative long-term consequences for an individual. Empirical findings from the few longitudinal studies indicate that the negative relation between job insecurity, as a chronic job stressor, and job satisfaction strengthens as the exposure to job insecurity increases (Ferrie, Shipley, Marmot, Stansfeld, & Smith, 1995; Heaney & House, 1994). Although there is no longitudinal evidence for vigor at work and work-family enrichment, it is reasonable to propose that job insecurity could also exert long-term negative effects on them.

H5. Both personal and contextual coping resources positively relate to employee work- (i.e., vigor at work and job satisfaction) and family-related (i.e., work-family enrichment) outcomes.

H6. Both contextual and personal coping resources buffer longitudinally against the negative effects of job insecurity on vigor at work, job satisfaction, and work-family enrichment. According to the stress theories (e.g., Hobfoll, 1989; Lazarus & Folkman, 1984), contextual coping resources and some personality resources may reduce the deleterious effects of job insecurity on employee responses and these buffering effects can also be longer-lasting.

H7. It is also likely that contextual coping resources (i.e., job control and social support) are proximal moderators in the relation between job insecurity and employee outcomes, whereas personal coping resources (i.e., optimism) are a distal moderator. Job insecurity is deeply rooted in the organization, from where contextual coping resources also derive, and rarely under personal control. Thus, those resources which come from the specific context (i.e., work)

where a given stressor (i.e., job insecurity) arises should be more effective buffers than non-contextual resources.

Study III: Longitudinal effects of job insecurity on employee outcomes: The moderating role of emotional intelligence and leader-member exchange

9. Does job insecurity have immediate and longitudinal negative effects on overall well-being (i.e., psychosomatic complaints) and attitude to work (i.e., organizational commitment)? (Direct main and lagged effects of job insecurity)

10. How are the deteriorated outcomes (i.e., psychosomatic complaints and organizational commitment at the initial level) that result from job insecurity related to subsequent employee reactions? (Direct lagged effects of negative employee reactions)

11. Do personal (i.e., emotional intelligence) and contextual coping resources (i.e., leader-member exchange) relate to employee reactions? (Direct immediate and/or lagged effects of coping resources)

12. Are personal and contextual coping resources beneficial in buffering the negative effects of job insecurity on psychosomatic complaints and organizational commitments longitudinally? (Immediate and/or lagged buffering effects of coping resources)

The following hypotheses were proposed in Study III:

H8. Not only job insecurity but also its immediate employee outcomes have long-lasting negative effects on subsequent employee reactions in terms of organizational commitment and psychosomatic complaints. Previous studies have shown that the perception of job insecurity acts first as a work stressor and exerts negative effects on organizational commitment and well-being (Kinnunen et al., 1999; Kinnunen, Mauno, Nätti, & Happonen, 2000). As time passes, even though the prior level of job insecurity may have changed, the state of impaired well-being and decreased organizational commitment may continue to exert an influence on subsequent outcomes.

H9. High emotional intelligence (measured only at Time 1) is related to higher organizational commitment and fewer psychosomatic complaints at both the cross-sectional and longitudinal level. A good leader-member exchange relationship (measured only at Time 2) directly enhances organizational commitment and reduces psychosomatic complaints.

H10. Emotional intelligence and leader-member exchange buffer against the effects of job insecurity on immediate employee outcomes (i.e., psychosomatic complaints and organizational commitment). These coping resources also mitigate the effects of job insecurity and immediate outcomes on subsequent employee outcomes. In a conceptual paper, Jordan et al. (2002) proposed that emotional intelligence may function as a moderator between job insecurity and its behavioral and emotional responses. In addition, according to the conservation of resources theory, a quality relationship with supervisors is a vital re-

source for individuals, as it could facilitate the maintenance of resource reservoirs and to assist stress resistance (Hobfoll, 1989). Thus, based on the above reasoning, it is likely that emotional intelligence and leader-member exchange both buffer the negative effects of job insecurity as well as its immediate outcomes on subsequent employee outcomes.

2 METHODS

2.1 Participants and procedures

Study I was a part of a research project with an original sample (*N* = 7,511) of employees from the health and social care and service sectors. Participants were recruited from two trade unions, Tehy and PAM, whose representatives randomly selected respondents from their membership registrations. It has been estimated that the union registration rate in Tehy is 90 percent and in PAM 65-70 percent (Böckerman & Uusitalo, 2006), and thus this sample can be considered as reasonably representative of the target group. The data were collected during a period when Finland was suffering from an economic downturn, which created a naturally relevant context for studying job insecurity.

A questionnaire was distributed to each participant by e-mail in October 2009. Of the original sample (N = 7,511), 2,764 respondents participated in this study, yielding a response rate of 36.8 percent, which is similar to the average response rate in studies that use data collected from organizations (Baruch & Holtom, 2008). Altogether, 1,728 health care professionals and 1,036 service employees contributed to the data, resulting in response rates 48 percent and 27 percent respectively. A lower response rate had been expected from PAM (service workers), as the participants were younger than those in Tehy (health workers) and a majority of them did not yet have family of their own. As this study was part of a project focusing on 'work-family interface and coping,' it is possible that the participants from PAM may not have considered issues of work-family interface relevant to them, or this topic simply did not interest them, which would explain the lower response rate.

The sample in *Study II* comprised employees from two multidisciplinary equal-sized universities in central Finland. Around the time of the data collection, Finnish universities were experiencing major legislative changes. With the new University Act (558/2009), the universities acquired increased autonomy and the terms of employment of university personnel also changed. At the same time, many universities were implementing downsizing and other cost-cutting

measurements, in part through mergers and alliances between universities. Altogether, the situation at the time in the Finnish universities offered us a fruitful environment in which to study job insecurity.

The questionnaire was emailed to all the universities' employees working at least 20 hours per week, as recorded in the personnel listings of their human resources departments. Data were collected three times in the fall over a 2-year period (Time 1: 2008; Time 2: 2009; and Time 3: 2010). At the time of the initial survey (Time 1), 2,137 individuals responded, yielding a response rate of 48 percent. At Time 2, the questionnaire was only emailed to those who participated at Time 1. This second round yielded 1,314 completed surveys, and hence a response rate of 61 percent. At Time 3, only employees who responded at Time 2 were invited to participate. The final sample comprised 926 participants, and thus the response rate was 70 percent.

The sample of *Study III* consisted of female nurses employed by three hospitals in a large city in central China. At the time of the data collection, the hospitals under study were over-staffed with regard to nurses. All three intended to reduce their nursing staff, but no action had yet been taken. However, the hospitals' employees had heard rumors that downsizing might occur. One year later, about 10 nurses per hospital were laid off. This situation provided suitable conditions for studying job insecurity.

All the nurses in the three hospitals were invited to participate in a paper and pencil questionnaire during their regular monthly meeting at work. Data were collected twice over a one-year period. At the time of the initial survey (i.e., Time 1), 323 out of 386 nurses participated, yielding an average response rate of 83 percent. At Time 2, 295 nurses participated in the survey using the same procedure as was used for the Time 1 data collection. The final sample comprised 157 participants when those who completed the questionnaire at both Time 1 and Time 2 were identified.

More information about the study participants in the separate studies and data collection can be found in the original publications.

2.2 Measures

A brief description of each scale is given and further details regarding the Cronbach's alphas of the scales can be found in the original publications.

2.2.1 Job insecurity

Both global and multidimensional measures of job insecurity were used in this research. In Study I and Study II, job insecurity was assessed by a global measure consisting of four items (e.g., "I think I can lose my job in the near future"), developed by De Witte (2000; see also Kinnunen et al., 2010) to capture the perceived threat of total job loss. The items were rated on a five-point Likert scale (1 = "totally disagree", 5 = "totally agree").

In Study III, job insecurity was measured using the scale developed by Ashford et al. (1989), which has been validated in a Chinese sample (Lee, Bobko, Ashford, Chen, & Ren, 2008; Lee, Bobko, & Chen, 2006). Seventeen job feature items were adopted to assess the importance and likelihood of losing each feature, ten items to assess the importance and likelihood of possible negative changes in one's overall job, and three items to measure powerlessness. Sample items include "You may lose your job and be moved to a lower level within the organization". All items were measured using a five-point response scale. Ashford and colleagues (1989) constructed the following multiplicative or fully composite, job insecurity measure:

Fully Composite Job Insecurity = [sum (importance of job feature × likelihood of losing job feature) + sum (importance of negative changes in overall job × likelihood of negative changes in overall job)] × [perceived powerlessness to resist threat].

2.2.2 Personal and contextual coping resources

In my research, both personal (i.e., coping strategies, optimism, and emotional intelligence) and contextual coping resources (i.e., job control, social support, and leader-member exchange) were investigated as moderators in the relationship between job insecurity and employee outcomes.

