
Explaining job satisfaction and job control: a survey among finnish psychiatrists

Jyrki Korkeila, Tanja Svirskis, Pirjo Mäki,
Tarja Melartin, Minna Valkonen-Korhonen

Abstract

Background: Job satisfaction has a major impact on mental health and job performance. Additionally, expected work satisfaction may influence choice of specialization within medicine.

Methods: A postal survey was conducted in 2009 among the members (N=1398) of Finnish Psychiatric Association. Out of the members 1132 were still working-aged. All in all 64.8% (N=738) of the working-aged members returned the survey. Only psychiatrists and residents were included in the final cohort of the study (N=665). Factors associated to work satisfaction were studied and a principal component analysis was conducted on factors reported to disturb working. The correlations of factors scores with job satisfaction and job-control were analyzed. Spearman correlation coefficients were calculated between factor scores and work satisfaction.

Results: Most respondents (73.8%) were satisfied with their work. Job satisfaction showed a negative correlation with increase in pace of work ($\rho=-0.24$, $p<0.001$). Job control correlated positively with job satisfaction ($\rho=0.46$, $p<0.001$). "Working conditions" factor explained 28.6%, "leadership" 8.8%, "failure without support" 7.8%, fear at work 6.5% and "patient records" factors 5.9% of the variation of perceived harmful factors at work. "Working conditions" and "leadership" factors showed the strongest and most significant negative correlations with job satisfaction ($\rho=-0.45$, $p<0.001$, $\rho=-0.32$, $p<0.001$, respectively). "Working conditions" associated strongly and significantly with job control ($\rho=-0.57$, $p<0.001$).

Conclusion: Job satisfaction may be better than expected among psychiatrists considering the findings of prevalence estimates of burnout in various other studies. However, employers should put emphasis on matching employers and type of work to promote well-being of their employees.

There is evidence showing a strong relationship between low levels of physician satisfaction and burnout, intention to leave, job turnover, self-reported psychiatric symptoms and poor perceived mental health [1]. Job satisfaction seems to have a major impact on job performance [2]. A study in Finland found that job dissatisfaction increased the intention to switch sector from public to private and that this trend had increased from 1988 to 2003 among junior physician subgroup working especially in primary care [3]. Dissatisfied physicians are unlikely to recommend to medical students that they pursue their specialty. Moreover, physician satisfaction appears to benefit patients, because patients of satisfied physicians report more trust and confidence in their physician and have enhanced adherence to care [1]. There is solid evidence that an imbalance of expected and experienced pressure or workload is moderately associated with dissatisfaction. Physicians' possibility to control over factors influencing their work associates strongly with satisfaction [1].

Although job satisfaction is a major topic in organizational research, there is a dearth of scientific literature on satisfaction and its correlates among psychiatrists. Most research on a related issue focuses on burnout. However, job satisfaction has been found to be higher among psychiatrists, who are in leading positions compared to those in staff positions [4]. The authors argued that the difference is mainly due to low workload in job conditions. Performance of patient care associated with satisfaction, however, this was somewhat dependent on age, specialty, physician characteristics and number of patients seen in a week. Administrative work was associated with less burden and more personal rewards.

The overall work satisfaction from moderate to very good level among physicians have varied in different studies from 50.5% to 75% [5,6,7]. Due to methodological reasons the comparison of these figures may not be straightforward. A survey of psychiatrists in Latin America found that the level of job satisfaction was as high as 86.4% [8]. Some other studies have reported good total satisfaction levels among psychiatrists, but have not provided figures as percentages [7,9,10].

Job satisfaction protects significantly physicians from harmful effects of stress. Psychological distress is a common (27%) phenomenon among physicians [7]. Likewise, job dissatisfaction has correlated positively with emotional exhaustion and depersonalization and negatively with personal achievement among psychiatrists [11]. Among mental health care workers in general high levels of stress and burnout associate with job dissatisfaction [12]. Moreover, job dissatisfaction at an earlier phase increases risk of burnout at a later phase [9]. Treating chronic illnesses, such as psychiatric disorders is intrinsically demanding emotionally and imposes a threat to experience exhaustion.

