

Associations of SF-36 mental health functioning and work and family related factors with intentions to retire early among employees

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Objective: To examine the associations of mental health functioning (SF-36) and work and family related psychosocial factors with intentions to retire early.

Methods: Cross sectional survey data (n=5037) from the Helsinki Health Study occupational cohort in 2001 and 2002 were used. Intentions to retire early were inquired with a question: "Have you considered retiring before normal retirement age?" Mental health functioning was measured by the Short Form 36 (SF-36) mental component summary (MCS). Work and family related psychosocial factors included job demands and job control, procedural and relational justice, conflicts between work and family, and social network size. Multinomial regression models were used to analyse the data.

Results: Poor mental health functioning, unfavourable psychosocial working conditions, and conflicts between work and family were individually related to intentions to retire early. After adjustments for all work and family related factors the odds ratio for low mental health functioning was halved (from OR=6.05 to 3.67), but nevertheless the association between poor mental health functioning and strong intentions to retire early remained strong.

Conclusions: These findings highlight not only the importance of low mental health and unfavourable working conditions but also the simultaneous impact of conflicts between work and family to employees' intentions to retire early.

Poor health is the main reason for early retirement.^{1–3} During the last decade problems of mental health and functioning have become a key cause of sickness absence and early retirement.⁴ However, there has been relatively little investigation into the associations between poor mental health and the retirement process. Recent research emphasises the importance of work related psychosocial factors to mental health^{5–8} and sickness absenteeism among employees.^{5–9} These factors have also been connected with the early retirement process.^{2–10}

In addition to work related psychosocial factors, associations between mental and physical health and conflicts between work and family have been studied.^{11–13} For example Chandola *et al*¹² found both work-to-family and family-to-work conflicts to be associated with poor mental health functioning among female and male employees in Britain, Finland, and Japan. However in the context of the early retirement process, the consequences of the conflicts between work and family are not well known.

Social support from significant others is a likely protecting factor against poor mental health.^{14–15} Such a "buffering effect of social support" hypothesis^{16–18} suggests that effective social support networks lessen the adverse psychological consequences of stress. The associations of social support, further psychosocial factors, and poor health with early retirement have typically been studied separately, but less is known about the complex interrelationships between poor mental health, work and family related psychosocial factors, and intentions to retire early.

The main aim of this study is to examine the associations of mental health functioning and work and family related psychosocial factors with intentions to retire early. We assume that poor mental health functioning, unfavourable working conditions, conflicts between paid work and family life, and lack of social networks strengthen the intentions to

retire early. We also assume that the associations between mental health functioning and intentions to retire early are affected by work and family related psychosocial factors. Extensive social networks are assumed to protect employees from the negative effects of poor mental health functioning.

METHODS

Data

This study is part of an ongoing Helsinki Health Study, an occupational cohort among middle aged women and men employed by the city of Helsinki, Finland. The city of Helsinki is the largest municipal employer in Finland with 40 000 employees (72% women, mean age 45 years). The largest employment sectors are social welfare, education, and health care.

Our analyses are based on cross sectional baseline surveys in 2001 and 2002. A questionnaire was mailed to employees reaching age 40, 45, 50, 55, and 60 years in each year (n=5829, response rate 66%). Since the mean age of retirement is about 60 years in the municipal sector, mainly due to the lower occupation specific retirement ages, the 60 year old respondents were excluded. Also those responding, "I have already sent an application" (for early retirement) were excluded because they were mainly 60 years old and many were eligible for an old age pension. Thus, the analysed data consisted of 5037 respondents (4071 women, 966 men).

Intentions to retire early

Intentions to retire early were asked with a question used in a number of previous studies:^{19–20} "Have you considered retiring before normal retirement age?" Four preset response options were: (1) No, I have not; (2) Yes, sometimes; (3) Yes, often;

Abbreviations: MCS, mental component summary; PCS, physical component summary; SF-36, Short Form 36

(4) I have already sent an application. Excluding the fourth category (I have already sent an application) which does not reflect an intention, the dependent variable included three categories: 1 = no intentions, 2 = weak intentions, and 3 = strong intentions.