Personal coping strategies (Study I) were measured using the cybernetic coping scale, which has been validated in Europe (Brough, O'Driscoll, & Kalliath, 2005; Guppy, Edwards, Brough, Peters-Bean, Sale, & Short, 2004). I focused on each of the five sub-scales of coping: *avoidance* (e.g., "I try to avoid thinking about the problem"), *changing the situation* (e.g., "I focus my efforts on changing the situation"), *symptom reduction* (e.g., "I try to let off steam"), *devaluation* (e.g., "I tell myself the problem is unimportant"), and *accommodation* (e.g., "I make an effort to change my expectations"). Thus, the first sub-scale described the disengaged or avoidance coping, and the remaining four described the engaged or active coping. Each sub-scale consisted of three items, rated on a five-point response scale (1 = "almost never", 5 = "always").

Optimism (Study II) was measured with the Life Orientation Test-Revised (LOT-R; Scheier, Carver, & Bridges, 1994). The optimism scale consisted of three items (e.g., "I am always optimistic about my future") to assess individuals' general expectancies for the future. The items were rated on a seven-point Likert scale (1 = "totally disagree", 7 = "totally agree").

Emotional intelligence (Study III) was measured by the Wong-Law Emotional Intelligence Scale (WLEIS), a 16-item scale that was developed and validated among Chinese respondents (Wong, Law, & Wong, 2004; Wong, Wong, & Law, 2007). It comprises four dimensions, including self-emotion appraisal, others-emotion appraisal, emotional regulation, and utilization of emotion. Sample items include "I am sensitive to the feelings and emotions of people around me" and "I am quite capable of controlling my own emotions". The

items were rated on a five-point scale (1 = "totally disagree", 5 = "totally agree").

Both job control and social support were measured with the QPS-Nordic Questionnaire (Lindström, Hanson, Ostergren, & Berglund, 2000) and the items were scored on a five-point scale (1 = "very seldom or never", 5 = "very often or always"). *Job control* (Study II) was assessed with four items (e.g., "Can you decide yourself about the pace of work") to evaluate the ability to control one's own tasks, goals, and general work activity. *Social support* (Study II) consisted of two dimensions: support from one's supervisor and support from colleagues. Each dimension had two items (e.g., "If needed, will your supervisor listen to your work-related problems", "If needed, can you get support and help with your work from your co-workers").

The leader-member exchange relationship (Study III) was measured by the Chinese version (Hui, Lee, & Rousseau, 2004; Wang, Law, & Chen, 2008) of the seven-item scale originally developed by Scandura and Graen (1984). This scale was designed to assess the perceived quality of the relationship with supervisors. This short form has been widely adopted in the leader-member exchange research (cf., Schriesheim & Gardiner, 1992). The response scale ranged from 1 ("strongly disagree") to 7 ("strongly agree").

2.2.3 Employee outcomes

I investigated whether job insecurity would affect overall (i.e., psychosomatic complaints), work- (i.e., work engagement, vigor at work, emotional energy at work, job satisfaction, and organizational commitment) and family-related (i.e., emotional energy at home, marital satisfaction, and work-family enrichment) outcomes.

Psychosomatic complaints (Study III) were measured to evaluate symptoms of strain. A ten-item scale developed and validated by Caplan et al., (1975) was adopted. The participants were asked how frequently in the past month (1 = "never", 2 = "once or twice", 3 = "three times or more") they had such symptoms as "heart beating hard", "dizzy spells", "trouble sleeping", and so on.

Work engagement (Study I) was measured with the UWES-9 (Utrecht Work Engagement Scale-Short Form) developed by Schaufeli, Bakker, and Salanova (2006). It consists of three subdimensions — vigor (3 items; e.g., "At my work, I feel bursting with energy"), dedication (3 items; e.g., "My job inspires me"), and absorption (3 items; e.g., "I am immersed in my work") — and has recently been validated in Finland (Seppälä et al., 2009). The items were rated on a seven-point frequency scale (0 = "never", 6 = "daily"). In Study II, only the dimension of *vigor at work* (Study II) was assessed as one of the employee outcomes.

For *emotional energy at work* (Study I), I turned to the three-item scale for the measurement of vigor developed by Shirom and Melamed (Shirom, 2003) and selected the emotional energy at work subscale, which seemed most relevant for use in health care and service work (in Study I) involving close social interactions with patients and customers. In the original scale, respondents indicate their feelings toward co-workers and customers; for the purpose of this

study I asked the respondents to rate their emotions toward customers or patients instead, using the following items: "I feel able to be sensitive to the needs of patients/customers", "I feel I am capable of investing emotionally in patients/customers", and "I feel capable of being sympathetic to patients/customer". Respondents rated these feelings in the previous month on a seven-point rating scale (1 = "never", 7 = "always").

Job satisfaction (Study II) was measured with a single item (i.e., "Overall, how satisfied are you with your current job") scoring on a five-point scale (1 = "very dissatisfied", 5 = "very satisfied"). Earlier studies have demonstrated the reliability of a single item measure of job satisfaction (Wanous, Reichers, & Hudy, 1997).

Organizational commitment (Study III) was measured by Mowday, Steers, and Porter's (1979) nine-item scale using a seven-point response scale that ranged from 1 ("strongly disagree") to 7 ("strongly agree"). It reflected the degree to which respondents feel loyalty towards, care about, and are proud of the organization that employs them. Sample items include "I would be happy to spend the rest of my career with this organization" and "This organization has a great deal of personal meaning for me".

Similarly, for well-being in the family domain, I used three scales, emotional energy at home, marital satisfaction and work-family enrichment. *Emotional energy at home* (Study I) was measured with three items similar to the emotional energy at work scale, except that I replaced "patients/customers" with "family members/significant others" (e.g., "I feel capable of being sympathetic to family members/significant others"). Respondents rated these feelings at home in the past month on a seven-point rating scale (1 = "never", 7 = "always"). For *Marital satisfaction* (Study I), I applied the Kansas Marital Satisfaction Scale (Schumm et al., 1986), which consists of three items (e.g., "How satisfied are you with your relationship with your spouse/partner"). The response scale ranged from 1 ("very unsatisfied") to 7 ("very satisfied").

Work-family enrichment (Study II) consisted of four items measured via the Work-Family Enrichment Scale (Carlson, Kacmar, Wayne, & Grzywacz, 2006). In the present research, the work-family enrichment scale comprised two dimensions: two items assessed affective (e.g., "My involvement in my work puts me in a good mood and this helps me be a better family member") and two developmental mechanisms of enrichment from work to family (e.g., "My involvement in my work helps me acquire skills and this helps me be a better parent or spouse"). The items were measured on a seven-point Likert scale (1 = "totally disagree", 7 = "totally agree").

2.2.4 Background variables

In each study, the background variables were controlled for in the analysis. In Study I, age, gender, education, family size, organization, and contract type were included as potential confounders. In study II, age, gender, education, contract type, number of people in the household, and number of hours worked per week were assessed at Time 1 and controlled for in the data analysis. In

study III, age, education, organization, and organizational tenure (measured at Time 1) were used as covariates.

2.3 Data analysis

Moderated hierarchical regression analysis was utilized in this research to examine the moderating effects of both personal and contextual coping resources against the negative effects of job insecurity on the employee outcomes (see Table 3). The procedure was as follows: at Step 1, I included background variables to control for their effects; at Step 2, job insecurity was entered into the regression model, and at Step 3, the moderator variables (i.e., coping strategies, optimism, emotional intelligence, job control, social support, and leader-member exchange) were included in order to examine their main effects on the employee outcomes. At Step 4, I entered the interaction terms of job insecurity with each of moderators (job insecurity × moderator). In Study I and Study III, I followed this 4-step procedure to perform multiple moderated hierarchical regression analysis. In Study II, the baseline level of the outcome variables was entered into the model at Step 1 before the background variables to control for their effects.

In these regression analyses, I used the standardized scores of the predictor (job insecurity), moderators, and outcome variables to reduce multicollinearity and facilitate interpretations. Moreover, to further interpret the moderating effects, the significant interaction effects were graphically presented, using the mean-centered or standardized scores of the predictors (see Aiken & West, 1991). Following the guidelines of Cohen and Cohen (1983), the high and low values were defined as plus and minus one standard deviation from the mean. In Study II, I reported the results of the longitudinal regression analyses conducted separately for different time lags (Time 1-Time 2; Time 2-Time 3; and Time 1-Time 3). I analyzed the different time lags in order to see whether the effects remained the same across time points. More information on the statistical analyses can be found in the original publications.

3 OVERVIEW OF THE ORIGINAL STUDIES

3.1 Study I

Cheng, T., Mauno, S., & Lee, C. (2012). The buffering effect of coping strategies in the relationship between job insecurity and employee well-being. Economic and Industrial Democracy. Online first.

This study had two main goals. The first was to examine whether job insecurity (i.e., the threat of job loss) and coping strategies (i.e., changing the situation, accommodation, devaluation, symptom reduction, and avoidance) relate to employee outcomes both at work and at home (direct effects), and the second to investigate whether coping strategies, and, if so, which ones, could decrease the adverse effects of job insecurity on employee reactions (buffering effects). More specifically, I examined whether job insecurity and coping strategies have main effects on employee outcomes, and whether specific types of coping strategies exert different buffering effects against job insecurity on employee reactions. In addition, the employee outcomes were investigated in relation to two major life domains: occupational (i.e., work engagement and emotional energy at work) and family (i.e., marital satisfaction and emotional energy at home).

