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Employment status and job insecurity: On the subjective appraisal of an objective status

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Abstract
The article argues that job insecurity has subjective aspects that are not determined by the objective levels of security of someone's employment status. These subjective aspects can be divided into two elements: the perceived probability and the perceived severity of job loss. The psychological consequences of job insecurity supposedly vary as a function of the objective status and the two constituting elements of subjective job insecurity. Results are reported from a study in the Netherlands among 1706 workers in five employment statuses that differ in degree of security. The perceived probability and severity of job loss were assessed, as were five possible consequences of subjective insecurity. The article shows that (1) job insecurity reflects the 'objective' conditions people are in; (2) the appraisal of job insecurity results from the functioning of the probability and severity of job loss; and (3) probability and severity have different consequences depending on employment status.

Since Greenhalgh and Rosenblatt (1984) published their seminal article on job insecurity, a small industry of research into job insecurity has developed. Subject of enduring debate among the workers in that industry is the issue of whether job insecurity is an objective

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or a subjective phenomenon (De Witte, 2005; Klandermans and Van Vuuren, 1999). The purpose of this article is to show (1) that subjective job insecurity is an appraisal of someone's objective employment status; (2) that subjective job insecurity must be separated into the perceived probability and the perceived severity of job loss; and (3) that perceived probability and perceived severity have different psychological consequences depending on someone's objective employment status.

In their contribution to the debate, Van Vuuren (1990) and Klandermans and Van Vuuren (1999) demonstrated that irrespective of the objective situation, workers might display feelings of job insecurity. These authors report research demonstrating that in companies where there is little objective insecurity some workers nonetheless display feelings of job insecurity, whereas in other companies some workers remain optimistic about the future of their job despite the bleak prospects of their organization.

The debate was further fuelled by such research as reported by De Witte and his colleagues (De Cuyper and De Witte, 2005, 2006, 2007; De Witte and Näswall, 2003) revealing that job insecurity had more detrimental effects among permanent workers than among temporary workers. This is not to say that temporary workers do not experience job insecurity. In fact, workers on temporary contracts do display stronger feelings of job insecurity than workers in permanent jobs (Kinnunen and Natti, 1994; Klein Hesselink and Van Vuuren, 1999; Parker et al., 2002; Pearce, 1998), but the psychological consequences seem to differ from what one would expect (e.g. Beard and Edwards, 1995). De Witte and colleagues (De Cuyper and De Witte, 2005, 2006, 2007; De Witte and Näswall, 2003) hypothesized that contract type and job insecurity interact in the consequences both have for such matters as life satisfaction, job satisfaction and organizational commitment. They found that only among workers with a permanent job, did job insecurity correlate negatively with well-being, especially job-related well-being such as job satisfaction and organizational commitment. Among workers on temporary contracts such effects were not observed. Similar findings were found in a range of European countries (Aronsson et al., 2002; Klein Hesselink and van Vuuren, 1999; Paoli and Merllie, 2002; Pearce, 1993; Sverke et al., 2000; Van Breukelen and Allegro, 2000).

Research on temporary contracts indicates an important distinction in the objective circumstances that give rise to job insecurity. On the one hand, there is the situation of workers on a permanent contract whose job is no longer secure, because the company is declining, downsizing, moving to another country, closing departments down, or closing down altogether. This is the context in which Van Vuuren and many other scholars conducted their research. Invariably, job insecurity appears to be detrimental is this context. On the other hand, there is the situation of workers on temporary contracts. For these workers insecurity is a permanent characteristic of their employment status. This is the kind of context in which De Witte and colleagues have been studying job insecurity. Their comparison of permanent and temporary workers suggests that insecurity does not have as many negative consequences for temporary workers. These findings are in line with the argumentation of Hartley and Jacobson (1991) that for workers with flexible contracts, job continuity in the same organization is not an integral part of their set of expectations. Unlike permanent workers, who expect their position in the organization to be safe, they tend to see moving to other jobs and organizations as part of the picture.

In other words, objective insecurity can be a permanent characteristic of someone's employment status or a prospect a company can bring to its workers. Individuals respond to these objective situations by displaying varying degrees of subjective insecurity. Although there is no complete match between objective and subjective insecurity, it would be a mistake to look at job insecurity as subjective appraisal only. Employing a longitudinal research design Van Vuuren (1990; Klandermans and Van Vuuren, 1999) demonstrated that at the aggregate level subjective job insecurity adapts to changes in objective insecurity over time. In a company that experienced a period of heightened uncertainty, the workers displayed increased levels of job insecurity. Conversely, in another company where the objective situation improved considerably, workers displayed reduced levels of job insecurity. Finally, in a third company, where the future remained bleak, job insecurity stayed at the same high level. In none of the three companies did objective circumstances alone account for the observed level of job insecurity. Objective situation, personality and personal characteristics all had to be taken into account.