Mental and physical health functioning

Mental and physical health functioning were measured by the Short Form 36 (SF-36) mental (MCS) and physical (PCS) component summaries. The SF-36 is a widely used and well validated generic health measure, which is suitable for the study of the relative burden of ill health in both general and patient populations. The SF-36 questionnaire contains 36 items measuring health related functioning on eight subscales, which can be summarised into a physical and a mental functioning summary component (PCS and MCS) by a method based on factor analysis. These eight subscales include Physical Functioning, Role-Physical, Bodily Pain, General Health, Vitality, Social Functioning, Role-Emotional, and Mental Health. PCS is closely correlated with the Physical Functioning, Role-Physical, and Bodily Pain scales, while MCS is closely correlated with the Mental Health, Role-Emotional, and Social Functioning scales. Vitality, General Health, and Social Functioning scales are closely correlated with both component summaries. Both MCS and PCS have shown to be useful and valid measures of mental and physical health functioning relative to the SF-36 health profile of eight subscales.²¹⁻²³

The values of the mental and physical health functioning summaries have been standardised by using population means and standard deviations in the general US population in 1998. The standardised mean was set to 50 and standard deviation to 10. Lower scores imply poorer health functioning. We tested the linearity of the association of MCS and PCS with intentions to retire early by fitting the MCS and PCS components in quartiles into the model including sex, age, and MCS or PCS as a continuous variable. Adding the classified variable improved the fit of the model statistically significantly ($\Delta\chi^2_6 = 22.9$, $p < 0.001$ for MCS and $\Delta\chi^2_6 = 17.05$, $p < 0.009$ for PCS) suggesting non-linearity. Thus we used MCS and PCS as divided into quartiles, the lowest quartile implying the poorest health functioning.

Socioeconomic status

Socioeconomic status included six hierarchical categories: (1) managers, (2) professionals, (3) semiprofessionals, (4) routine non-manuals, and (5) skilled and (6) unskilled manual workers. Manual workers and non-manual employees were distinguished by using the socioeconomic classification of Statistics Finland, and non-manual employees were further divided into the three subcategories following the occupational classification of the city of Helsinki. Managers have subordinates and they also do managerial/administrative work—for example, as directors of nursery schools, directors of medical surgeries, and administrative managers. Professionals, such as teachers and doctors, do professional work and typically do not have subordinates. Semiprofessionals include, for example, nurses, foremen, and technicians. Routine non-manual employees include non-professional clerical employees and other lower white-collar employees within the social and health services—for example, child minders and assistant maids. Manual workers include skilled manual workers, for example, cooks, firemen, and electricians, and unskilled manual workers, such as kitchen maids, cleaners, and bus drivers.²⁴

Work and family related psychosocial factors

Job demands and job control were measured by the Karasek model.²⁵ Job demands included 10 items and job control nine

items, and these had five response alternatives from 5 = fully disagree to 1 = fully agree. Job demands measure stressors, such as work load demands, and job control measures decision latitude. Summary scores were calculated for job demands and job control separately and divided into quartiles.⁶

Organisational justice was measured by the subscales of procedural and relational justice,^{5, 26} both consisting of four items. Procedural justice measures the degree to which the respondent agrees that the procedures used at workplace are designed to collect accurate information necessary to make decisions, provide opportunities to appeal or challenge the decision, generate standards so that decisions can be made with consistency, and hear the concerns of all those affected by the decision. Relational justice measures whether the respondents think that their supervisor considers the employee viewpoint, is able to suppress personal biases, treats subordinates with kindness and consideration, and takes steps to deal with subordinates in a truthful manner. Both subscales included five response alternatives from 5 = fully disagree to 1 = fully agree and they were divided into quartiles.

Work-to-family conflicts were measured by a question “To what extent do your job responsibilities interfere with your family life?” and family-to-work conflicts by a question “To what extent does your family life and family responsibilities interfere with your performance on your job in any of the following ways?” Both dimensions included four items.^{12, 13} Response alternatives were: 1 = not at all, 2 = to some extent, 3 = a great deal, and 4 = not applicable. The items were summed up to for both dimensions and divided into tertiles.

Social support was assessed using the Brief Social Support Questionnaire by Sarason with four items.²⁷ The questionnaire asked how many different kinds of people the respondent may rely on when help or support is needed. Such persons include: spouse/partner, other close relative, close friend, close friend from the work or your boss, close neighbour, someone else close to you, no-one. The received social support was classified into four categories, representing the size of social network.