Physicians' career satisfaction has been suggested as a key factor to focus on in the future in promotion of physicians' well-being and prevention of burnout [1]. Moreover, from the perspective of patient-safety this is no minor issue. Satisfaction with work should be a concern to policy makers and service providers. There are clear-cut implications on recruitment issues and willingness to continue working in a job or specialty. Currently, Finland and many other countries as well are facing difficulties in recruitment and future prospect of major shortage of psychiatrists. Hence, possibility of providing a satisfying career is of utmost importance for the field of psychiatry.

This study set out to define level of job satisfaction and its relationship with perceived job control, experience of factors that were perceived to disturb work and background factors, work-related factors (setting, position, private practice and private practice hours, reported restructuring of organization, increase in work pace) among the working-aged members (specialists and residents in psychiatry) of the Finnish Psychiatric Association FPA (www.psy.fi). The FPA is the oldest specialty association in Finland and today most psychiatrists in Finland are members in the association.

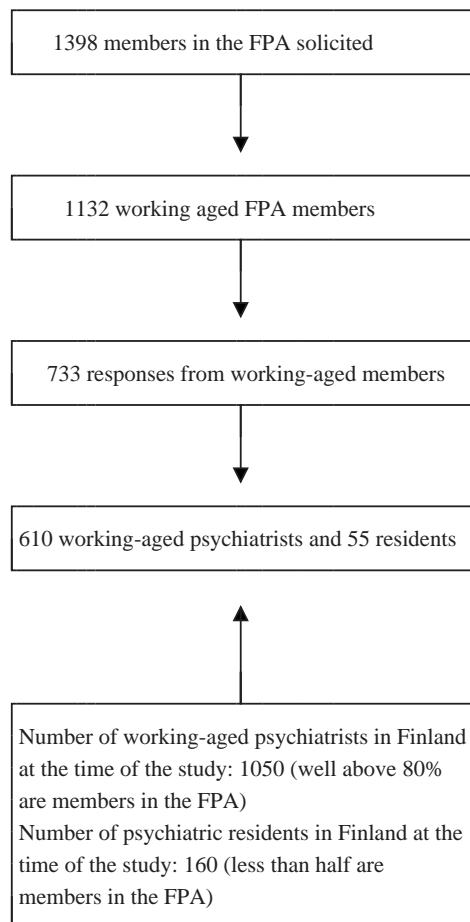
Material and methods

A postal survey was mailed in the end of 2009 to all members of Finnish Psychiatric Association (N=1398). If a response was not received within two weeks a reminder was sent. A second reminder was sent if response had not been received within a month from the first reminder. Total number of members included 236 specialists, who were on pension, and 30 foreign correspondents. Thus, there were 1132 working-aged members in the association in 2009 study (mostly psychiatrists), residents in psychiatry, and physicians from other specialties. In Finland the official age of retirement is 63 in the public sector, but many psychiatrists often to do part-time work until the age of 65. To include those who do work part-time work we set our age cut-point at 65 years.

Out of the 1132 members who were working-aged, 733 responded (64.8%). Out of these respondents only psychiatrists (N=610) and residents (N=55) in psychiatry were included in the cohort of the study (N=665, 90.7% of the working-aged responders). The exact figure of working-aged psychiatrists, who were members in the FPA, was not possible to extract from the files of the association. There were at the time of the study 70 resident members in FPA, so the response rate of residents was quite high (78,6%).

At the time of the survey there were 1050 working-aged psychiatrists in Finland. The number of residents in the association was 70, but their number on the national level was 160 (Finnish Medical Association 2012, data on file). The cohort of this study represents, thus, 58.1% of all working-aged psychiatrists (610 psychiatrist respondents of this sample divided by the number of all registered psychiatrists in Finland, see Figure 1) and 43.8% of all the residents in psychiatry in Finland. Response rate of psychiatrist members is very likely higher than this, because all psychiatrists are not members in the FPA.