The debate on objective vs subjective insecurity is more than just another controversy between academics. It is demonstrated over and again that subjective job insecurity has serious psychological consequences, both short-term and in the long run (Cheng and Chan, 2008; Sverke et al., 2002). Indeed, the literature gives reason to believe that feelings of job insecurity are more aggravating than actual job loss or dismissal (Dekker and Schaufeli, 1995) and as detrimental as being unemployed (De Witte, 1999). At the same time, increasing numbers of workers are on all kinds of temporary contracts. Hence, understanding job insecurity and differentiating what part originates in people's head and what part in their circumstances is crucial for those who want to redress its negative consequences.

In temporary employment contracts, job insecurity is present on a continuous basis, but we expect the reaction to job insecurity of workers on temporary contracts to be less strong than those of permanent employees, because these latter employees have more to lose. Along this line of thinking, Van Vuuren (1990) defined subjective job insecurity as a personal concern about the continuity of the job. Klandermans et al. (1991) stated that this concern about the continuity of the job consists of the perceived probability and the perceived severity of losing one's job. Both components are important, or as these authors framed it: 'The more likely it is that a person will lose his or her job and/or the more severe the consequences of the loss are, the stronger his or her feelings of job insecurity will be' (Klandermans et al., 1991: 41). Jacobson (1985: 33) formulated it even stronger in his Jobs-at-Risk Model: 'Employees only feel insecure about their jobs if they perceive it likely to lose their jobs and perceive the consequences as serious.' Jacobson (1991: 33) explains the importance of both components of job insecurity as follows: 'I can only be worried about losing my job if I think it is likely that I will lose it. But, if I do not care about my job, the likelihood of losing my job is of little concern to me.'

Greenhalgh and Rosenblatt (1984) were the first to consider job insecurity as a multi-dimensional concept. They conceptualized job insecurity as the perceived severity of the threat of losing one's job and the perceived powerlessness to counteract the threat. Severity depends in their eyes on the importance of the perceived costs of job loss and the subjective probability that these losses will occur. The dimension of powerlessness can be included in the probability component, since powerlessness to resist the threat

makes the loss more likely (Jacobson, 1991). Also Sverke et al. (2002) recommend the use of multidimensional instruments that take a wider perspective than probability meas-ures alone. These authors claim that scales capturing fear or worry of job loss best reflect the conceptual definition of job insecurity. We define job insecurity as 'a concern about the future of one's job' as well, but we keep the 'probability' and 'severity' components apart and study their impact separately. This definition of job insecurity is in line with expectancy theory (Feather, 1982; Mitchell, 1982; Porter and Lawler, 1968). This theory analyses an individual's attitude towards a specific event as a function of the probability of the event and the value of expected outcomes of its occurrence. In our case, the per-ceived probability of job loss represents the expectancy component, and the severity the value component.

Every factor, condition or circumstance that influences the perceived probability, the perceived severity, or both, influences job insecurity. We presume that probability and severity vary independently. Therefore, factors that impact on the probability of losing one's job are not necessarily the same as those impacting on the severity of job loss. Neither are the consequences of the one factor necessarily the same as those of the other.

The neglect to differentiate between both aspects of losing one's job might account for the inconsistencies found in the literature on the consequences of temporary employ-ment for employees' well-being, attitudes and behaviour (De Cuyper and De Witte, 2008). It is conceivable that perceived probability and perceived severity of job loss have a diverging impact. In the case of workers with a temporary employment contract the perceived probability of job loss is often high, but the severity of job loss often low. On the other hand, permanent workers estimate the probability of losing their job as low, but the severity as high. This explains why in the latter situation a small change in probabil-ity might have dramatic consequences, while in the former case large changes in proba-bility do not really matter.

Consequences of job insecurity

The consequences of job insecurity most often documented are declining levels of psy-chological well-being on all kinds of indicators. Job insecurity is considered a work-stressor, and unsurprisingly has a negative impact on various indicators of work-related well-being. Meta-analyses conducted by Sverke at al. (2002) and Cheng and Chan (2008) revealed that job insecurity goes together with negative occupational attitudes such as low levels of job satisfaction and organizational commitment and also – but to a lesser degree – with reduced physical and mental health.

In the present study, we focus on job satisfaction and on physical and mental health. Within the health indicators we differentiate between overall well-being (i.e. self-rated health, sickness absenteeism and presenteeism – working in spite of illness) and family well-being (i.e. work–home interference; Kinnunen and Mauno, 1998; Mauno and Kinnunen, 1999; Van Hooff, 2007). We choose this three indicators of overall well-being to make a distinction between the consequences on being able to attend (self-rated health) and on the pressure to attend (sickness absenteeism and presenteeism). Work–home inter-ference as an indicator of family well-being is of interest as it shows negative spillover effects of work to family well-being (Mauno and Kinnunen, 1999)

Theoretically, the detrimental consequences of feelings of job insecurity are accounted for by psychological contract theory (De Cuyper and De Witte, 2006, 2008; Sverke et al., 2004; Van Vuuren, 1990). This theory is useful in understanding why in the case of temporary workers job insecurity has fewer detrimental consequences. De Cuyper and De Witte distinguish between transactional and relational psychological contracts. The former focus upon economic and short-term exchange of benefits and contributions; the latter upon socioemotional exchanges, with job security in exchange for loyalty as core elements. The authors hold that workers on permanent employment are to a large extent engaged under relational promises, while those on temporary employment are more engaged under transactional promises. Thus, permanents and temporaries, they argue, hold different expectations with regard to their employment relationship. De Cuyper and De Witte suggest that changes in the psychological contract rather than job insecurity per se trigger adverse reactions. They hypothesize and show that violation of the relational psychological contract and not the transactional psychological contract negatively affects job satisfaction and life satisfaction. As a consequence, job insecurity negatively affects job satisfaction and life satisfaction for permanents, but not for temporaries (De Cuyper and De Witte, 2006: 398).