Limiting long standing illness was adjusted for in the analyses and it was inquired by asking: “Do you have any long standing illness, disability, or infirmity?” If the answer was “yes”, a follow up question was asked: “Does your illness/disability restrict your work or does it limit your daily activities (gainful employment, housework, schooling, studying)?” Those who answered “yes” were classified as having limiting long standing illness.

Ethical considerations

Participation to the study was voluntary and all participants were informed of this. A written permission to link the questionnaire data with the register data was asked from each participant. The study protocol of the Helsinki Health Study has been approved by the ethical committee of the Department of Public Health, University of Helsinki, and the ethical committee of the city of Helsinki health authorities.

Statistical methods

Age adjusted prevalence percentages and their 95% confidence intervals were calculated for women and men. The associations of mental health functioning and work and family related psychosocial factors with intentions to retire early were analysed by multinomial logistic regression analyses. In the statistical modelling, women and men were pooled together because no statistically significant interaction effects were found between the genders. The results are presented as odds ratios (OR) and their 95% confidence intervals.

Table 1 Age adjusted prevalence (%) and 95% confidence intervals for intentions to retire early

	Women		Men		All subjects	
	Weak intentions (%)	Strong intentions (%)	Weak intentions (%)	Strong intentions (%)	Women (%)	Men (%)
Age (years)						
40	34 (31–37)	8 (6–11)	33 (26–39)	15 (10–21)	23	21
45	36 (33–39)	11 (9–13)	42 (35–48)	14 (9–19)	25	23
50	39 (36–42)	17 (15–19)	38 (32–45)	20 (15–25)	24	25
55	36 (33–39)	24 (22–26)	33 (28–39)	23 (19–27)	29	31
Mental functioning (MCS)					100 (4071)	100 (966)
1st quartile	37 (34–40)	28 (25–30)	40 (33–46)	32 (27–37)	25	26
2nd quartile	38 (35–41)	15 (13–17)	37 (31–44)	18 (13–22)	25	24
3rd quartile	35 (32–38)	9 (7–11)	36 (30–42)	10 (6–15)	27	26
4th quartile	35 (32–38)	8 (6–10)	33 (27–40)	10 (5–15)	24	24
Physical functioning (PCS)					100 (3939)	100 (937)
1st quartile	41 (38–44)	29 (26–31)	49 (42–56)	31 (26–37)	25	19
2nd quartile	41 (38–44)	14 (12–17)	42 (36–48)	19 (14–24)	25	24
3rd quartile	34 (31–37)	9 (7–12)	34 (28–40)	15 (10–19)	25	28
4th quartile	30 (27–33)	8 (6–10)	27 (22–33)	12 (7–16)	25	30