Figure 1. Flow-chart of the study sample of the members of the Finnish Psychiatrist Association (FPA).



The questionnaire included multi-choice items on background socio-demographic information, hospital district and municipality where the respondent worked, on the university where basic medical education and specialist training was received, academic degree, information of medical specialties, years spent working as a psychiatrist, special competences granted by the Finnish Medical Association, employment status, and workplace sector (public/private), position, private practice, and changes in working environment (pace of work and restructuring of organization where the respondent worked). The questionnaire also included continuous-value item on years spent working as a physician. Job control and overall job satisfaction were inquired by single-item statements with a Likert-scale 1) "I can control my job well" (completely disagree, disagree, cannot say, agree, agree strongly) and 2) "Overall, how satisfied are you with your current job" (very satisfied, satisfied, neither satisfied or unsatisfied, unsatisfied, very unsatisfied). Additionally the questionnaire included a set of statements associated to the question "How often do you experience that these factors disturb your work" including a three-point Likert-scale (rarely, occasionally, often or continuously) from a previous Finnish study [10].

Statistical analysis

Differences between job satisfaction and its determinants (groups of marital status, gender, age groups, municipalities according to size, counties, health districts, work setting, working sector, private practice status and groups of practice working hours and position) were tested using two-tailed chi-squared test. Correlations between job satisfaction and age as continuous variable, and job satisfaction and years worked as a physician or psychiatrist, and correlation between job control and change in pace of work and organizational changes were calculated using Spearman correlation coefficients.

We conducted a principal component factor analysis for a multi-item question on "How often do you experience that these factors disturb your work" with varimax rotation. We saved the factor scores after the analysis and calculated bivariate correlations (Spearman correlation coefficients) between job satisfaction and the factor scores, and between job control and the factor scores. We controlled the effect of age on the before-mentioned coefficients by using partial correlation.

Sample characteristics

Of the participants, 433 were (65.1%) women and 232 men (34.8%) (N=665). There were significantly more women than men among those who were currently specializing in psychiatry (78.5% vs. 21.5%, $p=0.014$). The mean age of the sample was 49.4 (SD=7.9, range 26 to 64). The mean age of men was 50.9 (SD=7.8) and of women 48.5 (SD=7.8) ($p<0.001$). The respondents had on average worked as a physician for 22.5 years (SD=8.4). Men had significantly more commonly than women worked as a psychiatrist for more than 10 years (71.6% vs. 57.1%, $p<0.001$). A bit less than half (46.0%) of the respondents worked in the county of Southern Finland, nearly a third (31.8%) in Western Finland, 11.2% in Eastern Finland, 10.5% in Northern Finland (10.6%) and only few psychiatrist in the smallest county Ahvenanmaa (0.4%).

Results

Most respondents were satisfied or very satisfied with their job (73.8%, N=491), 16.5% (N=110) were neither satisfied nor unsatisfied and 9.6% (N=64) were unsatisfied or very unsatisfied with their job. There were no significant differences in job satisfaction between genders, marital status groups, and between the hospital districts where the respondent worked. Years worked as a physician or years worked as a psychiatrist did not associate significantly with job satisfaction. There was a tendency towards statistical significance in respondents living in bigger municipalities to report higher levels of job satisfaction (>100.000 inhabitants 77.9% satisfied or very satisfied, corresponding figure 67.6% among those living in municipalities with less than 10.000 inhabitants, $p=0.09$). There was a tendency towards statistically significant positive correlation between age and job satisfaction, but the size of the correlation is negligible ($\rho=0.07$, $p=0.08$). However, age as a discontinuous variable showed significant differences, because those between 41 and 50 years of age very most unsatisfied. Job satisfaction differed significantly according to the setting of work and position in work (Table 1).

Table 1. Job satisfaction among Finnish psychiatrists according to gender, work setting and size of municipality where the respondent works.