Hypotheses

In this study we assess the subjective job insecurity of workers in five employment statuses that differ in the objective security they offer. Subjective job insecurity is divided into the perceived probability and the perceived severity of losing one's job. We test the following assumptions:

H1: Workers with an objectively insecure employment status perceive it more likely but less severe to lose their job, while employees with an objectively secure employment status perceive it less likely but more severe to lose their job.

H2: Workers with an objectively insecure employment status who perceive a low severity of losing their job, react less strongly to the perceived probability of losing their job than workers with an objectively secure employment status who perceive a high severity of losing their job.

We test these hypotheses by means of the results of a study of the Dutch Research Institute TNO Work and Employment and subsidized by UWV, the Dutch social security authority.

Method

In December 2006 a cross-sectional internet survey on labour force participation was held in the Netherlands among 72,805 respondents ranging from 18 to 64 years of age and participating in a large Dutch internet panel (Klein Hesselink et al., 2008). All respondents completed the questions on employment status (contract type) at the time of the survey. A sample of 2524 respondents was selected to take part in a second internet survey to compare five employment status groups: agency workers, employees on a fixed contract, employees on a permanent contract, independent contractors and entrepreneurs (see Table 1). Within the five employment status groups, subjects were sampled at random. To validate

the quality of the sample we compared the randomness of the selection of the respondents per employment status group with national statistics before and during all stages of the sampling (Klein Hesselink et al., 2008). The variables used for comparison were sex, age, educational level, industry sector and immigrant status. In the sample of 2524 respondents, only young and immigrant workers were at first significantly underrepresented by about 30 percent and therefore supplemented until their proportion in the sample matched the population distribution. From this group, 2014 respondents (79.8 percent) completed the second internet questionnaire. The distribution per employment status group in the samples did not differ from the population distributions of these groups. We left out an additional group of 305 respondents with two or more contracts at one time and some particular subcontract types overlapping with other contract types, ending up with a total sample of 1709 respondents in five uniquely defined employment status groups. This final group of 1709 respondents is per employment status comparable with the same employment status samples in other large Dutch surveys considering the demographic variables (sex, age, educational level, household composition and nationality). We validated the quality of the sample against the distribution of respondents in the Netherlands Working Conditions Survey (Van den Bossche et al., 2007). The distributions appeared to be strongly comparable (Klein Hesselink et al., 2008).

Table 1 gives the distribution of some characteristics of the five groups. Agency workers and employees with a fixed contract are more often women and younger, while most entrepreneurs are males. Independent contractors and entrepreneurs have higher levels of education. The self-employed appear to work the longest average working week. Furthermore, specific employment status groups more often work in specific sectors, such as agency workers in industry, hotels and restaurants, transportation, financial services and other services. Employees on a fixed contract are more often found in education and health care. Independent contractors are often found in construction, commercial services and other services. Many independent contractors cannot classify themselves in one sector, because they work for companies in many sectors or do work that does not belong to the primary processes of the companies where they work. Entrepreneurs are more often found in sectors with many small businesses, such as agriculture, trade and commercial services.

The differences in employment status define differences in objective job insecurity, because of the legal nature related to the future likelihood to keep the contract or to continue working as an independent contractor or entrepreneur. The five groups are:

1. *Agency workers* (no objective job security). Employment of this group is mediated by a temporary employment agency. This group can be hired and fired instantly. In the Netherlands such insecure status is allowed for a fixed period of two years maximum. After this period the agency is obliged to offer a fixed labour contract and later on a permanent contract or to discontinue the relationship.

2. *Employees on a fixed contract* (moderate objective job security). These employees have an employment contract for a fixed period or a finite task. The contract can be renewed, but as a general rule a contract can be renewed only three times. In most cases after three renewals or a period of 13 quarters of a year a permanent job must

Table 1. Differences between five employment status groups in demographic and work situation variables[a]