Limiting longstanding illness					100 (3939)	100 (937)
No	35 (33–37)	12 (11–13)	35 (32–39)	15 (12–18)	84	84
Yes	42 (39–46)	30 (27–33)	43 (35–51)	34 (28–40)	16	16
Occupational status					100 (4071)	100 (966)
Managers	31 (25–37)	11 (6–15)	38 (30–45)	13 (7–19)	6	17
Professionals	35 (31–38)	13 (11–16)	35 (29–41)	18 (14–23)	20	25
Semiprofessionals	35 (32–39)	15 (12–17)	36 (30–43)	13 (8–19)	19	21
Routine non-manuals	37 (34–39)	16 (14–17)	34 (24–43)	19 (11–26)	43	11
Skilled manual	43 (35–52)	20 (14–27)	44 (34–54)	23 (15–31)	3	9
Unskilled manual	37 (32–42)	18 (14–22)	37 (30–44)	22 (17–28)	9	18
Job demands					100 (4029)	100 (948)
Low	35 (31–39)	10 (8–13)	36 (29–43)	12 (6–17)	17	17
Rather low	35 (32–38)	11 (8–13)	40 (34–46)	12 (7–17)	24	26
Rather high	37 (35–40)	16 (14–18)	38 (33–43)	20 (15–24)	35	35
High	36 (33–39)	22 (19–24)	32 (26–39)	29 (23–34)	24	22
Job control					100 (4016)	100 (952)
High	35 (32–38)	10 (9–12)	33 (28–39)	15 (11–20)	34	32
Rather high	37 (34–40)	14 (12–16)	35 (29–40)	16 (12–21)	30	31
Rather low	37 (34–40)	18 (16–20)	40 (33–47)	19 (13–25)	21	18
Low	36 (32–40)	24 (21–27)	42 (35–49)	26 (20–31)	16	19
Procedural justice					100 (4045)	100 (954)
High	34 (30–37)	9 (6–11)	36 (29–44)	10 (4–17)	18	15
Rather high	37 (34–40)	12 (10–14)	36 (30–42)	9 (5–14)	30	29
Rather low	39 (36–41)	15 (13–17)	37 (32–43)	22 (18–27)	31	31
Low	33 (30–37)	25 (23–27)	37 (31–44)	27 (23–32)	22	24
Relational justice					100 (4026)	100 (954)
High	35 (32–38)	10 (8–12)	31 (24–37)	13 (8–18)	25	22
Rather high	37 (34–39)	13 (11–15)	38 (32–43)	12 (8–16)	30	31
Rather low	37 (34–40)	17 (14–19)	40 (34–46)	19 (14–24)	24	26
Low	35 (32–39)	23 (21–26)	38 (31–44)	31 (26–37)	20	21
Work-family conflicts					100 (4037)	100 (956)
No conflicts	28 (25–32)	5 (2–7)	27 (20–34)	13 (7–19)	18	20
Weak conflicts	38 (36–40)	13 (12–15)	39 (35–43)	16 (12–19)	64	60
Strong conflicts	40 (36–43)	30 (27–32)	38 (31–45)	29 (24–35)	18	20
Family-work conflicts					100 (3755)	100 (893)
No conflicts	34 (32–36)	12 (11–14)	35 (30–39)	17 (13–20)	47	51
Weak conflicts	38 (36–40)	15 (14–17)	38 (33–43)	16 (12–20)	42	40
Strong conflicts	42 (37–47)	21 (17–24)	41 (30–51)	29 (21–38)	10	9
Network size					100 (3788)	100 (893)
11+	35 (32–38)	11 (9–13)	29 (21–37)	18 (11–24)	24	15
7–10	38 (35–41)	14 (12–16)	42 (36–48)	17 (12–22)	29	26
4–6	35 (33–37)	18 (16–20)	37 (32–41)	18 (15–22)	43	51
0–3	39 (32–45)	21 (16–26)	31 (21–42)	23 (14–32)	5	8
All	36	16	36	19	100 (4055)	100 (959)