Setting	Very satisfied or satisfied		Neither satisfied or unsatisfied		Unsatisfied or very unsatisfied		All		p-value
	%	N	%	N	%	N	%	N	
Setting									
University	96.0%	(24)	4.0%	(1)	0.0%	(0)	100%	(25)	
Hospital	69.6%	(197)	19.8%	(56)	10.6%	(30)	100%	(283)	
Outpatient ¹	65.5%	(95)	21.4%	(31)	13.1%	(19)	100%	(145)	
Private practice	92.1%	(116)	2.4%	(3)	5.6%	(7)	100%	(126)	
Other	67.1%	(55)	23.2%	(19)	9.8%	(8)	100%	(82)	
All	73.7%	(487)	16.6%	(110)	9.7%	(64)	100%	(661)	<0.001
Position at work									
Academic	93.8%	(15)	0.0%	(0)	5.3%	(1)	100%	(16)	
Chief/assistant chief psychiatrist	68.8%	(159)	19.5%	(45)	11.7%	(20)	100%	(231)	
Staff psychiatrist	68.1%	(190)	21.5%	(60)	10.4%	(29)	100%	(279)	
Private practitioner	93.2%	(68)	2.7%	(2)	4.1%	(3)	100%	(73)	
Other	78.9%	(15)	15.8%	(3)	5.3%	(1)	100%	(19)	
All	72.3%	(447)	17.8%	(110)	9.9%	(61)	100%	(618)	<0.001
Municipalities by size (inhabitants)									
>100.000	77.9%	(300)	14%	(54)	8.1%	(31)	100%	(385)	
50.000-100.000	69.3%	(88)	18.9%	(24)	11.8%	(15)	100%	(127)	
<50.000	67.6%	(92)	22.1%	(30)	10.3%	(14)	100%	(136)	
All	74.1%	(480)	16.7%	(108)	9.3%	(60)	100%	(648)	0.09
Private practice									
None	67.9%	(241)	20.6%	(73)	11.5%	(41)	100%	(355)	
On the side	73.1%	(133)	17.6%	(17)	9.3%	(17)	100%	(182)	
Private practitioner	92.3%	(96)	3.8%	(4)	3.8%	(4)	100%	(104)	
All	73.3%	(470)	17.0%	(109)	9.7%	(62)	100%	(641)	<0.001
Private practice in addition to daily work									
1-3 hours	75.9%	(44)	12.1%	(7)	12.1%	(7)	100%	(58)	
4-6 hours	72.6%	(45)	21.0%	(13)	0.0%	(0)	100%	(62)	
7-10 hours	90.0%	(18)	6.5%	(4)	10.0%	(2)	100%	(20)	
11-12 hours	50.0%	(9)	38.9%	(7)	11.1%	(2)	100%	(18)	
All	73.4%	(116)	17.1%	(27)	9.5%	(15)	100%	(158)	0.042

¹ Includes mental health centers, regional polyclinics, primary care psychiatrists

Out of the respondents, 35.0% (N=220) reported that work pace had decreased, 10.7% (N=67) reported no change in work pace, 29.9% (N=188) reported that work pace had increased somewhat, and 24.5% (N=154) reported that work pace had increased a lot. Experience of increase in work pace correlated significantly with low job satisfaction ($\rho=0.31$, $p<0.001$). Slightly less than a third (32.5%, N=198) reported no organizational restructuring during the past five years, 25.5% (N=155) reported restructuring, which, had small impact on work, 15.1% (N=92) reported considerable organizational restructuring that had no clearly negative impact on work, and 26.9% (N=164) reported organizational restructuring that had a negative impact on work. There was a significant correlation between organizational restructuring and job dissatisfaction ($\rho=0.26$, $p<0.001$). The more there was restructuring that was experienced to have a negative impact, the higher was the dissatisfaction level. Most of the respondents (31.0%, N=204) agreed very strongly with the statement "I feel that I can control my job", 38.2% (N=252) agreed strongly, 2.3% (N=15) neither agreed nor disagreed, 22.5% (N=148) disagreed and 6.1% (N=40) disagreed strongly with the statement. There was a significant and strong correlation between perceived job control and job satisfaction ($\rho=0.50$, $p<0.001$).

