



Munich Personal RePEc Archive

Who stay unwillingly in a job?

Böckerman, Petri and Ilmakunnas, Pekka and Jokisaari,
Markku and Vuori, Jukka

14 October 2008

Online at <https://mpra.ub.uni-muenchen.de/11066/>
MPRA Paper No. 11066, posted 14 Oct 2008 07:56 UTC

245

**Who stay
unwillingly in a
job? A study
based on a
representative
random sample
of employees***

Petri Böckerman**
Pekka Ilmakunnas***
Markku Jokisaari****
Jukka Vuori*****

* The data can be accessed on site at the Research Laboratory of the Business Structures Unit of Statistics Finland. We are grateful to Satu Nurmi and Juha Honkkila for linking the data sets for our use. The paper is part of the Academy of Finland research program on the future of work and well-being. The usual disclaimer applies.

** Corresponding author. Labour Institute for Economic Research.
Address: Pitkäsillanranta 3A, 6th floor, FIN-00530 Helsinki, FINLAND.
Phone: +358-9-25357330. Fax: +358-9-25357332.
E-mail: petri.bockerman@labour.fi

*** Helsinki School of Economics and HECER. E-mail: pekka.ilmakunnas@hse.fi

**** Finnish Institute of Occupational Health. E-mail: markku.jokisaari@ttl.fi

***** Finnish Institute of Occupational Health. E-mail: jukka.vuori@ttl.fi

ISBN 978-952-209-062-1
ISSN 1795-1801

TIIVISTELMÄ

Tutkimuksessa tarkastellaan työpaikan vaihtoaikkeitä, työn etsintää sekä todellisia työpaikan vaihtoja viiden vuoden seurantajakson aikana. Tutkimuksessa käytetään Tilastokeskuksen työolotutkimusta. Tutkimuksessa eritellään epämukavien työolojen, työorganisaation sekä työpaikan vaihtomahdollisuuksiin liittyvien tekijöiden vaikutusta. Tulosten valossa epämukavat työolot, heikot etenemismahdollisuudet nykyisessä työpaikassa, syrjintä, työnjohdon heikkous sekä mielenterveydelliset oireet lisäävät todennäköisyyttä, että henkilö työskentelee vastentahtoisesti nykyisessä työpaikassaan. Ko. tekijät lisäävät todennäköisyyttä olla vastentahtoisesti nykyisessä työpaikassa, koska ne lisäävät työpaikan vaihtohalukkuutta, mutta ne eivät lisää todellisen vaihdon todennäköisyyttä.

ABSTRACT

The paper examines the antecedents of intentions to quit, job search, and actual job switches during a five-year follow-up period. We use a representative random sample of all Finnish employees (N = 2800). The data both contain information on intentions to quit and on-the-job search from a cross-section survey and records employees' actual job switches from longitudinal register data that can be linked to the survey. Specifically, we study the contribution of adverse working conditions (harms, hazards, uncertainty, physically and mentally heavy work), work organization (promotion prospects, discrimination, supervisor support) and ease-of-movement factors (mental health, wage level, regional unemployment). According to the estimates, adverse working conditions, poor promotion prospects, discrimination, poor supervisor support and mental health symptoms are positively related to unwillingly staying in a job, since these variables increase the probability of turnover intentions or job search but not actual job switches.

INTRODUCTION

Employee turnover has gained much attention in the organizational and management literature. One reason for this is the high costs of turnover for organizations as well as employees. In the organizations employee turnover produces recruitment and training costs of new employees and for the employees who are leaving there are costs related to finding a new job and weakened financial security (e.g., Campion, 1991). Earlier research has examined the antecedents of turnover and has identified several variables which are related to employee

turnover. First, the employee's intention to leave is a strong predictor of actual turnover (e.g., Griffeth et al., 2000). Second, it has been highlighted that job search behavior is also an important antecedent of actual job separation (e.g., Tett & Meyer, 1993; Griffeth et al., 2000).

However, far less is known about the employees who have intentions to leave and show actual job search behavior, but nevertheless stay in a job which they are aiming to leave. Consequently, in this paper we focus on the antecedents of staying unwillingly in a job. This is an important issue. Employees who are not motivated to stay show withdrawal behavior (Hanisch & Hulin, 1991), or job avoidance at the workplace (Hom & Kinicki, 2001), such as lateness and absence, which reduces their job proficiency significantly (Hanisch & Hulin, 1991). An important limitation of earlier research on employee turnover is that it typically has taken advantage of non-representative samples of working age population (e.g., Hom & Griffeth, 1991; Shields & Price, 2002), such as nurses, with a consequence that the generalizability of the results for a variety of occupations and organizations is seriously restricted. A major advantage of our study is that it is based on a representative random sample of all Finnish employees.