Firstly, the baseline model was adjusted for age, socio-economic status, physical health functioning (SF-36, PCS), and limiting long standing illness (Model 0), as our previous study showed that these factors affect both intentions to retire early and mental health functioning.²⁸ Secondly, in order to test the effects of each psychosocial factor on the association between poor mental health functioning and intentions to retire early additional adjustments were made (Models 1–5). For each explanatory variable, those with weakest intentions to retire early were selected as the reference category (OR = 1.00). To study the possible buffering effect of social support, interaction of social network size

with mental health functioning was checked (data not shown). Statistical modelling was carried out using the SPSS (release 12.0.1) statistical package.

RESULTS

Slightly less than half of women (48%) and men (45%) reported no intentions to retire early (table 1). The age adjusted prevalence of weak intentions to retire early was 36% both in women and men. For strong intentions to retire early, the corresponding figures were 16% and 19%.

Among both genders, a higher prevalence of strong intentions to retire early was associated with higher age,

Table 2 Multinomial regression models for strong intentions to retire early

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5
Mental functioning (MCS)	OR	OR	OR	OR	OR	OR
4th quartile	1.00	1.00	1.00	1.00	1.00	1.00
3rd quartile	1.37 (1.02–1.84)	1.27 (0.95–1.72)	1.30 (0.96–1.75)	1.21 (0.89–1.65)	1.36 (1.01–1.83)	1.12 (0.81–1.53)
2nd quartile	2.64 (2.00–3.48)	2.36 (1.78–3.13)	2.50 (1.89–3.32)	2.12 (1.57–2.86)	2.59 (1.96–3.42)	1.94 (1.43–2.63)
1st quartile	6.05 (4.63–7.90)	4.92 (3.73–6.48)	5.24 (3.98–6.88)	4.52 (3.35–6.09)	5.93 (4.52–7.78)	3.67 (2.69–5.01)
Job demands						
Low	1.00	1.00				1.00
Rather low	1.02 (0.75–1.39)	0.90 (0.66–1.24)				0.85 (0.60–1.20)
Rather high	1.86 (1.41–2.47)	1.57 (1.17–2.10)				1.27 (0.92–1.75)
High	2.70 (2.00–3.65)	1.91 (1.40–2.62)				1.38 (0.97–1.97)
Job control						
High	1.00	1.00				1.00
Rather high	1.25 (0.99–1.58)	1.11 (0.87–1.41)				1.04 (0.80–1.35)
Rather low	1.64 (1.27–2.14)	1.31 (1.00–1.72)				1.12 (0.83–1.51)
Low	2.49 (1.88–3.30)	1.95 (1.45–2.61)				1.49 (1.07–2.08)
Procedural justice						
High	1.00		1.00			1.00
Rather high	1.31 (0.97–1.78)		1.14 (0.82–1.58)			1.14 (0.80–1.63)
Rather low	1.91 (1.43–2.57)		1.38 (0.99–1.94)			1.42 (0.98–2.06)
Low	3.02 (2.24–4.08)		1.79 (1.24–2.59)			1.72 (1.14–2.58)
Relational justice						
High	1.00		1.00			1.00
Rather high	1.29 (0.99–1.67)		1.09 (0.82–1.45)			1.03 (0.76–1.40)
Rather low	1.75 (1.34–2.27)		1.21 (0.90–1.64)			1.01 (0.73–1.40)
Low	2.76 (2.11–3.60)		1.53 (1.09–2.13)			1.25 (0.87–1.79)
Work-family conflicts						
No	1.00			1.00		1.00
Weak	2.34 (1.72–3.16)			2.15 (1.56–2.95)		1.86 (1.34–2.58)
Strong	7.25 (5.13–10.27)			5.14 (3.54–7.48)		3.78 (2.53–5.65)
Family-work conflicts						
No	1.00			1.00		1.00
Weak	1.15 (0.94–1.41)			0.70 (0.56–0.87)		0.74 (0.59–0.92)
Strong	1.88 (1.37–2.57)			0.69 (0.49–0.97)		0.71 (0.50–1.02)
Network size						
11+	1.00				1.00	1.00
7–10	1.47 (1.13–1.93)				1.27 (0.97–1.67)	1.21 (0.90–1.63)
4–6	1.78 (1.39–2.28)				1.44 (1.12–1.86)	1.37 (1.05–1.81)
0–3	1.80 (1.20–2.71)				1.01 (0.66–1.54)	0.97 (0.60–1.58)

Odds ratios (OR) and their 95% confidence intervals.

Model 0: Adjusted for age, sex, occupational status, physical health functioning (SF-36) and limiting long standing illness.

Model 1: Model 0+MCS+job demands and job control.

Model 2: Model 0+MCS+procedural and relational justice.

Model 3: Model 0+MCS+work-family and family-work conflicts.

Model 4: Model 0+MCS+social network size.

Model 5: Model 0+MCS+job demands and job control, procedural and relational justice, work-family and family-work conflicts+social network size.

having a lowered mental, and physical health functioning (1st quartile of MCS and PCS), having limiting long standing illness, and occupying a low socioeconomic status. A higher prevalence of strong intentions to retire was equally associated with all work and home related psychosocial factors including high job demands and low job control, low procedural and relational justice, and strong conflicts between paid work and family life. Only among women, a higher prevalence of strong intentions to retire early was statistically significantly associated with small social network size (table 1).

Table 2 firstly shows the associations of mental health functioning, work and family related psychosocial factors, and social network size with strong intentions to retire early (Model 0) and secondly how the association between mental health functioning and strong intentions to retire early was affected by the adjustments for work and family related psychosocial factors and social network size (Models 1–4). Finally Model 5 shows the associations between all explanatory factors for strong intentions to retire early after simultaneous adjustments.

Poor mental health functioning was strongly associated with strong intentions to retire early (OR 6.05, 95% CI 4.63 to 7.90). Employees with high job demands (OR 2.70, 95% CI 2.00 to 3.65) and low job control (OR 2.49, 95% CI 1.88 to 3.30), low procedural justice (OR 3.02, 95% CI 2.24 to 4.08),

and low relational justice (OR 2.76, 95% CI 2.11 to 3.60) were more likely to report strong intentions to retire early than those with better working conditions. The association between work-to-family conflicts and strong intentions to retire early was clearly stronger (OR 7.25, 95% CI 5.13 to 10.27) than that between family-to-work conflicts (OR 1.88, 95% CI 1.37 to 2.57) and between social network size (OR 1.80, 95% CI 1.20 to 2.71).