	Agency workers	Employees fixed contract	Employees permanent contract	Independent contractors	Entrepreneurs	Total	Sig.
Percentage of women	72%	67%	53%	50%	34%	56%	**
Mean age (18–64)	30	32	39	41	42	37	**
Percentage with low educational level	18%	13%	22%	11%	18%	17%	**
Percentage of couples with children at home	25%	28%	46%	44%	58%	40%	**
Percentage of singles with children at home	4.9%	4.0%	4.6%	3.6%	1.2%	3.8%	–
Contractual number of working hours per week	17	27	31			27	**
Actual number of working hours per week	21	30	33	34	44	32	**
Percentage of part-timers (0–30 hours per week)	67%	46%	32%	47%	23%	41%	**
Mean duration of current contract in months		2.8		0.8	0.4	1.0	**
Agriculture	0%	1%	1%	0%	5%	1%	**
Industry	8%	6%	8%	2%	3%	6%	**
Construction	3%	3%	3%	7%	4%	4%	*
Trade	6%	7%	7%	6%	15%	8%	**
Hotels and restaurants	9%	4%	1%	1%	3%	3%	**
Transportation	6%	4%	4%	2%	4%	4%	–
Financial services	6%	4%	4%	2%	5%	4%	–
Commercial services	7%	8%	12%	21%	27%	14%	**
Administration	5%	7%	11%	2%	0%	6%	**
Education	3%	14%	11%	6%	2%	9%	**
Health care	15%	18%	18%	15%	10%	16%	–
Other services	10%	6%	4%	9%	8%	6%	*
Other sectors	15%	17%	13%	22%	12%	16%	**
Unknown	4%	2%	2%	4%	2%	3%	–
Number of respondents	203	502	502	251	251	1709	

[a] Tests of significance (– not significant; * $p \leq .05$; ** $p \leq .01$).

be offered or the relationship must be discontinued. Exceptions can be negotiated between parties in a sector and implemented by collective agreement.

3. *Employees on a permanent contract* (high objective job security). These employees have a permanent employment contract. Under the Dutch regulations it is very difficult to discontinue the relationship.

4. *Independent contractors* (moderate objective job security). This group consists of individual workers that work for their own (no personnel) and without a labour contract. They enter commercial contracts to produce materials or deliver services on a personal basis. They do not have employment security under Dutch law, because the relationship with the client ends once the contract terminates. Most of them have more than one contract at a time, which guarantees moderate job security.

5. *Entrepreneurs* (high objective job security). This group is defined by owning an enterprise as a legal person. About half of them also have employees contracted. As long as the enterprise continues to exist their job is secured. As the economy was doing very well at the time of our study these were favourable times for entrepreneurs, with high job security.

Questionnaire

The original questionnaire consisted of about 100 questions. Two versions were used: one for employees and one for independent contractors and entrepreneurs. This article is based on questions regarding the probability and the severity of losing one's job or business, three demographic variables and five consequences of job insecurity.

The *probability of losing one's job or business* was measured with the following question for employees: '*How do you rate your chances of losing your job? Is that chance: very high (5), high, reasonable, low, or very low (1)?*' For independent contractors and entrepreneurs the question was formulated as: '*How do you rate your chances of losing your business? Is that chance: very high (5), high, reasonable, low, or very low (1)?*' The *severity of losing one's job or business* was measured with the following question for employees: '*How serious is losing your job for you? Is that: very serious (5), serious, unpleasant but not a serious problem, not serious or would you not care (1)?*' For independent contractors and entrepreneurs the question was: '*How serious is losing your business for you? Is that: very serious (5), serious, unpleasant but not a serious problem, not serious, or would you not care (1)?*'

Although the use of single item variables is frequently criticized, we are confident that these measures are reliable and valid as demonstrated in previous studies (Hartley et al., 1991; Klein Hesselink and Van Vuuren, 1999; Van Vuuren, 1990).

The following control variables – gender (0 = man, 1 = woman), age (18 through 64) and educational level (1 = primary school, 8 = university) – are selected to rule out the most obvious alternative explanations. Cheng and Chan (2008) found that job insecurity had more negative consequences for older workers than for younger workers. Lower educated workers experience more job insecurity than more highly educated workers (Sverke et al., 2002). Males and females significantly differed in their level and profile of job insecurity (Rosenblatt et al., 1999).

The *consequences of job insecurity* are measured by five variables. *Sickness absence percentage* is measured as the reported number of sick leave days in the last year, divided by the total number of working days in the last year, times 100 to get the percentage. The *presenteeism percentage* is the percentage of days in the past three months that a respondent reported to continue working when ill, divided by the total number of working days in the past three months, times 100 to get the percentage. *Self-rated health is* measured by a single question ('*In general, what is your opinion about your health?*' 1 = bad, 2 = moderate, 3 = good, 4 = very good, 5 = excellent). *Job satisfaction* is measured by a single question as well ('*In general, how satisfied are you with your work?*' 1 = very unsatisfied to 5 = very satisfied; see also Wanous et al., 1997). These four measures are frequently applied in Dutch labour force surveys and appear to be valid indicators of health problems and problems in the working situation (Van den Bossche et al., 2007). *Work–home interference* was measured by two questions ('*How often does it happen that you have problems fulfilling your tasks at home, because you are busy at work?*' '*How often does it happen that you cannot concentrate at home because of problems at your work?*' 1 = never, sometimes, regularly, 4 = often). These questions were combined into one scale (Pearson correlation = .452) with scores ranging from 1 (never) to 4 (often).

Appendix 1 gives the correlation matrix and descriptive statistics for all variables used in this article.