Job insecurity was associated with lower well-being at work, and its negative effects also spilled over into the family domain. Faced with the threat of job loss, employees engaged less at work, and reported lower emotional energy at work and at home. However, job insecurity was not related to marital satisfaction.

Coping strategies exerted main effects on employee outcomes. However, their beneficial effects depended on the type of strategy. Engaged coping strategies benefited work- and family-related outcomes, whereas avoidance coping related to negative employee reactions. Specifically, changing the situation (i.e., actively solving the problem and thereby changing one's perceptions) and accommodation (i.e., adjusting one's desires to conform to one's perceptions)

were associated with higher work engagement and emotional energy at work. Symptom reduction (i.e., attempting to improve well-being directly), in turn, was related to higher emotional energy at home, and devaluation (i.e., reducing the importance associated with the discrepancy between perceptions and desires) predicted all four employee outcomes at work and at home.

The most prominent finding of this study was that different coping strategies moderated the relationship between job insecurity and different employee outcomes. Specifically, the coping strategy of changing the situation buffered against the relationship between (higher) job insecurity and (lower) emotional energy at work, while symptom reduction buffered against (lower) emotional energy at home. In another words, employees who made more frequent use of the coping strategies of changing the situation and symptoms reduction (describing the engaged coping) reported a less pronounced decrease in their emotional energy, at work and at home, respectively.

Furthermore, several interesting buffering effects arose for other engaged coping strategies, although they were not as strong and did not prompt significant changes in the explanation rate. Thus, I was only able to note trends in job-insecure settings: accommodation minimized marital dissatisfaction and devaluation had a similar protective effect in relation to work engagement in the presence of high job insecurity.

Finally, the use of avoidance coping showed a reverse pattern; again, I can only speak about trends, as the change in the explanation rate was not significant. Frequent use of avoidance strengthened the deleterious influence of job insecurity on work engagement.

3.2 Study II

Cheng, T., Mauno, S., & Lee, C. (2013). Do job control, support, and optimism help job insecure employees? A three-wave study of buffering effects on job satisfaction, vigor and work-family enrichment. Social Indicators Research. Online first.

The purpose of this study was to investigate the long-term relationships between job insecurity (i.e., threat of job loss), coping resources (i.e., job control, social support, and optimism), and work- (i.e., vigor at work and job satisfaction) and family-related (work-family enrichment) outcomes by utilizing three-wave two-year lagged data collected among Finnish university employees. I was particularly interested in the buffering role of job control, social support, and optimism in the job insecurity-employee reaction relationship. Furthermore, I examined the direct lagged effects of job insecurity and the three coping resources on the employee outcomes.

Job insecurity showed lagged effects on just one of the employee outcomes, the two-year lagged effect on lowered vigor at work. Although, initially, per-

ceived job insecurity was negatively associated with all three employee outcomes at different time points at the correlational level, when job insecurity was analyzed in the regression models after adjusting for the baseline level of the dependent variables and background factors, it no longer had predictive power.

Coping resources, especially optimism and job control, had positive long-term associations with the employee outcomes. More specifically, optimism significantly predicted all three work- and family-related outcomes (i.e., job satisfaction, vigor at work, and work-family enrichment) at all time lags. The same result was found for job control except that the initial level of job control did not have one-year lagged effects on vigor at work or job satisfaction. In contrast, social support significantly predicted only one outcome variable (job satisfaction at Time 2). Taken together, these findings suggest that the more optimistic employees are about the future and the more job control they have, the more positive their reactions are (more vigor, job satisfaction, and work-family enrichment).

Further interesting results were found in the buffering role of coping resources in the job insecurity-employee outcome relationship. First, in the presence of high job insecurity, employees who had more job control remained more vigorous at work, even two years later. The same longitudinal effect was noticed across a one-year time period (in the second wave). However, job control did not buffer against the negative effects of job insecurity on job satisfaction or work-family enrichment.

Furthermore, social support buffered against the negative effects of job insecurity on subsequent vigor at work and job satisfaction at the one-year lag. In addition, it also mitigated the detrimental effect of job insecurity on subsequent job satisfaction at the two-year time interval. These findings suggested that, in the presence of high job insecurity, employees who received more social support and had more job control tended to report better occupational well-being, and also that these effects might be longer-lasting. Nonetheless, this study failed to find a buffering effect of coping resources in the relationship between job insecurity and work-family enrichment. Furthermore, optimism did not operate as a buffer between job insecurity and the employee outcomes of interest.

3.3 Study III

Cheng, T., Huang, G-H., Lee, C., & Ren, X. (2012). Longitudinal effects of job insecurity on employee outcomes: The moderating role of emotional intelligence and the leader-member exchange. Asia Pacific Journal of Management, 29, 709-728.

The purpose of my third study was to investigate the buffering effects of personal (i.e., emotional intelligence) and contextual coping resource (i.e., leader-member exchange) in the context of job insecurity in a two-wave follow-up study among Chinese nurses. Specifically, I examined whether emotional intel-

ligence could attenuate the immediate and long-term negative effects of job insecurity (i.e., the threat of job loss or certain dimension of valued job features) on employee outcomes (i.e., organizational commitment and psychosomatic symptoms), and the effects of employee reactions as a result of job insecurity on subsequent outcomes. I also explored whether leader-member exchange could alleviate the initial effect of job insecurity on subsequent employee outcomes and the effect of employee reactions as a consequence of job insecurity on subsequent outcomes. In contrast to my previous studies (Studies I-II), in this study, based on the multidimensional view, job insecurity was operationalized by focusing on both the threat of job loss and the threat of losing certain important features of the total job.

Job insecurity was associated with psychosomatic complaints, and the outcomes associated with the initial level of job insecurity strongly predicted the subsequent outcomes. When psychosomatic complaints occurred as a result of job insecurity, they continued to have an effect on employee well-being and organizational commitment one year later.

More importantly, individuals with high emotional intelligence tended to understand and manage their emotional reactions to job insecurity better than those with lower levels of emotional intelligence, thereby mitigating its effects on psychosomatic complaints. In addition, emotional intelligence also exhibited a long-lasting buffering effect. It appeared to ameliorate the negative effect of impaired well-being on subsequent psychosomatic complaints, even after job insecurity had been experienced for one year. The contextual coping resource found to be effective in this study was a quality relationship with a supervisor, which buffered against the negative effects of psychosomatic complaints as a result of job insecurity on subsequent organizational commitment.

TABLE 3 A summary table of study results concerning moderator effects

Study	Participants and study design	Independent variables	Moderators	Dependent variables	Major analysis method	Main results regarding moderator effects
Study I: Cheng et al., 2012 (Online first)	2,764 Finnish employees in a cross-sectional questionnaire study	Job insecurity	Coping strategies (i.e., changing the situation, accommodation, symptom reduction, devaluation, and avoidance)	Work engagement, emotional energy at work, marital satisfaction, and emotional energy at home	Multiple moderated regression analysis	The coping strategies of changing the situation and symptom reduction buffered against the negative effects of job insecurity on emotional energy at work and home respectively.
Study II: Cheng et al., 2013 (Online first)	926 Finnish workers in a three-wave longitudinal survey study with two-year time lag	Job insecurity	Job control, social support, and optimism	Vigor at work, job satisfaction, and work-family enrichment	Multiple moderated regression analysis	Job control was the most consistent lagged buffer against job insecurity in relation to vigor at work. In addition, social support longitudinally buffered against the negative effects of job insecurity on job satisfaction and vigor at work.
Study III: Cheng et al., 2012	157 Chinese employees in a one-year follow-up survey study	Job insecurity, organizational commitment, and psychosomatic complaints	Emotional intelligence and leader-member exchange	Organizational commitment and psychosomatic complaints	Multiple moderated regression analysis	Emotional intelligence buffered the relation between job insecurity and psychosomatic complaints at both the cross-sectional and lagged level. Leader-member exchange buffered against the effects of psychosomatic complaints as a result of job insecurity on subsequent organizational commitment.

4 DISCUSSION

4.1 Major findings

The major conclusion of my research is that although job insecurity can be seen as a severe work stressor, its effect can be mitigated by the use of appropriate personal and contextual coping resources. This conclusion was drawn from three specific findings. First, job insecurity exhibited stronger immediate than long-lasting negative effects on employee outcomes. Second, both personal and contextual coping resources directly promoted positive employee reactions in different life domains. Third, the detrimental effects of job insecurity were buffered by coping resources (see Table 3). These main findings will next be discussed in greater detail.