THE TURNOVER LITERATURE AND HYPOTHESES

Earlier research on turnover has examined both work-related conditions and ease-of-movement factors or job alternatives in the labor market as the antecedents of actual turnover (e.g., Hom & Kinicki, 2001; Kammeyer-Mueller et al., 2005; Trevor, 2001). First, there are factors related to job content and organization that foster employees' intentions to leave and search for a new job. In particular, it has been shown that adverse working conditions, such as routinization, are related to turnover (Griffeth et al., 2000). Finland has a relatively centralized wage bargaining system. The system sets a floor to firm-level pay determination and leads to wage compression. This may prevent the creation of wage differentials that would compensate for the existence of adverse working conditions. The evidence shows that perceived working conditions have a minor role in the determination of individual wages (Böckerman & Ilmakunnas, 2006). The effect of adverse working conditions on intentions to quit and job search can therefore be particularly pronounced in this context.

The literature has also shown that low justice perceptions at the workplace are related to turnover (Griffeth et al., 2000). When employees perceive that their treatment has not been fair, their attachment to the organization will decrease, which in turn increases the likelihood of actual turnover. In our study justice perceptions are captured by discrimination at the workplace. Promotions and promotion prospects are related to turnover (Trevor et al., 1997).

For example, Kammeyer-Mueller et al. (2005) found that leavers showed less satisfaction with their promotion prospects than stayers in the organization. Furthermore, we reason that low supervisor support is related to low attachment to the organization, i.e. high intentions to quit and job search behavior. This is due to the fact that a supervisor is a central representative of the organization who affects how employees' perceive the organization as a whole (Eisenberger et al., 2002). Thus, when perceived support from a central representative of the organization is low, this perception should also be related to a low perception of the organizational support. All in all, in this paper we focus on adverse working conditions, promotion prospects, the perceptions of discrimination, and perceived supervisor support as the antecedents of intentions to quit, on-the-job search and actual job switches.

Second, ease-of-movement in the labor market may foster employee turnover. Ease-of-movement has been captured by using measures of human capital, such as education (e.g., Trevor, 2001), and unemployment (e.g., Hom & Kinicki, 2001; Kammeyer-Mueller et al., 2005). Furthermore, we hypothesize that employees with mental health symptoms face obstacles in the labor market. For example, if the employment history contains interruptions (a large number of absences or unemployment spells), it may signal to a prospective employer that the employee may also show withdrawal behavior in the future. Unobservable, poor working conditions could be related to mental health symptoms and leaving a job may be a coping strategy to avoid continuing stress and health problems. Josephson et al. (2008) reported that self-assessed health is related to quitting. Thus, we expect that mental health symptoms to be related to intentions to quit and job search, but those employees may face difficulties actually finding a new job.

The economic literature argues that high-wage employees search less for a new job (e.g., Farber, 1999). A high wage increases the probability that the current match between an employee and a firm is among the best available in the labor market. This reduces the potential payoff from search. On the other hand, a high wage at the current match may be a sign of an employee's productivity for prospective employers. Hence, high-wage employees may receive unsolicited job offers without active search efforts, which could increase their actual job switches. Finally, high regional unemployment may diminish employees' prospects to find a new job and consequently the expected costs of turnover might be perceived as too high or job search behavior is unsuccessful in the labor market when unemployment is high (e.g., Hom & Kinicki, 2001). Thus, we reason that high regional unemployment hinders employees from leaving a job although they may show intentions to quit and actively search for a new job.

DATA

We use the Quality of Work Life Survey (QWLS) of Statistics Finland (SF) from 1997. QWLS provides a representative sample of Finnish wage and salary earners, because the initial sample for QWLS is derived from a monthly Labor Force Survey (LFS) of SF, where a random sample of the working age population is selected for a telephone interview. The 1997 QWLS was based on LFS respondents in September and October who were 15-64 years old with a normal weekly working time of at least five hours. 3,795 individuals were selected for the QWLS sample and invited to participate in a personal face-to-face interview. Out of this sample 2,978 persons, or around 78%, participated (Lehto & Sutela, 1999). QWLS is supplemented with information from the LFS and registers maintained by SF.