Analysis

We conducted analyses of variance with perceived probability and perceived severity of job loss as the dependent variables and employment status as independent variable, in order to test hypothesis 1 – whether a difference in employment status leads to differences in perceived probability and severity of job loss. To check if hypothesis 1 is independent of demographic influences, we performed hierarchical regression analyses for perceived probability or perceived severity of job loss using three control variables (gender, age, education) entered at step 1 to establish their baseline effects; and employment status as dummy variables entered at step 2. Finally, we conducted five multivariate analyses of variance with five consequences of job insecurity as dependent variables, employment status as a fixed factor and probability and severity as continuous covariates, to test hypothesis 2, whether employment status and probability and severity interact in their impact on the consequences of job insecurity. Results of significant three-way interaction effects are displayed in Figures 1–3.

Results

Table 2 displays the means of the five employment status groups for the perceived probability and perceived severity of losing one's job or business. Both aspects of job insecurity differ significantly between the five employment status groups. Agency workers report the highest probability of losing their job. Employees with a fixed contract report a somewhat lower probability but still significantly higher then the grand mean. Independent contractors, employees with a permanent contract and entrepreneurs score significantly lower than the grand mean. More or less the opposite pattern is found with

Table 2. Mean standardized scores (0 = very low; 5 = very high), tests of significance and deviation contrast analysis of workers in five employment status groups, evaluating the probability of losing their job/business and the severity of losing the job/business

	Mean	SD	N	Deviation contrast estimate	Sig.
Probability of losing job/business[a]					
Agency workers	2.59	1.30	203	.124	.000
Employees fixed contract	2.40	1.17	502	.077	.000
Employees permanent contract	1.79	0.88	502	−.075	.000
Independent contractors	1.92	0.81	251	−.041	.003
Entrepreneurs	1.75	0.77	251	−.085	.000
Total	2.08	1.06	1709		
Severity of losing job/business[b]					
Agency workers	2.95	0.99	203	−.110	.000
Employees fixed contract	3.32	0.95	502	−.016	.125
Employees permanent contract	3.60	0.96	502	.052	.000
Independent contractors	3.49	1.01	251	.025	.062
Entrepreneurs	3.59	1.01	251	.049	.000
Total	3.42	1.00	1709		

[a] $F = 43.833; p = .000.$ [b] $F = 19.156; p = .000.$

regard to the severity of losing one's job or business. Here the agency workers score lowest, followed by the employees with a fixed contract. Employees with a permanent contract, independent contractors, and entrepreneurs score higher. These patterns are in line with our hypothesis 1.

Table 3 reveals that the perceived probability of losing one's job or business is different for males or females, younger or older people, but not different for highly or lower educated people. Female and younger workers perceive a higher probability of losing their job or business than male and older workers. Net of the control variables, agency workers and employees on fixed contracts deem it more likely to lose their job than the other employment status groups. The perceived severity of losing their job, on the other hand, is stronger for older people and less educated people. Net of these control variables, agency workers find it less severe to lose their job than the others. We can conclude that hypothesis 1 still holds if we control for these demographic variables.

Consequences of job insecurity

A MANOVA with the five consequences as dependent variables, employment status as a factor and probability and severity as continuous covariates reveals effects on all dependent variables (Table 4). We found significant three-way interactions for sickness absenteeism, job satisfaction and work–home interference; significant two-way interactions of probability and severity for sickness absenteeism and presenteeism; significant two-way interactions of employment status and probability for sickness absenteeism and work–home interference;

Table 3. Results of the hierarchical regression analysis for probability and severity of losing the job/business[a]

	Probability of losing job/business						Severity of losing job/business					
	β	Sig.	ΔR²	Sig.	R²	Sig.	β	Sig.	ΔR²	Sig.	R²	Sig.
Step 1: Control variables			.01	−	0.01	−			.04	**	.04	**
Sex (0 = men; 1 = women)	.08	**					.00	−				
Age (18–64)	−.08	**					.17	**				
Educational level (1–8)	−.02	−					−.06	**				
Step 2: Employment status			0.08	**	0.09	**			.03	**	.06	**
Agency workers												
Employees fixed contract	−.08	*					.17	**				
Employees permanent contract	−.35	**					.25	**				
Independent contractors	−.22	**					.17	**				
Entrepreneurs	−.28	**					.19	**				

[a] β = standardized beta-coefficient from the final step; ΔR² = change in explanation rate in each step; R² = explanation rate; tests of significance (− not significant; * p ≤ .05; ** p ≤ .01).