4.1.1 The main effects of job insecurity

Consistent with previous studies on job insecurity (e.g., Kinnunen et al., 2010; Mauno et al., 2010; Vander Elst et al., 2010), my investigation showed that job insecurity immediately and/or persistently impaired overall (i.e., psychosomatic complaints), occupational (i.e., work engagement, vigor at work, and emotional energy at work), and family (i.e., emotional energy at home) well-being. Faced with the threat of job loss or the uncertainty of keeping valued job features, employees tended to be less engaged at work, had lower emotional energy both at work and at home, and reported more psychosomatic complaints. These findings are in line with the results of two meta-analyses on the effects of job insecurity (Cheng & Chan, 2008; Sverke et al., 2002) and previous studies on its effects on work engagement (Kinnunen et al., 2010; Mauno et al., 2010). In addition, once psychosomatic complaints have begun to occur as a result of job insecurity, they continued to have a negative effect on employee well-being and organizational commitment even one year later. This result is in agreement with previous findings (Kinnunen et al., 1999, 2000) that the perception of job insecurity first acts as a work stressor, exerting negative effects on organizational

commitment and well-being. As time passes, even if the prior level of job insecurity has reduced, impaired well-being and decreased organizational commitment can continue to exert a 'negative' influence upon subsequent outcomes. This is also consistent with the conservation of resources theory, according to which a loss spiral can arise when individuals experience resource loss; that is, they become vulnerable to further resource loss (Hobfoll, 1989, 2001). It also lends support to the spillover theory, according to which negative experiences in one life domain (i.e. work) can spillover into another domain (i.e., family) (Leiter & Durup, 1996; Zedeck & Mosier, 1990).

Nevertheless, partially counter to my hypotheses (H2, H4, H8), job insecurity was not found to have immediate or lagged direct effects on some of studied outcomes (i.e., vigor at work, job satisfaction, organizational commitment, work-family enrichment, marital satisfaction, and psychosomatic complaints). There are several possible reasons for this. First, my research was conducted in organizations undergoing changes or restructuring but without drastic downsizing. Second, the participants were mostly either university or health service employees, groups with relatively high employability. Third, positive-toned outcomes were in my focus, whereas it is possible that job insecurity, as a demand/ stressor at work, relates more strongly to strain-based outcomes in the work domain, e.g., burnout, job exhaustion (e.g., Dekker & Schaufeli, 1995; Kinnunen et al., 2010; Mauno & Kinnunen, 1999b). Fourth, its effects on family well-being may be mediated by factors such as employability (Mäkikangas et al., 2012), job exhaustion (Mauno & Kinnunen, 1999a), or increased workload (Richter et al., 2010). Here, I did not focus on mediator but on moderator effects, leaving this question open.

4.1.2 The main effects of coping resources

The question of how the available coping resources relate to employee outcomes was also explored in my research. Personal coping resources (i.e., coping strategies, optimism, and emotional intelligence) and contextual coping resources (i.e., job control, social support, and leader-member exchange) were found to directly facilitate employee outcomes. Generally, work- and family-related outcomes appeared to benefit relatively equally from the various personal and contextual coping resources studied, but differed with respect to the type of personal coping strategies used. This is discussed further below.

Both work and family well-being benefited from using the engaged coping strategies, but was impaired if the disengaged coping strategy (i.e., avoidance) was used, which is partially in line with my hypothesis (H3). Although in general the engaged coping is beneficial, specific types of the engaged coping might be more helpful in particular life domains. For example, changing the situation (i.e., changing a stressful situation to meet a person's desires, Edwards, 1988) and accommodation (i.e., adjusting desires to match the situation) were associated with well-being at work (i.e., higher work engagement and emotional energy at work). Symptom reduction (i.e., enhancing perceptions of well-being directly) in turn related to better family well-being (i.e., higher emotional ener-

gy at home). Devaluation (i.e., lowering the level of importance attached to the discrepancy between perception and desires) contributed to both better work (i.e., work engagement, emotional energy at work) and family well-being (i.e., emotional energy at home and marital satisfaction). In contrast, avoidance (i.e., diverting attention away from the situation) was associated with deteriorated work and family well-being. In sum, my research showed that the engaged coping strategies seemed to be adaptive and related to positive outcomes, whereas the avoidance coping strategy appeared to be detrimental for an employee's well-being (Carver & Connor-Smith, 2010; Connor-Smith & Flachsbart, 2007; Penley et al., 2002). Despite this overall trend, it should also be recalled that in my research, the engaged coping comprised four different, although modestly related, coping strategies that showed different patterns of relationships with the studied well-being outcomes. Such scale-based variation is possible, and, in fact, has also been found in previous studies (e.g. Roskies et al., 1993; Skinner et al., 2003). The most recent coping literature suggests that coping strategies should always be examined as broadly as possible (via sub-scales) (Carver et al., 1989; Dewe et al., 2010; Skinner et al., 2003). My findings also highlighted the importance of studying coping strategies beyond narrow taxonomies (Carver et al., 1989; Lazarus, 2006; Skinner et al., 2003) such as problem-focused versus emotion-focused coping, or active versus passive coping.

In support of my hypothesis (H5), both work (i.e., job satisfaction and vigor at work) and family (i.e., work-family enrichment) well-being were promoted when individuals were more optimistic about the future and perceived that they had more job control. This result is consistent with previous findings (Brough & Pears, 2005; Dyson-Washington, 2006; Koyuncu, Burke, & Fiksenbaum, 2006; Mauno et al., 2007; Noblet et al., 2006; Xanthopoulou et al., 2007; for reviews, see Halbesleben, 2010; Mauno et al., 2010). My study also provided longitudinal evidence that optimism is beneficial for both work and family well-being. However, it seemed to take somewhat longer (i.e., about a year) for job control (H5) to show direct beneficial effects. Having job control (i.e., perception of having control over one's tasks, goals, and general work activity, Karasek & Theorell, 1990) implies that employees have the opportunity to make decision about their work activity, in terms of task, schedule, method, and even goals. The perception of having control at work may help employees to experience their work as meaningful, feel responsibility for their work output, and become acquainted with the actual outcome of their work (Hackman & Oldham, 1975; Karasek & Theorell, 1990). Hence, these experiences can be seen as contributing to employee well-being. Being optimistic (i.e., having general positive expectancies for the future, Scheier & Carver, 1985) may directly influence how individuals appraise stressful situations and what resources they can use to cope with it, leading, eventually, to better well-being outcomes (for a review, see Carver & Connor-Smith, 2010).

In line with my expectation (H9), personal coping resources (i.e., emotional intelligence) and contextual coping resources (i.e., leader-member exchange) enhanced employees' organizational commitment. However, partially counter

to my assumption (H9) neither of these two resources directly reduced impaired overall well-being (i.e., psychosomatic complaints). It seems that having a higher level of emotional intelligence (i.e., a set of abilities to deal with one's own and others' emotions, Mayer & Salovey, 1997) enhanced individuals ability to perceive, interpret, express, and manage emotional information, while leader-member exchange (i.e., exchange relationships between supervisors and their subordinates) generated rapport in the workplace, leading to a positive appraisal of the work situation that in turn contributed to organizational commitment, which is in line with previous findings (e.g., Golden & Veiga, 2008; Mayer & Salovey, 1997). However, my finding that impaired well-being, defined as psychosomatic complaints, did not benefit from these two coping resources was not consistent with previous reports that they contribute to less work-related stress (e.g., Golden & Veiga, 2008; Mayer & Salovey, 1990). In addition, social support from supervisors and coworkers (i.e., the availability of help relationships at work and the quality of those relationships, Leavy, 1983) (H5) did not directly enhance either work or family well-being, which is also not in agreement with previous findings (Cinamon & Rich, 2010; de Jonge et al., 2001; Schaufeli & Bakker, 2004; for a review, see Crawford, LePine, & Rice, 2010). Emotional intelligence showed a modest association with organizational commitment at the cross-sectional level but not at the lagged level. The inconsistent relationship between emotional intelligence and the work-related outcomes at different time points suggest that further research is needed to establish a conclusive link between them. The present result implies that as a personality characteristic, emotional intelligence seemed to have limited ability to directly improve well-being. Future research should thus examine emotional intelligence in relation to a broader range of employee outcomes. In addition, because a good quality relationship with one's supervisor and having social support at work did not show longitudinal beneficial effects, future research may need to detect the finer-grained aspects (emotional, esteem, tangible, and informational) of support at work to identify which type of social support promote specific well-being.

In sum, personal coping resources (i.e., the engaged coping strategies and optimism) and contextual coping resources (i.e., job control) showed similarly beneficial effects on employee work- and family-related outcomes. However, the other coping resources studied (i.e., emotional intelligence, social support and leader-member exchange) had relatively modest beneficial, direct effects in enhancing work-related outcomes. None of studied resources directly promoted overall well-being (i.e., psychosomatic complaints).