QWLS contains information on intentions to quit and on-the-job search. We have information on those employees who would change jobs within the same occupational field, if they could receive the same pay as now (around 24 percent of employees), and on those who would switch for the same level of pay to another occupational field (around 26 percent). From these measures we can derive an indicator of intentions to quit, Switch Intentions, which is the sum of the two sub-cases (50 percent). Searcher Last Six Months is a dummy variable that indicates that the employee has looked for another job at some stage during the last six months (15 percent of the employees).

The subjective valuations related to working conditions are measured by the use of different categories. There are questions on different types of perceived harms with a five-point Likert scale, in which the highest category corresponds to the perception that the feature of working conditions is ‘very much’ an adverse factor. Responses are aggregated by forming a dummy variable that equals one if there is at least one clearly adverse factor (Harm). The other dummy variables for working conditions and the attributes of work organization are constructed similarly. We also use a variable that captures mental health symptoms. We include a large set of control variables, which can be regarded as ‘the usual suspects’ based on the empirical literature that has explained employees’ turnover (e.g. Pissarides & Wadsworth, 1994; Clark et al., 1998). The variables that we are using are described in detail in the Appendix (Table A1).

The QWLS data is a cross-section data set from 1997 that does not include any information on actual job switches. However, the QWLS data can be matched to longitudinal register data, FLEED (Finnish Longitudinal Employer-Employee Data). FLEED is constructed from a number of different registers on individuals and firms that are maintained by SF. FLEED contains information from Employment Statistics, which records each employee’s employer during the last week of each year. Matching these data sources is possible, because both the QWLS data and FLEED contain the same unique personal identifiers (i.e. ID codes for persons). We have followed the employees over the period 1998-2002, since it may take time

before intentions to quit and on-the-job search materialize as actual job switches. This is particularly relevant in the environment of rather high unemployment, where the number of suitable vacancies is limited. (According to LFS, the unemployment rate in Finland was 12.7 in 1997.) The actual job switches of the employees are defined based on changes in the employer plant codes. Using plants rather than firms to define the job switches matches, as closely as possible, the information in the QWLS data, because its questions refer to the plant level. Our measure for actual job switches or separations is Actual Switch, which obtains value one when an employee during the follow-up period 1998-2002 is at least once in a different plant than he or she was in 1997 (38 percent of the employees).

RESULTS

We estimate three separate probit models, because our dependent variables are dichotomous indicators (Greene, 2003). Marginal effects are reported, as they are the parameters of interest. For binary variables, these are calculated as differences in probabilities. Our reading of the results is that the variables that positively affect intentions to quit and/or job search, but do not have a statistically significant positive effect on actual job switches over the five-year follow-up period 1998-2002, positively contribute to staying unwillingly in a job.

The effects of adverse working conditions on intentions to quit are substantial (Table 1). For example, those employees that face at least one harm are 6% more likely to have intentions to quit, other things being equal. The effects of adverse working conditions on intentions to quit are much stronger than on job search or actual job switches. Uncertainty and mentally heavy work are the only statistically significant working conditions variables with positive effects when explaining job search and actual job switches, respectively.

=== TABLE 1 AROUND HERE ===

The attributes of work organization also matter a lot for the prevalence of being unwillingly in a job. Facing no promotion opportunities, experiencing discrimination and obtaining no support from a supervisor all increase intentions to quit and job search, but they do not have a positive influence on actual job switches. The quantitative magnitude of the effects on intentions to quit and job search are considerable. For example, those who experience discrimination have a 10% higher probability of having intentions to quit and a 6% higher probability of job search. Interestingly, the estimates reveal that those facing no promotion prospects in their current organizations also experience difficulties in finding a new job from other organizations (Table 1, Column 3).

Experiencing mental health symptoms increases intentions to quit, while having no effect on job search and actual job switches. High-wage employees are clearly more likely to conduct actual job switches, even though they are not more actively searching for a new job. This finding is in accordance with the thinking that high-wage employees are also high-performance employees that receive unsolicited job offers frequently. Furthermore, regional unemployment decreases job search and actual job switches, but it does not have a statistically significant influence on intentions to quit. However, since the QWLS data are cross-sectional, our unemployment variable may also capture other regional effects. Finally, it is worth noting that the pseudo R^2 of the models is higher when job search is explained than for intentions to quit or actual job switches. Hence, unobservable individual characteristics not included in our covariates are more important in the determination of intentions to quit and actual job switches.