Table 4. Test results of multivariate analysis of variance with five dependent variables, employment status as factor and the two job insecurity variables as continuous predictors (i.e. covariates)[a]

	Employment status		Probability		Severity		Employment status × probability		Employment status × severity		Probability × severity		3-way interaction	
	F	p	F	p	F	p	F	p	F	p	F	p	F	p
Sickness absenteeism percentage	.32	−	1.06	−	.69	−	3.02	*	1.05	−	11.96	**	6.63	**
Presenteeism percentage	.21	−	1.73	−	.36	−	.79	−	.69	−	8.27	**	.89	−
Self-rated health	.98	−	1.36	−	4.02	*	.77	−	1.67	−	2.41	−	.97	−
Job satisfaction	1.07	−	4.15	*	2.38	−	1.89	−	2.11	−	.33	−	2.65	*
Work–home interference	3.27	*	0.02	−	5.81	*	2.64	*	1.96	−	1.17	−	3.50	**

[a] In the p columns: tests of significance (− not significant; * $p \leq .05$; ** $p \leq .01$).
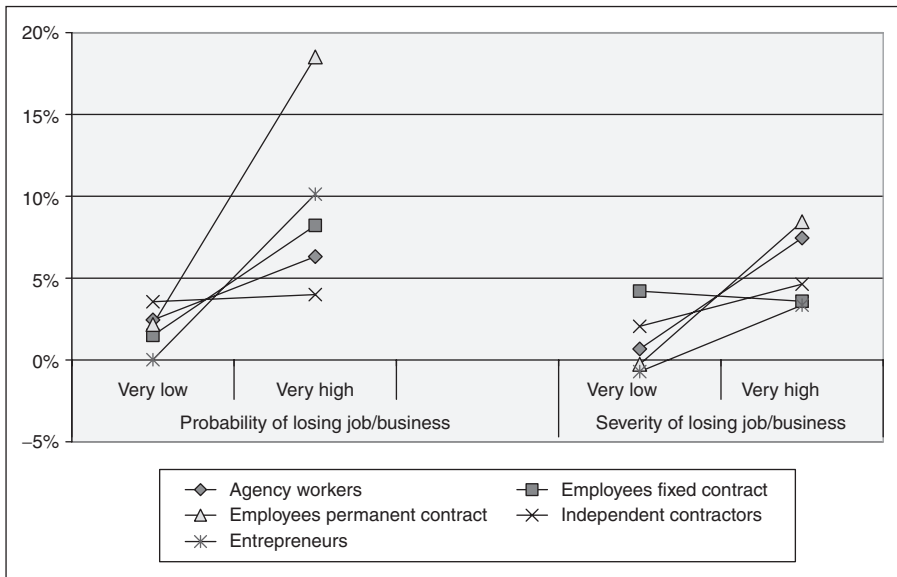
Figure 1. Regression lines that illustrate the significant three-way interaction effect of the sickness absence percentage for perceived probability and severity of losing the job/business of five employment status groups

main effects of severity on self-rated health, job satisfaction and work–home interference; a main effect of probability on job satisfaction; and a main effect of employment status on work–home interference.

The 3 three-way interactions result in different patterns for the five employment status groups for probability and severity (Figures 1, 2 and 3).

Figure 1 reveals that among almost all workers the sickness absence percentage increases as the perceived probability or severity increase, but not in all groups equally. In the first place, the increase is stronger for the perceived probability then for the perceived severity. Next, among employees on permanent contracts, sickness absenteeism increases most dramatically with probability as well as severity. Agency workers and independent contractors have the same pattern but less strong. Among workers on fixed contracts, absenteeism increases as the perceived probability increases, but decreases even slightly as the perceived severity increases. Finally, sickness absenteeism among independent contractors is not related to the probability of losing one's business, but moderately to severity.

For all groups, job satisfaction declines if the perceived probability of job loss increases, but increases if the severity of job loss increases. The contrast is the largest in the case of independent contractors (Figure 2). As for the positive relation between job satisfaction and perceived severity, one could, of course, question the causality. Obviously, severity and satisfaction are linked, but causality could be such that perceived severity of job loss is higher because someone likes his or her job. Alternatively, one could reason that the correlation between severity of job loss and satisfaction with one's job signifies dissonance reduction. A job that someone is so afraid to lose must be an attractive job.
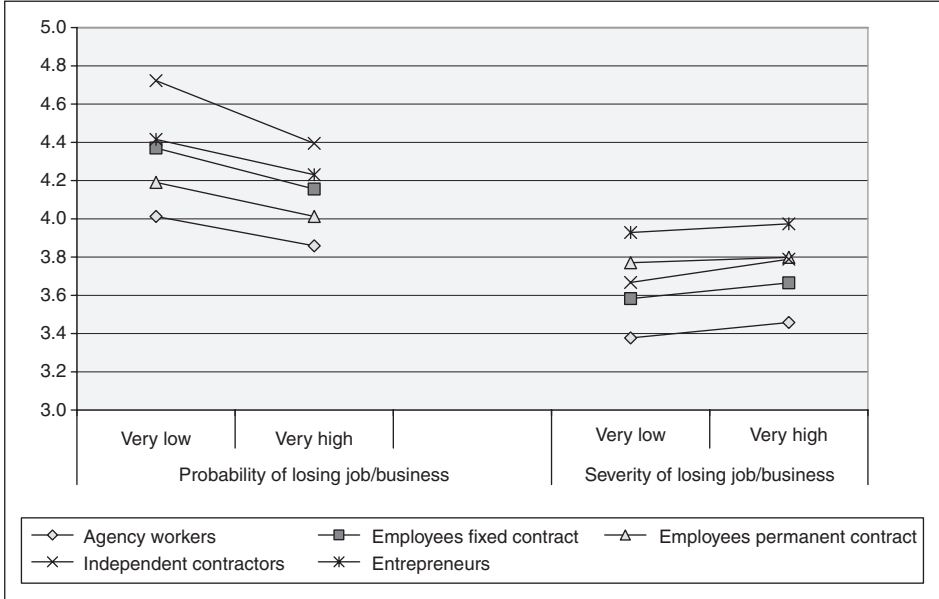
Figure 2. Regression lines that illustrate the significant three-way interaction effect of job satisfaction for the five categories of perceived probability and severity of losing the job/business of five employment status groups