We found a five-factor solution for the items in the list "factors that disturb your work" (Table 2). "Working conditions" factor scores correlated negatively with job satisfaction in a statistically significant manner ($\rho=-0.45$, $p<0.001$). Likewise, "leadership" factor, and "fear of failure without support", "fear at work" and "patient record" factor scores showed a significant negative correlation with job satisfaction ($\rho=-0.32$, $p<0.001$, $\rho=-0.18$, $p<0.001$, $p=0.019$, $\rho=-0.11$, $p=0.005$, $\rho=-0.12$, $p=0.003$, respectively). The poorer the "working conditions" were perceived, the worse job control was reported ($\rho=0.57$, $p<0.001$). Likewise, "leadership" ($\rho=-0.23$, $p<0.001$), "failure without support" ($\rho=0.12$, $p=0.003$) and "patient records" ($\rho=0.11$, $p=0.005$) factors associated significantly with poor job control.

Table 2. Principal component analysis of multi-item questions on "factors that disturb your work" in Finnish psychiatrists with varimax rotation.					
Variables	Working conditions	Leadership	Failure without support	Fear at work	Patient record
Job strain	0.803	0.190	0.179	*	*
Work load	0.802	0.221	0.125	0.109	*
Lack of resources	0.763	* * *			
Too much paper work	0.724	0.206	*	*	0.242
Poor relationship with superiors	0.104	0.831	*	*	*
Injustices in decision-making	0.168	0.754	*	0.163	0.102
Tense atmosphere at work place	0.142	0.739	0.151	0.108	*
Fear of failure	*	*	0.753	0.169	*
Work is "plodding on in loneliness"	*	0.262	0.725	*	*
Fear of violence	0.125	0.114	0.131	0.867	*
General feeling of insecurity at work	0.107	0.319	0.125	0.801	*
Work related to use of e-systems and computers	0.104	0.139	*	*	0.832
Need to record too many things in patient files	0.209	*	*	*	0.820
General frustration with work in psychiatry	0.242	0.292	0.435	0.137	*
Low level of salary	*	0.441	0.161	*	*
Emotional strain at work	0.312	0.146	0.585	0.167	*
Conflict between resource and ethics	0.616	0.270	0.115	0.135	0.147
Poor flow of information at work	0.277	0.590	*	0.220	0.179
Poor quality of offices	0.198	0.367	*	*	0.151
Eigen value	5.73	1.76	1.56	1.29	1.17
Variance explained	28.6%	8.8%	7.8%	6.5%	5.9%

* = values smaller than 0.10

The items loading to each factor are in bold

Discussion

In this study of psychiatrist and resident members of the Finnish Psychiatric Association we found job satisfaction levels that were within the top range of physicians in general. Job satisfaction was greater among those working in academia and private practice than in other analyzed both by setting and position. Staff psychiatrists reported the lowest job satisfaction scores. Job satisfaction was associated independently, especially to good perceived job control. Organizational change that was perceived to have a negative impact on work was associated to dissatisfaction. Respondents who report good satisfaction would choose psychiatry again, if they were in that occasion. Job satisfaction showed a moderate to small negative correlation with factor scores of "working conditions", "leadership", "failure without support" and "fear at work", whereas "working conditions", "leadership", "failure without support" and "patient records" factors associated significantly with job control.

The finding of association between job control and satisfaction was expected, because job control has been found to be a factor predicting worse health outcomes and lower satisfaction levels among physicians [13]. The factors perceived to disturb work that we found to associate negatively to job satisfaction were comparable to those associating to found in other studies and studies on burnout [9,11]. We found that "working conditions" was the factor explaining most of the variance in items that were experienced to disturb one's work. Job satisfaction has been found to associate with job design comprising variety, task-identity, feedback, autonomy, participation, learning and information [14].