CONCLUSIONS

We examined the antecedents of intentions to quit, job search and actual job switches, using a representative random sample of all Finnish employees. According to the estimates, adverse working conditions, poor promotions prospects, discrimination, poor supervisor support and mental health symptoms are positively related to unwillingly staying in a job, since these variables increase the probability of turnover intentions or actual job search without affecting the probability of actually switching a job. Our study contributed to the literature by showing that the combination of information from a cross-section survey with longitudinal register data that records actual job switches provides useful insights about the search process in the labor market.

The results open up important questions for research. First, why do employees unwillingly stay in a job? One reason might be that their job search was unsuccessful in the past. Roughly 30% of employees leave a job because of an unsolicited job offer, based on the evidence (e.g., Lee et al., 2008). The social network approach emphasizes that many job openings are available through informal channels such as an employer's network ties that are not reachable by all job seekers (e.g., Granovetter, 1995). Thus, job search behavior may be a rather weak predictor of getting a new job, at least for some employees. Second, to what extent is staying unwillingly in a job related to health problems later on? Earlier research has shown that poor working conditions are related to health problems (e.g. Schnall et al., 1994). It would be an important avenue for future research to examine the effects of staying unwillingly in a job on employees' health and well-being.

ACKNOWLEDGEMENTS

The data can be accessed on site at the Research Laboratory of the Business Structures Unit of Statistics Finland. We are grateful to Satu Nurmi and Juha Honkkila for linking the data sets for our use. The paper is part of the Academy of Finland research program on the future of work and well-being. The usual disclaimer applies.

REFERENCES

- Böckerman, P. & Ilmakunnas, P. (2006). Do job disamenities raise wages or ruin job satisfaction? *International Journal of Manpower*, 27, 290-302.
- Campion, M. A. (1991). Meaning and measurement of turnover: Comparison of alternative measures and recommendations for research. *Journal of Applied Psychology*, 76, 199-212.
- Clark, A. E., Yannis, G., & Sanfey, P. (1998). Job satisfaction, wage changes, and quits: Evidence from Germany. *Research in Labor Economics*, 17, 95-121.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87, 565-573.
- Farber, H. S. (1999). Mobility and stability: The dynamics of job change in labor markets. In O. Ashenfelter, and D. Card (Eds.), *Handbook of Labor Economics* (Vol. 3B, pp. 2439-2483). Amsterdam: Elsevier.
- Granovetter, M. S. (1995). *Getting a job: A study of contacts and careers* (2nd ed.) Chicago: The University of Chicago Press.
- Greene, W. H. (2003). *Econometric analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26, 463-488.
- Hanisch, K. A., & Huli, C. L. (1991). General attitudes and organizational withdrawal: An evaluation of a causal model. *Journal of Vocational Behavior*, 39, 110-128.
- Hom, P. W., & Kinicki, A. J. (2001). Toward a greater understanding of how dissatisfaction drives employee turnover. *Academy of Management Journal*, 44, 975-987.

- Josephson, M., Lindberg, P., Voss, M., Alfredsson, L., & Vingard, E. (2008). The same factors influence job turnover and long spells of sick leave: A 3-year follow-up of Swedish nurses. *European Journal of Public Health*, 18, 380-385.
- Kammeyer-Mueller, J. D., Wanberg C. R., Glomb T. M., & Ahlburg D. (2005). The role of temporal shifts in turnover processes: It's about time. *Journal of Applied Psychology*, 90, 644-658.
- Lee, T. H., Gerhart, B., Weller, I., & Trevor, C. O. (2008). Understanding voluntary turnover: Path-specific job satisfaction effects and the importance of unsolicited job offers. *Academy of Management Journal*, 51, 651-671.
- Lehto, A-M., & Sutela, H. (1999). *Efficient, More Efficient, Exhausted. Findings of Finnish Quality of Work Life Surveys 1977-1997*. Statistics Finland, SVT: Labor Market 1999, No. 8: Helsinki.
- Pissarides, C. A., & Wadsworth, J. (1994). On-the-job search: Some empirical evidence from Britain. *European Economic Review*, 38, 385-401.
- Schnall P. S., Landsbergis P. A., & Baker D. (1994). Job strain and cardiovascular disease. *Annual Review of Public Health*, 15, 381-411.
- Shields, M. A., & Price, S. W. (2002). Racial harassment, job satisfaction and intentions to quit: Evidence from the British nursing profession. *Economica*, 69, 295-326.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-293.
- Trevor, C.O. (2001). Interactions among actual ease of movement determinants and job satisfaction in the prediction of voluntary turnover. *Academy of Management Journal*, 44, 621-683
- Trevor, C. O., Gehart, B., & Boudreau, J. W. (1997). Voluntary turnover and job performance: Curvilinearity and the moderating influences of salary growth and promotions. *Journal of Applied Psychology*, 82, 44-61.