For work–home interference we found next to the three-way interaction, a significant two-way interaction of employment status and probability, and a main effect of employment status and a main effect of severity. The main effects mean that independent of the level of the probability and severity of losing one's job or business independent contractors and entrepreneurs experience more work–home interference than the other employment statuses and that in all employment groups an increase in severity is related to an increase in work–home interference. The two- and three-way interactions imply that among entrepreneurs, independent contractors, employees with a permanent contract and agency workers, work–home interference increases with an increase in both probability and severity of job loss (Figure 3). Among employees on fixed contracts, work–home interference is not influenced by either probability or severity. A higher probability of job loss goes together with a higher level of work–home interference among entrepreneurs, independent contractors, employees with a permanent contact and agency workers than a stronger severity of job loss. The increase related to the probability of losing one's job is highest among entrepreneurs. The increase related to the severity of losing the job is highest among agency workers and independent contractors.

No three-way interactions were found for self-rated health and presenteeism. A main effect of perceived severity on self-rated health was found. This main effect implies that an increase in severity is related to a decline in self-rated health in all five employment groups.
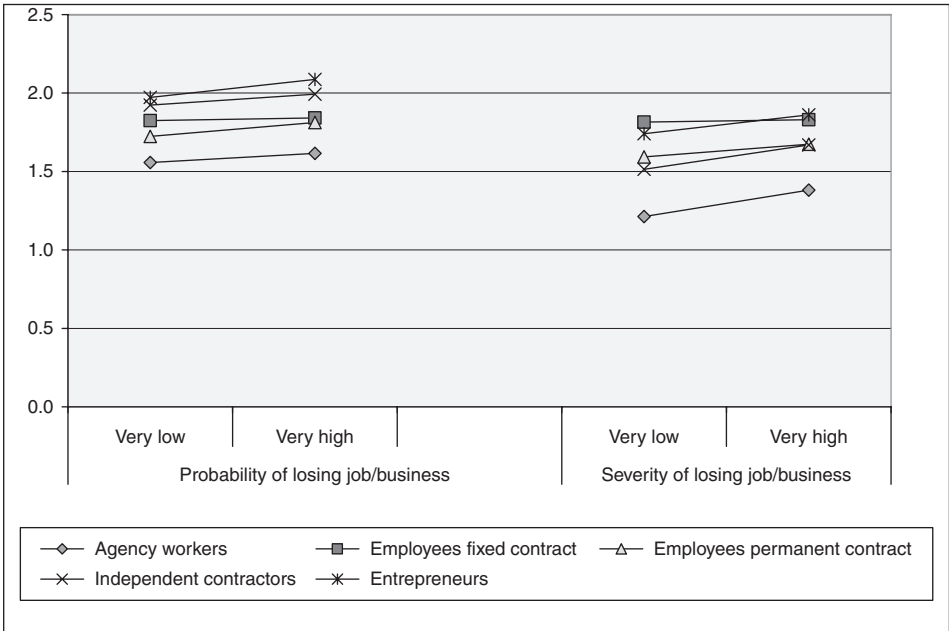
Figure 3. Regression lines that illustrate the significant three-way interaction effect of work–home interference for the five categories of perceived probability and severity of losing the job/business of five employment status groups

For presenteeism, a two-way interaction effect of probability and severity exists. Presenteeism increases both with an increase in perceived probability and severity, but the increase for probability is stronger than that for severity.

Conclusions

We worked from the assumption that subjective job insecurity is an individual appraisal of the level of job insecurity offered by someone's employment status and that it must be divided into the perceived probability and severity of job loss. We hypothesized that employees with an objectively insecure employment status perceive it more likely but less severe to lose their job, while employees with an objectively secure employment status perceive it less likely but more severe to lose their job. We also hypothesized that employment status and perceived probability and severity interact to determine the consequences of job insecurity.

These assumptions are confirmed. Probability and severity appeared to be two different aspects of job insecurity, that turn out differently depending on someone's employment status. The consequences of job insecurity appear to vary with an individual's employment status and with the perceived probability and severity of job loss. In turn, probability estimates and perceived severity of job loss are related to consequences; but their impact varies depending on an individual's employment status. Reduced job

satisfaction, sickness absenteeism, reduced self-rated health, work–home interference and presenteeism are the typical consequences of threat of job loss. Health problems seem to be primarily related to the perceived severity of job loss, whereas presenteeism is related to the combined working of probability and severity. The remaining consequences investigated in our study all relate to the interaction of employment status, probability and severity. As a consequence, the influence of probability and severity varies for the diverging employment statuses.