4.1.3 The moderating role of coping resources in the context of job insecurity

The most prominent finding of my investigation was that personal coping resources (i.e., coping strategies and emotional intelligence) and contextual coping resources (i.e., job control, social support, and leader-member exchange) buffered against the negative effects of job insecurity on various employee out-

comes. In general, in mitigating the negative effects of job insecurity, work-related outcomes are most likely to benefit from both personal and contextual coping resources. In contrast, overall and family well-being benefited only from the studied personal coping resources.

4.1.3.1 Contextual coping resources as buffers against job insecurity

Consistent with my assumption (H7), *job control* showed the strongest lagged buffering effect in the relationship between job insecurity and work-related well-being (i.e., vigor at work). *Social support* also mitigated the adverse effects of job insecurity on vigor at work. In addition, social support showed a tendency to have a lagged buffering effect on job satisfaction and *leader-member exchange* (H10) on organizational commitment at the cross-sectional level. Having decision-making latitude, being able to have control of one's own work schedule, receiving positive support in the work environment from both supervisors and colleagues, obtaining feedback regarding the quality of a task which has been done, seemed to help combat the negative effects of the threat of job loss on work-related well-being. However, these social resources did not appear to improve family well-being in terms of work-family enrichment. The reason why job control and social support did not have a buffering effect in relation to work-family enrichment might be due to the time-frame used--it needs to be longer (or shorter)--or to the involvement of mediating factors, which I did not examine or to the match between certain types of social support and specific stressors. Such mediators could be time pressure, work intensity, or job-related fatigue. Previous studies have shown that job exhaustion mediated the relationship between job insecurity and marital dissatisfaction (Mauno & Kinnunen, 1999a), and that workload may also operate as a mediator between job insecurity and work-family conflict (Richter et al., 2010). These potential mediating mechanisms should be taken into consideration in future studies on the negative effects of job insecurity on family and marital well-being. The 'proximality hypothesis' suggests that job stressors first cause negative emotions in the work domain (e.g., job exhaustion), which are then transmitted to the family domain (Warr, 1987). It is also possible that there is a need to match the types of social support to specific stressors and strains (e.g., Cohen & Wills, 1985; Cutrona & Russell, 1990), as was found in Lim's study (1996), where work-based support reduced the negative effects of job insecurity on job dissatisfaction, proactive job search, and noncompliant behaviors, while support from family and friends buffered against life dissatisfaction related to job insecurity. Hence, to understand how the beneficial effects of social support protect individuals from stress, it is important to operationalize it as a multidimensional construct and match it with specific stressors and strains.

4.1.3.2 Personal coping resources as buffers against job insecurity

In contrast, the engaged personal coping strategies seemed to bolster both work and family well-being, whereas the disengaged coping exaggerated the nega-

tive effects of job insecurity on work-related outcomes but not family-related well-being, which partially supports H3. Although the engaged coping strategies contributed to the enhancement of better work and family well-being, similar to their main effects on job insecurity, different coping strategies moderated the relationship between job insecurity and well-being in different life domains. In the work domain, *changing the situation* buffered the relationship between (higher) job insecurity and (lower) emotional energy at work, and *devaluation* had a tendency to have a similar protective effect in relation to work engagement. However, a frequent use of *avoidance* strengthened the deleterious influence of job insecurity on work engagement, similar to previous findings in studies with a different focus (Day & Livingstone, 2001; Mantler et al., 2005; Parasuraman & Cleek, 1984). Whether coping strategies serve as a buffering or a risk factor depends on the type of coping and strain (Day & Livingstone, 2001; Folkman & Moscowitch, 2004); ultimately, no coping strategy is adaptive in all situations (Cohen, 1987).

By comparison, in the family domain, *symptom reduction* buffered against (lower) emotional energy at home and *accommodation* showed a tendency to minimize the negative effects of job insecurity on marital dissatisfaction. In another words, employees who made more frequent use of the symptoms reduction and accommodation coping strategies reported a less pronounced decrease in their emotional energy at home and higher marital satisfaction. This finding is in line with previous studies on the buffering role of the engaged coping (Bhagat et al., 1995; Koeske et al., 1993; Parkes, 1990; Shimazu & Schaufeli, 2007). It should be pointed out that post hoc analysis shown that the engaged coping (the mean of four sub-scales: changing the situation, accommodation, devaluation, and symptom reduction) buffered against job insecurity in relation to both work and family outcomes. Although the reported analyses for the different sub-scales of the engaged coping indicated that not all engaged coping strategies were equally beneficial buffers against high job insecurity in different life spheres, these associations also depended on criterion variables used. Taken together, the results imply that in the presence of stressor, coping strategies, when studied with multiple sub-categories, especially the engaged coping might result in different outcomes (Brough et al., 2005; Carver et al., 1989; Lazarus, 2006; Skinner et al., 2003).

In line with my hypothesis (H10), personal resource (i.e., emotional intelligence) attenuated the harmful effects of the threat of job loss or loss of job feature on overall well-being (i.e., psychosomatic complaints). By empirically examining the argument that highly emotionally intelligent individuals are more skillful at managing their perceptions of job insecurity than those who are not and are better equipped to cope with situations of uncertainty by reacting appropriately (Jordan et al., 2002), it was found that individuals with high emotional intelligence tended to understand and manage their emotional reactions to job insecurity better than those with lower levels, and thus mitigated its effects on psychosomatic well-being. In addition, emotional intelligence also exhibited a long-lasting moderating effect. It appeared to ameliorate the negative

effect of impaired well-being on subsequent psychosomatic complaints even after experiencing job insecurity for one year. With respect to previous inconsistent results on cognitive reactions to perceived job insecurity, my study to some extent provided evidence that emotional reactions to job insecurity accounted for the various outcomes associated with perceived job insecurity (Huang, Lee, Ashford, Chen, & Ren, 2010).

Contrary to the hypothesis (H6), optimism did not operate as a buffer between job insecurity and the employee outcomes of interest. On the other hand, this finding was consistent with my hypothesis (H7) which proposed stronger moderator effects for social resources (i.e., job control and social support) than for personal resource (i.e., optimism). On the basis of these findings, it can be suggested that whether individuals are optimistic or not did not help to change the uncontrollable nature of job insecurity. Job insecurity is often based more on contextual, organizational and societal (e.g., unemployment rate and economic situation of the organization) than personal factors, and thus its effects may be particularly detrimental to highly optimistic individuals. Uncertainty and uncontrollability, which lie at the heart of job insecurity (De Witte, 1999), may prevent individuals from employing active coping strategies to combat this stressful situation. It is also known that active coping often comes together with high optimism (Carver & Connor-Smith, 2010), implying that perceptions of job insecurity could be more harmful for optimistic employees. In a previous study, the negative effects of job insecurity caused highly optimistic employees to experience more adverse psychological distress than pessimistic ones (Mäkikangas & Kinnunen, 2003).

Consequently, contextual coping resources, that is, job control and social support from supervisors and co-workers, appeared to be more helpful than optimism in managing job insecurity. These contextual coping resources may directly function to solve the stressful situation by giving employees the feeling that they have greater control over their job or allowing them greater decision-making latitude as well as through increased support at work. It has also recently been found that perceived job control mitigated the negative effects of job insecurity on employee well-being, whereas self-efficacy, a personal coping resource did not (Schreurs et al., 2010). On the other hand, it would be unwise to conclude that, on the basis of just a couple of studies, optimism never buffers against job insecurity. At present, whether optimism could help in some phases of the job insecurity process is unknown because it has not been examined in a process of downsizing or other organizational change. During these processes, it is also possible that the level of optimism is likely to fluctuate based on the characteristics and development of the event process (Sweeny, Carroll, & Shepperd, 2006) and varies across cultural backgrounds (Chang, Asakawa, & Sanna, 2001; Taylor & Brown, 1988).

To sum up, the moderating role of personal resources (i.e., the engaged coping strategies and emotional intelligence) and social resources (i.e., job control, social support, and leader-member exchange) in the face of job insecurity provides support for the conservation of resources theory (Hobfoll, 1989), ac-

cording to which both personal and contextual coping resources could aid stress resistance. In the presence of job insecurity, individuals strive to make use of both personal (i.e., the engaged coping strategies) and social coping resources (i.e., job control, social support, and leader-member exchange) to combat its influence on work-related outcomes as well as employ personal resources (i.e., the engaged coping strategies and emotional intelligence) to alleviate its harmful effects on family and overall well-beings. These resources can help individuals to maintain their resource balance or gain more resources to maintain their resource pool and prevent future resource loss. In another words, all these coping resources could be beneficial for employees to successfully attenuate the negative effects of job insecurity on overall, occupational, and family well-being. The results also provide valuable information for organizations and authorities that although job insecurity is stressful, effective strategies and interventions could help to prevent its potential detrimental effects, thereby improving the quality of life of employees, enhancing organizational effectiveness, and helping to maintain the stability and prosperity of society.