Table 1. Estimation results for intentions to quit, job search and actual job switches.

	Switch Intentions, Probit model	Searcher Last Six Months, Probit model	Actual job switches, Probit model
Harm	0.062 (2.58)***	0.006 (0.47)	0.033 (1.42)
Hazard	0.002 (0.10)	0.018 (1.32)	-0.039 (1.74)*
Uncertainty	0.099 (4.71)***	0.025 (2.01)**	0.015 (0.72)
Heavy physically	0.079 (1.70)*	-0.006 (0.22)	-0.077 (1.74)*
Heavy mentally	0.090 (2.19)**	0.006 (0.28)	0.084 (2.11)**
No promotion	0.086 (3.94)***	0.041 (3.33)***	-0.063 (3.01)***
Discrimination	0.099 (4.40)***	0.063 (4.60)***	0.032 (1.47)
No support	0.049 (2.21)**	0.047 (3.47)***	-0.029 (1.37)
Mental health symptoms	0.045 (1.97)**	0.015 (1.14)	-0.017 (0.77)
Wage (2 nd quantile)	0.058 (1.60)	-0.022 (1.27)	0.108 (3.03)***
Wage (3 rd quantile)	0.028 (0.74)	-0.052 (2.81)***	0.171 (4.64)***
Wage (4 th quantile)	0.077 (1.85)*	-0.046 (2.28)**	0.193 (4.69)***
Regional unemployment	-0.002 (0.78)	-0.005 (4.02)***	-0.013 (6.24)***
Industry indicators	Yes	Yes	Yes
Pseudo R ²	0.0679	0.2053	0.0748
Observations	2776	2819	2831

Notes: Reported estimates are marginal effects from probit models, evaluated at variable means. Robust z statistics in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%. All models include the unreported control variables that are described in the Appendix (Table A1).

APPENDIX

Table A1. Definitions and descriptive statistics of variables.

Variable	Average (standard deviation)	Definition/measurement
Dependent variables:		
<i>Job switch intentions</i>		
Switch Intentions	0.50 (0.50)	Would change jobs at the same level of pay = 1, otherwise = 0 (sum of Would Switch to Same Field and Would Switch to Other Field)
Would Switch to Same Field	0.24 (0.43)	If could change jobs at the same level of pay, would change to the same occupational field = 1, otherwise = 0
Would Switch to Other Field	0.26 (0.44)	If could change jobs at the same level of pay, would change to a different occupational field = 1, otherwise = 0
<i>On-the-job search</i>		
Searcher Last Six Months	0.15 (0.36)	Has looked for another job in the last six months = 1, otherwise = 0
<i>Actual job switch</i>		
Actual Switch	0.38 (0.49)	Has switched plant at least once during the follow-up period 1998-2002 = 1, Otherwise = 0. Information is based on plant codes in FLEED.
Independent variables:		
<i>Adverse working conditions</i>		
Harm	0.29 (0.45)	At least one adverse factor that affects work 'very much' (includes heat, cold, vibration, draught, noise, smoke, gas and fumes, humidity, dry indoor air, dust, dirtiness of work environment, poor or glaring lighting, irritating or corrosive substances, restless work environment, repetitive, monotonous movements, difficult or uncomfortable working positions, time pressure and tight time schedules, heavy lifting, lack of space, mildew in buildings) = 1, otherwise = 0
Hazard	0.34 (0.47)	At least one factor is experienced as 'a distinct hazard' (includes accident risk, becoming subject to physical violence, hazards caused by chemical substances, radiation hazard, major catastrophe hazard, hazard of infectious diseases, hazard of skin diseases, cancer risk, risk of strain injuries, risk of succumbing to mental disturbance, risk of grave work exhaustion, risk of causing serious injury to others, risk of causing serious damage to valuable equipment or product) = 1, otherwise = 0
Uncertainty	0.58 (0.49)	Work carries at least one insecurity factor (includes transfer to other duties, threat of temporary dismissal, threat of permanent dismissal, threat of unemployment, threat of becoming incapable of work, unforeseen changes) = 1, otherwise = 0
Heavy physically	0.05 (0.22)	Current tasks physically 'very demanding' = 1, otherwise = 0
Heavy mentally	0.06 (0.25)	Current tasks mentally 'very demanding' = 1, otherwise = 0