Workers in jobs that are objectively insecure such as agency workers and workers on fixed contracts estimate the probability of losing their job relatively high, but the severity relatively low. Workers in relatively secure jobs, on the other hand, evaluate the likelihood of losing their job low, but the severity high. These findings elaborate on the research of De Cuyper and De Witte (2006). These authors reported that workers in objectively insecure jobs displayed less job insecurity, but they failed to differentiate between the probability and the severity of job loss. Entering that distinction into the equation obviously qualifies the picture. Thus, De Cuyper and De Witte's observation that workers in temporary jobs bother less about job loss than workers in permanent jobs is to be explained not by their employment status alone, but also by their perception of the probability and severity of losing their job.

The finding that job insecurity must be separated into the probability and the severity of job loss has important theoretical and practical implications. Probability and severity are two different aspects of a life-event as our findings illustrate. What makes job loss problematic are its consequences both material and non-material. The more serious these consequences are in the eyes of the persons involved, the more severe it is to lose their job. Nonetheless, however serious the consequences of an event might be, few people care if it is unlikely to happen. The reverse is also true; if job loss has no serious consequences, why bother whether it might occur. These findings underscore the fact that objective job insecurity does not necessarily result in subjective job insecurity. Objectively insecure employment statuses might in fact generate less subjective job insecurity than one would expect in view of the objective situation. This is not to say that objective insecurity is irrelevant. Remember that subjective job insecurity in the insecure statuses is twice as high as in the secure statuses. Moreover, once they do find job loss a serious problem, people's well-being lowers significantly as their fear of losing their job heightens.

Theoretically, it would be of use to develop a model of how the perceived probability and severity of job loss are formed. What personal characteristics and circumstantial factors are of influence? We demonstrated that different employment statuses impact on subjective job insecurity, but what exactly explains the variation within employment statuses is a subject for further research. Practically, our findings imply that not all objective insecurity is necessarily detrimental. Therefore, support agencies must be aware of who are the more vulnerable people and adapt their policies to that assessment.

In line with these observations we hold that future research must employ a multidimensional measure of job insecurity distinguishing between the probability and severity of job loss. This is of relevance irrespective of the question of whether probability and severity are to be conceived of as different aspects of subjective job insecurity or rather as

antecedents of feelings of job insecurity. The advantage of a multidimensional measure is that it remains possible to differentiate between the probability and severity dimensions and to employ differential analyses. As Jacobson (1991) indicated, this keeps the possibilities open of posing theoretical and empirical questions about the relationships between elements of the model (see Mauno et al., 1999 for a similar argument).

Finally, we should point to some limitations of our study. A first limitation is its cross-sectional design, which makes it impossible to draw conclusions about causality. A second limitation and weakness concern our measures. Some of the key variables are single-item measures. As a consequence, we cannot assess their reliability and validity with statistical means in the way one could with multiple-item scales. Multiple-item scales tend to have stronger relationships. For that matter, our findings might be a conservative estimate of the real relationships. We have other reasons to feel confident about the reliability and validity of our measures. The fact that we have used them repeatedly and with comparable results serves as another indicator of their metric characteristics. Nonetheless, we do believe that now their relevance is assessed one should aim at the construction of better measures. A third limitation of our study is the operationalization of objective job insecurity. We employed the categories used in Dutch labour statistics, taking their legal definitions as indicators of (in)security. Although the legal protection creates different levels of security, this does not necessarily mean that each person in the same legal situation is objectively equally (in)secure. However, our findings show that our assumptions hold at the aggregate level, that is to say groups of workers who are objectively in less secure positions display at the aggregate level higher scores of insecurity than groups that are objectively more secure. As such our assumptions were confirmed.

Appendix

Descriptive statistics and correlation matrix of all variables used in the analyses

Variables (range)	Mean	SD	N	Skewness	V1	V2	V3	V4	V5	V6	V7	V8	V9
V1 Probability of losing job/business (1–5)	2.08	1.06	1709	1.17									
V2 Severity of losing job/business (1–5)	3.42	1.00	1709	–.03	–.16								
V3 Sex (0 = men; 1 = women)	0.56	0.50	1709	–.24	.10	–.04							
V4 Age (18–64)	36.8	11.5	1709	.21	–.09	.18	–.21						
V5 Educational level (1–8)	5.98	1.50	1709	–.56	.00	–.09	.03	–.16					
V6 Sickness absenteeism percentage (0–100%)	4.0%	12.9%	1709	5.55	.15	.08	.08	.05	–.08				
V7 Presenteeism percentage (0–100%)	5.2%	12.6%	1709	5.00	.06	.03	.07	–.03	–.05	.25			
V8 Self-rated health (1–5)	3.48	.83	1709	.25	–.13	–.07	–.05	–.12	.12	–.23	–.24		
V9 Job satisfaction (1–5)	3.90	.90	1709	–1.22	–.25	.10	–.04	.03	.04	–.07	–.11	.17	
V10 Work–home interference (1–4)	1.93	.66	1709	.54	.04	.16	.01	.05	.12	.03	.11	–.11	–.08

Note: Correlations ≥ .05 are significant at $p < .05$.

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