4.2 Conceptual and methodological considerations

4.2.1 The concept of job insecurity

Due to the far-reaching changes in contemporary working life, increasing attention has been paid to perceived uncertainty of the future career among employees. The pioneering work of Greenhalgh and Rosenblatt (1984), who defined the concept of job insecurity, marked the beginning of a shift in the research focus away from regarding job security as a motivator (Herzberg, 1959; Maslow, 1954) to considering job insecurity as a work stressor (Ashford et al., 1989). Job insecurity has been defined in a variety of ways, as was reviewed earlier. The basic tenet of these definitions is that job insecurity is to be considered a work stressor, which has various deleterious consequences. Despite similarities in definitions, there are many different approaches to the operationalization of the job insecurity concept.

Generally speaking, operationalizations of the concept of job insecurity may be classified into two basic groups: global and multidimensional (e.g., Mauno, 1999; Sverke et al., 2002). The global approach usually measures job insecurity with a single item (e.g., Mohr, 2000) or multiple items (Caplan et al., 1975; Johnson, Messe, & Crano, 1984; van Vuuren, 1990) by using a summed score which indicates either overall concern about the probability of job loss (e.g., Mohr, 2000; van Vuuren, 1990) or fear of job loss (e.g., Johnson et al., 1984). In contrast, the multidimensional approach aims to measure different aspects of job insecurity. Several multidimensional approaches have been suggested; for example, objective versus subjective (e.g., De Cuyper, De Witte, Vander Elst, & Handaja, 2010; Hartley et al., 1991; Klandermans, Hesselink, & van Vuuren, 2010), cognitive versus affective (e.g., Borg & Elizur, 1992; Huang et al., 2012;

Reisel & Banai, 2002; Staufenbiel & König, 2011), qualitative versus quantitative job insecurity (e.g., De Witte, De Cuyper, Handaja, Sverke, Näswall, & Hellgren, 2010; Hellgren, Sverke, & Isaksson, 1999). So what, then, is the difference and relationship between these various multidimensional approaches to the measurement of job insecurity? Below, a view integrating all these approaches will be presented.

In the debate about whether job insecurity is an objective or subjective phenomenon, researchers have argued that job insecurity is a subjective phenomenon that is independent of objective situations such as economic recession, unemployment rate, and downsizing (e.g., Hartley et al., 1991, p. 2; Klandermans et al., 2010; Sverke et al., 2002). The basic assumption is that regardless of the objective job insecurity situation, individuals may develop a feeling of job insecurity. Employees displayed strong feelings of job insecurity in an organization where the risk of objective job insecurity was low, while people in the companies experiencing severe economic slowdown, i.e., high objective job insecurity, remained confident about their future employment (De Witte, 2005; Klandermans & van Vuuren, 1999; van Vuuren, 1990). This implies that objective job insecurity situation is not necessarily harmful, but it is the subjective appraisal of the objective situation, which is detrimental for employee outcomes. So far, there is no general consensus about how to measure objective job insecurity. It has been assessed by objective contract type (Klandermans et al., 2010), company and department economic situation (Roskies et al., 1993), and objective employment status (De Cuyper et al., 2010). Although job insecurity was regarded as a subjective phenomenon, research has shown an obvious association between job insecurity perceptions and employment status, indicating a vulnerable labor market position (Näswall & De Witte, 2003), national levels of unemployment, and poor economic situations (e.g., De Weerdt, De Witte, Catellani, & Milesi, 2004; Nätti, Happonen, Kinnunen, & Mauno, 2005). Hence, perceiving job insecurity can be seen as reflecting a personal evaluation of one's objective employment situation in the labor market (De Witte, 2005).

Based on the extent to which the objective situation can prompt individuals to perceive job insecurity, it is reasonable to propose that objective job insecurity can be measured on the following levels: global economic situation and unemployment rate, country level, regional level (city/town), industry level, organization level, department level, career level, and individual level (e.g., contract type, employment status). The closer the situation is to the individual, the stronger the impact of the perception of job insecurity. It may be too optimistic to include all these antecedents in one study, since job insecurity is a sensitive topic for organizations, which are generally reluctant to participate in this type of research. However, identifying these antecedents also highlights the importance of a comparison study, for example, comparing people from different countries and/or cultures with diverse economic levels and social welfare systems.

In addition to the threat of imminent job loss, other important dimensions of job features such as demotion, career security, changing job location, and sal-

ary decrease could also be a central concern which might induce perceived uncertainty of current employment among employees. In response to this argument, researchers have differentiated between qualitative (i.e., the important dimensions of job feature) and quantitative (i.e., concern about the continued existence of the current job) job insecurity (Hellgren, Sverke, & Isaksson, 1999). It might be meaningful to make this distinction, because awareness of the threat of losing quality in one's employment, such as lack of opportunity for career development, promotion, and salary increase, as well as deterioration in working conditions, may present employees with a challenging stressor that motivates them to enhance their work effort and promote work performance. In contrast, perception of a potential threat to the continuance of the current job may act as a hindrance stressor, and thus likely to result in negative consequences. To summarize, qualitative job insecurity emphasizes the important features of a job, whereas quantitative job insecurity reflects concern about total job loss. Both qualitative and quantitative job insecurity are cognitive components of job insecurity, as is explained next.

Some researchers have argued that an affective/ emotional component of job insecurity should be distinguished from a cognitive component (Borg & Elizur, 1992; Huang et al., 2010; Huang et al., 2012; Reisel & Banai, 2002), as it is not necessary that employees would have emotional reactions while they are aware of the instability of current employment. For example, many empirical studies have shown that perceived job insecurity resulted in more negative consequences among permanent workers than temporary workers (e.g., De Cuyper & De Witte, 2006, 2007; De Witte & Näswall, 2003; Mauno, Kinnunen, Mäkikangas, & Nätti, 2005). The researchers proposed therefore a distinction between cognitive job insecurity, which refers to awareness of the possibility of job loss, and affective job insecurity, which refers to emotional reactions to the possibility of job loss. Affective job insecurity is the outcome of cognitive job insecurity and acts as a mediator between cognitive job insecurity and its outcomes (Huang et al., 2010; Huang et al., 2012).

The above-analysis of these different approaches to the operationalization of the job insecurity concept which are most frequently used among researchers led to an attempt to integrate these approaches to better our understanding of job insecurity. In my investigation, both global (Studies I and II) and multidimensional (Study III) approaches were applied. Although a multidimensional approach was adopted in my research, no distinction between the perception of potential loss of the total job and the loss of important job features has been made. Hence, no conclusion can be drawn from my research about whether the distinction between qualitative and quantitative job insecurity in the multidimensional approach would result in different outcomes. It is left for future research to employ finer-grained measures of job insecurity.

Although researchers have differentiated qualitative job insecurity from quantitative job insecurity (Ashford et al., 1989; Hellgren et al., 1999), no measure has yet been developed to distinguish the different affective responses to these. Previous studies have used items, such as "The thought of losing my job

troubles me" (Borg & Elizur, 1992; Staufenbiel & König, 2011), "I am scared by the thought of losing my job", "I feel uneasy about my chances for remaining with this company" (Huang et al., 2012), and "To what extent are you worried at the present time about your continued employment in your current job" (Hartley et al., 1991), to measure affective reactions to quantitative job insecurity (i.e., perception of the threat to the total job). However, no scale has been developed to measure affective responses to perceptions of the potential loss of important job features. Some researchers have also suggested that since qualitative job insecurity consists of many components, it is possible to divide them into separate dimensions; however, the measurement properties of so doing are far from clear (Sverke et al., 2002). Future research should consider more frequently adopting multidimensional operationalization of the job insecurity concept, as it may offer a more comprehensive perspective on the target phenomenon than the global approach.

4.2.2 Methodological limitations

Some consideration should be given to methodological limitations in my research. First, I relied exclusively on self-reports for the measurements, which can lead to common method bias and inflation of the magnitude of the relationships observed (Podsakoff, Mackenzie, Lee & Podsakoff, 2003; Spector, 2006). However, common method variance reduces rather than increases interaction effects (Conway & Briner, 2002); common method bias would thus provide a more conservative test of my hypotheses. Not all the relations between the constructs were strong, and hence common method variance seems unlikely to be a major issue. However, to minimize this risk, future research might adopt multiple measurement methods (such as supervisor- or colleagues-rated criterion variables, sickness absence, length of sick leave, heart-beat rate and blood pressure as indicators of health). Second, two of my studies comprised either an exclusively female sample or a sample with a majority of women (86 percent). Previous studies have indicated that female and male employees respond differently to perceived job insecurity (e.g. De Witte, 1999; Näswall & De Witte, 2003; Rosenblatt, Talmud, & Ruvio, 1999). Thus, the findings from my research should be interpreted with caution and this limitation may affect the ability to generalize the results to the industries where male employees are dominant.