Working conditions also contributed strongly to poor job control. The items that loaded on this factor all represent a threat to job control emphasizing the importance of paying attention to external conditions at work. This also implies challenges on leadership, because leadership behavior influences job satisfaction both directly and via organizational culture [15]. Positive features of leadership such as perceived support may buffer against negative outcomes in work-life [16,17]. In work life this essentially entails such features as connecting the employee's sense of identity and self to the mission and the collective identity of the organization, being a role model for workers, challenging followers to take greater ownership for their work, and understanding the strengths and weaknesses of employees to optimize their performance [18]. Work group composition, factors such as gender, were been found to have only a minor influence on meaningfulness at work, whereas respect for workers' rights was stronger and widespread effect [19]. The single most important factor for a satisfying work-life is a well-run organization.

Since poor satisfaction at work may predict future burnout, our results imply targets to work on in prevention of burnout. The factors related to working environments and conditions are to an extent modifiable. This is a fact that should concern providers of public services as well as policy makers. Public services have failed to provide adequate working conditions for psychiatrists. In a survey in 2003, we reported that similar findings than reported here were associated with previous change from public to private sector and plans to change the sector [20]. Turnover will result, if the needs concerning working conditions are not met in the future.

The results of this study indicate important topics to focus pertaining to recruitment. Prospects for good career satisfaction might well increase the number of graduates, who choose psychiatry as their specialty. Moreover, employers should put emphasis on good compatibility between person and job to promote well-being of their employees. From the patient-safety perspective satisfaction at work is an issue of great importance, because treatment relationship and adherence to long-term care are important factors influencing outcomes in psychiatry. The additional work caused by dysfunctions in electronic patient record systems has been a topic of public discussion and was evident in this study.

Limitations and strengths of the study

There are difficulties in estimating the representativeness of the sample due to the above-mentioned reasons, but our estimate of response rate is likely to be an underestimate. Many of the residents on a national level are not members in the association, and therefore the same underestimate (38.2% of nation level residents) argument applies for residents as for psychiatrists. Nearly 50% of private practitioners are lacking from the respondent group. In the study by Heponiemi et al. [13] physicians working in private practice were more satisfied than their counterparts in public services. Our estimate of total job satisfaction is likely to be an underestimate of the whole group of psychiatrists.

Comparing this sample to our previous survey [19], which had a response rate of 83% of all members, our sample with response rate of 65% is likely to represent better clinicians working in public sector than psychiatrists private sector and academia, which may have lowered the overall satisfaction level found. An additional limitation of the study is that it is based on a cross-sectional inquiry. Work satisfaction was measured using a single item instead of a scale developed to measure job satisfaction

more broadly. The subject matter of the study is, however, important and timely and our results imply directions for development of working conditions, career satisfaction and for future studies in the field. Our sample size was good and it provides a fair estimate of job satisfaction among psychiatrists.

Conclusion

In this sample of working-aged psychiatrists job satisfaction was in the range as among physicians in general. However, among medical students and graduates the expected job satisfaction may be viewed worse than is justified. Job control and job satisfaction were found to associate significantly to, especially to working conditions and leadership. Employers should put emphasis on good compatibility between job and person to promote well-being of their employees.

There is a need for leadership that takes development of adequate working conditions as an important target for development. There are policy implications in balancing scarcity of resources and working conditions, but also a patient safety issue. An unsatisfied and highly distressed staff is also more liable to poor judgment and quality of output.