<i>Attributes of work organization</i>		
No Promotion	0.62 (0.49)	Advancement opportunities in current workplace 'poor' = 1, otherwise = 0
Discrimination	0.30 (0.46)	Has fallen subject to at least one type of unequal treatment or discrimination in current workplace (includes time of hiring, remuneration, career advancement opportunities, access to training arranged by employer, receiving information, attitudes of co-workers or superiors) = 1, otherwise = 0
No support	0.32 (0.47)	At least one supportive factor 'never' experienced in work (includes advice or help, reward, inspiration, conversation, trust, encouragement, sharing information or response) = 1, otherwise = 0
<i>Mental health symptoms</i>		
	0.29 (0.46)	Person has reported that he or she suffers from at least one symptom (fatigue, sleeping problems, depression, serious stress, nervousness or lack of self-control), otherwise = 0
<i>Wage level</i>		
Wage (1 st quantile)	0.25 (0.43)	The logarithm of hourly earnings that is calculated based on the annual earnings (FIM) obtained from tax registers and by using regular weekly hours from LFS. Weekly hours are converted to the annual figures by multiplying them by 48. (We assume that annual leave is four weeks, which is the Finnish standard.) First quantile = 1, otherwise = 0 (reference)
Wage (2 nd quantile)	0.25 (0.43)	Logarithm of hourly annual earnings, second quantile = 1, otherwise = 0
Wage (3 rd quantile)	0.25 (0.43)	Logarithm of hourly annual earnings, third quantile = 1, otherwise = 0
Wage (4 th quantile)	0.25 (0.43)	Logarithm of hourly annual earnings, fourth quantile = 1, otherwise = 0
<i>Regional unemployment</i>		
	17.08 (4.74)	The regional unemployment rate based on 12 NUTS3 -regions (Source: LFS by Statistics Finland).
<i>Control variables</i>		
Female	0.53 (0.50)	1 = female, 0 = male
Age <=24	0.08 (0.28)	Age <= 24 = 1, otherwise = 0
Age 25-34	0.25 (0.43)	Age 25-34 = 1, otherwise = 0
Age 35-44	0.30 (0.46)	Age 35-44 = 1, otherwise = 0 (reference)
Age 45-54	0.28 (0.45)	Age 45-54 = 1, otherwise = 0
Age 55-64	0.08 (0.26)	Age 55-64 = 1, otherwise = 0
Age > 65	0.08 (0.27)	Age >= 65 = 1, otherwise = 0
Comprehensive	0.24 (0.43)	Comprehensive education = 1, otherwise = 0 (reference)
Secondary education	0.56 (0.50)	Upper secondary or vocational education = 1, otherwise = 0
Polytechnic education	0.12 (0.32)	Polytechnic or lower university degree = 1, otherwise = 0
University education	0.09 (0.28)	Higher university degree = 1, otherwise = 0

Manager	0.32 (0.47)	Tasks involve supervision of work of others or delegation of tasks = 1, otherwise = 0
Number of Switches	0.74 (1.65)	Number of job switches during the past five years
Tenure <=5	0.43 (0.50)	Tenure <=5 years, otherwise 0 (reference)
Tenure 6-10	0.17 (0.38)	Tenure 6-10 years otherwise 0
Tenure >10	0.36 (0.48)	Tenure > 10 years, otherwise 0
Temporary	0.18 (0.38)	Fixed-term employment relationship = 1, otherwise = 0
Part-timer	0.10 (0.30)	Part-time work = 1, otherwise = 0
Public sector	0.34 (0.48)	Employer is state or municipality = 1, otherwise = 0
Foreign firm	0.07 (0.26)	Employer is private, mainly foreign-owned enterprise = 1, otherwise = 0
Plant size <10	0.28 (0.45)	Size of plant under 10 employees = 1, otherwise = 0 (reference)
Plant size 10-49	0.36 (0.48)	Size of plant 10-49 employees = 1, otherwise = 0
Plant size 50-499	0.28 (0.45)	Size of plant 50-499 employees = 1, otherwise = 0
Plant size > 499	0.08 (0.27)	Size of plant over 499 employees = 1, otherwise = 0
Industries	..	14 dummies based on Standard Industry Classification