Third, the study sites selected for this research were a developed country (i.e., Finland) and a developing country (i.e., China). The results showed that job insecurity had both immediate and persistent effects on employees in both countries. However, no other comparison between Finland and China was conducted as part of my investigation. It is likely that cultural differences may exist in responses to perceived job insecurity. A prior study found that individuals with collectivist cultural values reacted more negatively to the potential threat of job loss than their individualist counterparts (Probst & Lawler, 2006). Hence, caution is advised in seeking to generalize the results from my research to different cultural backgrounds. Cultural differences in individuals' response to job insecurity perception merit further examination. For example, with globaliza-

tion, there has been a gradual increase in the numbers of international companies and, in the total workforce of employees from different cultural backgrounds. In order for organizations to operate smoothly and improve their organizational effectiveness when implementing organizational changes or downsizing, it is important that they take their employees' cultural backgrounds into account. Because culture tends to influence individuals' value systems and their roles in the social structure, and guides the range of normative behavior (Probst & Lawler, 2006). Organizations should consider using culturally appropriate strategies when informing employees from different cultural backgrounds about personnel change, as this may help them to accept these changes in more peaceful or reasonable way. Furthermore, it is also likely that different coping resources may be effective or useful for people from different cultures. Thus, taking into account the dimension of cultural difference may contribute to an understanding not only of employees' reactions to work stressors (i.e., job insecurity) but also of what resources might be effective in helping them cope with those stressors.

Fourth, although a longitudinal design has been applied in my research, no information was obtained about how long the participants had experienced job insecurity. By comparing the level of job insecurity pre- and post-organizational change, and the differences in the strength of the relation between job insecurity and its employee outcomes, future research could provide valuable information about how the experience of job insecurity develops and what coping resources would be more effective in which stage in the development of job insecurity. It could also sharply increase the effectiveness of interventions to combat the negative effects of job insecurity on employees and organizations.

Finally, only a variable-centered approach was used along with the cross-sectional and/or longitudinal designs in my research. The drawback of this method is that it mainly focuses on the general stability of or change in the variables as a total group or in predefined subgroups of respondents (e.g., Mäkikangas et al., 2012). However, a person-centered investigation, especially with a longitudinal design would provide novel information about subgroups differing in the development of perceived job insecurity and so better capture the heterogeneity of individual change trajectories. This heterogeneity would be revealed by identifying subgroups of individuals who follow a similar pattern of mean-level stability or change in job insecurity over time. Hence, future research could investigate job insecurity by utilizing a person-centered approach that would yield more reliable information about individual employees and lay a solid foundation for effective interventions to prevent its negative effects and enhance psychological well-being and organizational effectiveness.

4.3 Implications and future directions

The results of my investigation, at least to some extent, provided evidence that the negative consequences of job insecurity could be mitigated either directly or indirectly with the assistance of personal and contextual coping resources. Hence, the findings provide meaningful practical implications not only for organizations but also for government (policy-makers).

Job insecurity, an individual's subjective evaluation of the threat of job loss or the loss of valued job features, is based more on contextual, organizational, and societal factors (e.g., economic situation and unemployment rate). As these factors are always outside of an employee's personal control, it seems that contextual resources are more relevant in aiding stress resistance. In my research, job control was the most consistent longitudinal buffer, while social support reduced the deleterious effects of job insecurity over time and a quality relationship with supervisors attenuated the effects of psychosomatic complaints as a result of job insecurity on organizational commitment. Consequently, organizations, if they want to reduce the negative effects of job insecurity on employee outcomes, especially work-related outcomes, such as vigor at work, job satisfaction, and organizational commitment, should provide control and social support for their employees as well as promote rapport in the workplace. These factors are the most relevant resources against excessive workload in the stress model of Karasek (Karasek & Theorell, 1990); the present research confirmed that they matter in the presence of job insecurity as well, and that their protective effects can also be longer-lasting. Hence, organizations should invest in both social support and job control when seeking to combat increased job insecurity.

Sometimes contextual coping resources may not be available for employees to cope with job insecurity. However, personal coping resources that could assist them to respond less negatively to job insecurity as a stressor usually reside within the individual's personality or cognitive structure. Hence, they are more tangible for employees in handling stressful situations. Personal coping strategies can be modified, at least to some extent, with an appropriate psychosocial intervention, such as coping effectiveness training (Folkman et al., 1991; Taylor & Stanton, 2007). My research showed that employees' coping strategies alter the relationship between job insecurity and strain. Therefore, stress management interventions should focus on encouraging employees to adopt more active coping methods, such as engaging in active problem-solving, setting realistic goals, thinking about alternative possibilities, minimizing the importance of the negative impact of stressful situations, and improving their well-being perceptions to promote both occupational and family well-being.

Moreover, emotional intelligence may also be enhanced through an appropriate training program (Slaski & Cartwright, 2003). Emotional intelligence, the ability to deal with emotion information, is an important personal resource for individuals to maintain and facilitate psychological well-being. When con-

fronted with the potential threat of job loss, emotional intelligence can assist individuals to react less emotionally, think more reasonably about the stressful situation, and thus adopt more effective coping strategies to offset the stressor. It is thus possible for organizations to adopt such programs to enhance their employees' emotional intelligence levels and to reduce the adverse effects of job insecurity, thereby contributing to employee well-being and organizational productivity. It should be noted that although there is quite a strong consensus on interpreting emotions, many differences between individuals from diverse cultural backgrounds doubtless exist in understanding and managing emotional information. Thus, culture differences should be taken into account when generalizing the findings of my research to different cultures and also when designing emotional intelligence training programs, applying these in different culture environments, and evaluating their effectiveness.

However, an organization might be less likely to initiate an intervention program for employees immediately when they begin to experience job insecurity due to the need to give full attention to implementing restructuring or down-sizing. Yet because job insecurity remains a relatively uncontrollable stressor, employees are likely to adopt avoidance coping initially, which could heighten the negative relationship between their job insecurity and well-being (Amiot et al., 2006). My research also showed that avoidance coping had the strongest negative effects on employee outcomes. Therefore, when noticing the beginning of an economic slowdown, government should take steps to prevent the negative effects of job insecurity. In other words, before individuals adopt coping strategy to deal with job insecurity, intervention strategies can be used to encourage employees to shun avoidance coping (Parasuraman & Cleek, 1984).

Although a growing amount of research has shown that job insecurity results in various detrimental consequences at the individual, organization, and society levels, a considerable variation in the strength of the relationships between job insecurity and its outcomes has been reported in two recent meta-analyses (Cheng & Chan, 2008; Sverke et al., 2002). This implied that more research is needed to identify the factors that may explain this variation. These factors may represent different mechanisms such as mediating and moderating effects. Increasing attention has recently been paid to mediating factors in the field of job insecurity. Job satisfaction has frequently been identified as a mediator in the relation between job insecurity and various employee outcomes, such as turnover intention and mental health (Chirumbolo & Hellgren, 2003), impaired organizational citizenship behavior, deviant behavior, and anxiety (Reisel, Probst, Chia, Maloles, & König, 2010), as well as safety motivation and knowledge, and reported compliance with safety policies (Probst & Brubaker, 2001). There is also a need to identify other mediating factors. Future research should investigate whether perceived unfairness (Bernhard-Oettel, De Cuyper, Schreurs, & De Witte, 2011), work involvement (Stiglbauer et al., 2012), vigor and job exhaustion (Mauno, De Cuyper, Tolvanen, Kinnunen, & Mäkikangas, 2013; Mauno & Kinnunen, 1999a), psychological contract breach (De Cuyper & De Witte, 2007, 2008), perceived control (Vander Elst, De Cuyper, & De Witte,

2011), and work overload (Ritcher et al., 2011) mediate the relation between job insecurity and a wide scope of employee outcomes.

In addition to the mediating effect, research should also expand our knowledge about what other resources would be beneficial for individuals in coping with job insecurity by broadening the range of possible moderating factors, such as sense of coherence, self-efficacy, locus of control, more widely-defined different types of coping strategies, style of leadership, the manner and effectiveness of communication at work, the perception of justice, job involvement, and so on. For example, during organizational change or restructuring, allowing employees to access to accurate and adequate information via effective communication between them and their organizations could promote a sense of certainty. Having certainty about one's job status, even if this means the unwelcome certainty of being laid off, is less detrimental to one's psychological well-being than prolonged job insecurity (van Vuuren, 1990). If they are informed about being redeployed or made redundant, uncertainty will be relieved allowing employees to prepare for the impending transition (Jacobson, 1991). In addition, treating employees fairly during downsizing, making management decisions about employment status known as early as possible, offering the opportunity of re-training for alternative employment, and gathering employment openings even outside the organization and informing employees these job opportunities could enhance the perception of justice, or perceived fairness, which may prevent the development of job insecurity (Brockner et al., 1992; Davy et al., 1991; Hartley et al., 1991; Heaney et al., 1994). Moreover, allowing individuals to have intensive and extensive involvement at work, giving them the opportunity to have job-related decision-making latitude, and encouraging an atmosphere in which supervisors consult employees on work-related issues (Evans & Fisher, 1992; Probst, 2005) would give them a sense of control. In a word, once a more comprehensively understanding of these underlying mechanisms in the relation between job insecurity and its outcomes is achieved, the most important next step is to develop an effective intervention program to prevent job insecurity and facilitate its coping process.