References

1. Scheuer D, McKean S, Miller J, Wetterneck T. U.S. Physician satisfaction: A systematic review. *J Hosp Med* 2009;4:560-568.
2. Kankaanranta T, Nummi T, Vainiomäki J, Halila H, Hyppölä H, Isokoski M, Kujala S, Kumpusalo E, Mattila K, Virjo I, Vänskä J, Rissanen P. The role of job satisfaction, job dissatisfaction and demographic factors on physicians' intentions to switch work sector from public to private. *Health Policy* 2007;83:50-64.
3. Ranz J, Stueve A, McQuiston HL. The Role of the Psychiatrist: Job Satisfaction of Medical Directors and Staff Psychiatrists. *Community Ment Hlt J* 2001;37:525-529.
4. Bovier PA, Perneger TV. Predictors of work satisfaction among physicians. *Eur J Public Health* 2003;13:299-305.
5. Cetina-Tabares RE, Chan-Canul AG, Sandoval-Jurado L. Correlation between the level of work satisfaction and professional burnout in family physicians]. *Rev Med Inst Mex Seguro Soc* 2006;44:535-40.
6. Gaba DM, Howard SK. Fatigue among clinicians and the safety of patients. *N Engl J Med* 2002;347:1249-1255.
7. Ramirez AJ, Graham J, Richards MA, Cuff A, Gregory WM. Mental health of hospital consultants: the effects of stress and satisfaction at work. *Lancet* 1996;347:724-728,
8. Córdoba RN, Cano JF, Alzate M, Olarte AF, Salazar I, Cendales R. [The Latin American Psychiatrist: profile and degree of satisfaction with the specialty]. [Article in Spanish] *Actas Esp Psiquiatr* 2009;37:9-16.
9. Kumar S, Sinha P, Dutu G. Being satisfied at work does affect burnout among psychiatrists: A national follow-up study from New Zealand. *Int J Soc Psychiatry*. 2013;59:460-7.
10. Priebe S, Fakhoury WK, Hoffmann K, Powell RA. Morale and job perception of community mental health professionals in Berlin and London. *Soc Psychiatry Psychiatr Epidemiol* 2005;40:223-32.
11. Kumar S, Fischer J, Robinson E, Hatcher S, Bhagat RN. Burnout and job satisfaction in New Zealand psychiatrists: a national study. *Int J Soc Psychiatry* 2007;53:306-16.
12. Evans S, Huxley P, Gately C, Webber M, Mears A, Pajak S, Medina J, Kendall T, Katona C. Mental health, burnout and job satisfaction among mental health social workers in England and Wales. *Br J Psychiatry* 2006;188:75-80.
13. Heponiemi T, Kuusio H, Sinervo T, Elovainio M. Job attitudes and well-being among public vs. private physicians: organizational justice and job control as mediators. *Eur J Public Health* 2011;21:520-5.
14. Sarata BP, Jeppesen JC. Job design and staff satisfaction in human service settings. *Am J Commun Psychol* 1997;5:229-36.
15. Tsai Y. Relationship between organizational culture, leadership behavior and job satisfaction. *BMC Health Serv Res* 2011;11:98.
16. van den Berg TI, Elders LA, Burdorf A. Influence of health and work on early retirement. *J Occup Environ Med*. 2010 Jun;52(6):576-83.
17. von Vultée PJ, Axelsson R, Arnetz B. The impact of organizational settings on physician wellbeing. *Int J Health Care Qual Assur* 2007;20:506-15.

18. Hodson R. Demography or respect?: work group demography versus organizational dynamics as determinants of meaning and satisfaction at work. *Br J Sociol* 2002;53:291-317.
19. Watson LM. Leadership's influence on job satisfaction. *Radiol Technol* 2009;80:297-308.
20. Korkeila J, Ostamo A, Joukamaa M, Salokangas RKR. Where are the psychiatrists? *Psychiatria Fennica* 2003;suppl 1.

Jyrki Korkeila, MD, PhD
Professor of Psychiatry
University of Turku
Chief psychiatrist, Satakunta hospital district

Tanja Svirskis, MD, PhD
University of Helsinki, Department of Psychiatry
Helsinki University Central Hospital, Peijas hospital

Pirjo Mäki, MD, PhD, clinical lecturer
Department of Psychiatry, University of Oulu and Oulu University Hospital, Finland

Tarja Melartin, MD, PhD
Department of Psychiatry, Helsinki University Central Hospital, Helsinki, Finland
and Department of Mental Health and Alcohol Research, The National Institute for Health
and Welfare, Helsinki, Finland

Minna Valkonen-Korhonen, MD, PhD
Department of Psychiatry, University of Eastern Finland and Kuopio University Hospital

Correspondence:
jyrki.korkeila@pp.inet.fi