As a consequence of global economic rivalries and the constant updating of high technology in industries, it seems that organizations cannot avoid constant restructuring and organizational changes, if they are to survive in a rapidly changing economic environment. This implies that organizations can not ensure job security for their employees. However, some effective strategies may exist to prevent the occurrence of job insecurity or the development of prolonged job insecurity. For example, it has been suggested that human resources departments plan reasonable recruitment and cautious hiring, offer career counseling and planning, and provide training and even outplacement (Van Vuuren, 1990). In a situation of inevitable economic downturn, such strategies could render workforce downsizing less severe. When organizational restructuring and changes are to be undertaken, the period of implementation should be as short as possible (Dekker & Schaufeli, 1995). In personal opinion, a stress prevention program is more vital and meaningful than a stress intervention

program in light of the negative effects of job insecurity and the eventual cost for individuals, organizations, and society.

Effectively preventing and offsetting the negative impact of job insecurity are beneficial not only for an employee's psychological well-being but also for an organizations' productivity and the stability of society as a whole. Along with the global financial crisis and economic instability experienced during the past few decades, job insecurity has attracted increasing attention among researchers, practitioners, and policymakers, since in the absence of effective means to cope with job insecurity, the likely outcomes are increased sickness leave, less job involvement, absenteeism, anxiety, depression, and impaired mental health. If the impact of job insecurity on individuals' well-being persists, an increase in the prevalence of various serious mental health and social issues, such as suicide and alcohol-related mortality, which impose a considerable economic and social burden, can be expected. All efforts to investigate factors that could prevent and attenuate the impact of job insecurity would help reduce the substantial direct and indirect costs (about 3-4% of GDP in the European Union) of mental health problems (OECD, 2008) caused by the threat of job loss and high psychological demands at work.

YHTEENVETO (SUMMARY)

Työn epävarmuuden puskurit: Uusien puskuroivien voimavarojen tarkastelu koetun työn epävarmuuden ja sen seurausten välillä

Globalisaatio ja kiristyvä kilpailu pakottavat organisaatioita vähentämään kustannuksia esimerkiksi irtisanomisten, lomautusten ja muiden uudelleenjärjestelyjen kautta. Tänä päivänä monien organisaatioiden täytyy toimia kustannustehokkaammin. Tämä vaatimus merkitsee lisääntyviä joustavuusvaatimuksia työmarkkinoilla, mikä työntekijän näkökulmasta näyttäytyy usein työn epävarmuutena, jolla tarkoitetaan työn menettämisen tai työssä tapahtuvien kielteisten muutosten uhkaa. Työn epävarmuutta on tutkittu jo melko pitkään, ja tiedetään, että se kytkeytyy kielteisesti työntekijän hyvinvointiin ja motivaatioon ollen näin merkittävä työn kuormitustekijä. Näyttää myös siltä, että työn epävarmuutta on vaikea välttää nykyisessä ja tulevassa työelämässä. Siksi keskeiseen asemaan nousevat puskuroivat stressinhallinnan voimavarat, joiden avulla työntekijä voi paremmin hallita työn epävarmuutta tai sopeutua siihen. Toistaiseksi tällaisia työn epävarmuudelta suojaavia voimavaroja on tutkittu melko vähän. Tutkimukseni keskeisin tavoite oli tutkia työn epävarmuuden suojaavia, puskuroivia voimavaroja, jotka voivat vähentää työn epävarmuuden kielteisiä vaikutuksia hyvinvointiin.

Tutkimuksessani tarkastelin sekä yksilöllisiä että tilannesidonnaisia stressinhallinnan voimavaroja koetun työn epävarmuuden ja sen hyvinvointiseurausten suhteen. Yksilöllisiä voimavaroja olivat emotonaalinen älykkyys, optimismi ja stressinhallintastrategiat. Tilannesidonnaisina voimavaroina tarkastelin työn tarjoamia vaikutusmahdollisuuksia ja sosiaalista tukea sekä esimies-alaisvuorovaikutussuhteen laatua. Käyttämäni tutkimusaineistot olivat sekä pitkittäis- että poikkileikkausaineistoja, jotka oli kerätty sekä suomalaisilta että kiinalaisilta työntekijöiltä. Aineistojen keruun aikoihin molemmissa maissa oli työn epävarmuutta lisääviä makrotason tekijöitä: Suomessa taloudellinen laskusuhdanne ja Kiinassa taloudelliset uudistukset markkinatalouden suuntaan. Tarkastelin tutkimuksessani monia erilaisia työn epävarmuuden hyvinvointiseurauksia. Työhön liittyviä seurauksia olivat koettu työn imu, tarmokkuus ja emotionaalinen energisyys työssä. Selvitin työn epävarmuuden mahdollisia seurauksia myös työn ulkopuolella parisuhdetyytyväisyyden, työn ja perheen rikastuttamisen sekä kotona koetun emotionaalisen energisyyden kautta. Myös psykosomaattista oireilua tarkastelin yhtenä yleisen hyvinvoinnin kuvaajana.

Tutkimukseni antoi kolme keskeistä tutkimustulosta. Ensinnäkin, työn epävarmuuden yhteydet heikentyneeseen hyvinvointiin voivat olla myös pitkäkestoisia tai viiveellä tapahtuvia. Toiseksi, tutkitut stressinhallinnan voimavarat olivat usein myönteisiä koetun hyvinvoinnin kannalta ja yhdistyivät korkeampaan koettuun hyvinvointiin. Kolmanneksi, sekä yksilölliset (paitsi optimismi) että tilannesidonnaiset stressinhallinnan voimavarat puskuroivat työn epävarmuuden kielteisiä hyvinvointiseurauksia vastaan vähentäen näin työn

epävarmuuden haitallisuutta työntekijän hyvinvoinnille. Sekä yksilölliset että tilannesidonnaiset voimavarat auttoivat työntekijää kovassa epävarmuustilanteessa, kun mittapuuna oli työperäinen hyvinvointi. Toisaalta, yleinen (so. oireilu) ja perhetason hyvinvointi hyötyi ainoastaan yksilöllisistä voimavaroista, jos työn epävarmuutta koettiin paljon. Johtopäätöksenä tutkimukseni tuloksista esitän, että vaikka työn epävarmuus on usein vakava riski työntekijälle, kytkeytyen monenlaisiin hyvinvoinnin ongelmiin, sen kielteisiä vaikutuksia voidaan lievittää toimivilla stressinhallinnan voimavaroilla. Teoreettisena johtopäätöksenä esitän, että työn epävarmuuden käsitteellistäminen ja mittaaminen tarvitsevat lisähuomioita jatkotutkimuksissa. Lisäksi myös kulttuurierot täytyy ottaa huomioon, kun tarkastellaan työn epävarmuutta ja sen seurauksia työntekijöiden kannalta.

Tutkimustuloksillani on myös käytännön sovellusarvoa työelämän kehittämisessä. Koska työn epävarmuus usein liittyy olosuhteisiin organisaatiossa ja myös laajemmin yhteiskunnassa (esim. taloudelliset vaikeudet, korkea työttömyysaste), erilaiset organisatoriset voimavarat, kuten hyvä työn hallinta, vaikutusmahdollisuudet suhteessa omaan työhön ja päätöksentekoon organisaatiossa, sosiaalinen tuki työyhteisössä ja laadukas esimies-alaisvuorovaikutussuhde, nousevat keskiöön työn epävarmuuden vaikutusten lievittäjinä. Tutkimukseni osoitti, että nämä organisatoriset stressinhallinnan voimavarat auttavat työn epävarmuustilanteessa olevaa henkilöstöä. Näiden voimavarojen ohella organisaatioissa tulee kiinnittää huomiota henkilöstön yksilöllisiin stressinhallintastrategioihin, jotka voivat myös auttaa työn epävarmuustilanteessa. Esimerkiksi erilaiset interventiot, jotka tähtäävät aktiivisten stressinhallintastrategioiden käyttämiseen (mm. realististen tavoitteiden asettaminen, vaihtoehtojen punnitseminen) sekä tunteiden kontrolloinnin ja ilmaisun kehittämiseen, voivat edesauttaa työn epävarmuustilanteista selviytymistä. Lisäksi optimistinen asennoituminen elämään näyttäisi tulosteni mukaan edistävän hyvinvointia, ja on sinänsä tavoittelemisen arvoista, vaikka se ei tutkimuksessani suojannut työn epävarmuudelta.

Organisatorisissa muutostilanteissa organisaatioiden olisi hyvä konsultoida ajoissa esimerkiksi työterveyshuoltoja, jotta erilaisiin stressinhallinnan voimavaroihin voitaisiin panostaa jo ennen organisaatiomuutosten käynnistämistä. Muutosten toteuttamisesta vastaavien tahojen, esimerkiksi organisaation johdon, olisi myös syytä olla tietoisia, millaisia vaikutuksia työn epävarmuudella on yleensä henkilöstöön ja miten näitä vaikutuksia voidaan minimoida ja hoitaa.

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