Mental health functioning remained strongly and independently associated with strong intentions to retire early after separate (Models 1–4) and simultaneous (Model 5) adjustments for all work and family related psychosocial factors. In Model 1 the OR for the lowest mental health functioning weakened from 6.05 to 4.92 (95% CI 3.73 to 6.48) when job demands and control were adjusted for. The effects of the adjustments for procedural and relational justice (Model 2, OR 5.24, 95% CI 3.98 to 6.88) were somewhat lesser. After the adjustments for work-to-family conflicts (Model 3), the OR for the lowest mental health functioning was 4.52 (95% CI 3.35 to 6.09). Social network size (Model 4, OR 5.93, 95% CI 4.52 to 7.78) had no effect on the association. After simultaneous adjustments for all explanatory work and family related psychosocial factors (Model 5), the association between mental health functioning and strong intentions to retire early weakened but remained (OR 3.67, 95% CI 2.69 to 5.01). Work-family conflicts also

showed a clear own relationship with strong intentions to retire early, even after full adjustment (OR 3.78, 95% CI 2.53 to 5.65).

The individual associations of mental health functioning, work and family related psychosocial factors, and social network size with weak intentions to retire early were quite similar but weaker than those with strong intentions to retire early (Model 0). After adjustments the associations weakened and were not necessarily statistically significant anymore.

Analyses of interactions showed no statistically significant interactions between social network size and mental health functioning (data not shown).

DISCUSSION

We studied the associations of mental health functioning and work and family related psychosocial factors with intentions to retire early among middle aged municipal employees. A strong association between mental health functioning and intentions to retire early was found. While the strength of this association was halved after full adjustment for all work and family related psychosocial factors, a clear association nevertheless remained. Thus, the association between mental health functioning and intentions to retire early was partly explained by unfavourable working conditions and conflicts between paid work and family life. These findings are in agreement with previous studies showing that poor health—either mental or physical—is a strong factor contributing to the retirement process as has been theoretically assumed and empirically confirmed.²⁹

The studied psychosocial factors showed own associations with intentions to retire early, and as expected high job demands and low job control, low procedural and relational justice, and conflicts between paid work and family life were all clearly associated with the intentions to retire early. Thus unfavourable working conditions are likely to repel employees away from work and push them towards retirement.^{3 29} Especially strong was the association between work-to-family conflicts and strong intentions to retire early. This suggests the great importance of family life today both among women and men, and perhaps a desire for a better balance between paid work, family life, and leisure time activities. However, the association between family-to-work conflicts and intentions to retire early was weaker. This is understandable against previous studies which have shown that work is more likely to influence family life than vice versa.¹²

The association between limited social network size and intentions to retire early was, however, only modest. In addition, no statistically significant interaction was found between social network size and mental health functioning. These findings nevertheless are supported by similar ones from a previous study, where no connections between low social network size and intentions to retire early were found.¹⁹

Our findings highlight not only the importance of mental health functioning and favourable working conditions but also favourable work/family interface to employees' work career continuing until their normal retirement age. In order to be able to postpone early retirement, the prevention of poor mental health functioning should be increasingly prioritised. In addition, improving working conditions, creating possibilities for more flexible and individual ways of arranging one's work, and a better balance between work and family life should be promoted.

The results of our study should be interpreted against some limitations. First of all, the data were derived from cross sectional surveys where intentions to retire early were asked alongside questions concerning health functioning and psychosocial factors. Therefore, strict causal judgements

Main messages

- Mental health problems are currently major causes of early retirement, but there is little investigation on the complex interrelationships between poor mental health, work and family related psychosocial factors, and the retirement process.
- Our study shows a strong and independent association between mental health functioning (SF-36) and intentions to retire early among middle aged employees. Unfavourable working conditions and conflicts between work and family equally contribute to the intentions to retire early.

Policy implications

- To be able to postpone early retirement prevention of mental health problems should be increasingly prioritised, and possibilities for more flexible and individually tailored ways of arranging one's work, as well as a better balance between work and family life, should be promoted.

cannot be made. Second, the measures of health functioning and psychosocial factors included in this study were based on self-reports and are in this sense "subjective". Third, the response rate was 66%, with women and those in higher socioeconomic groups being somewhat more likely to respond. However, non-response analyses showed that the data represent well the target population.³⁰

CONCLUSIONS

This study showed a strong and independent association between mental health functioning and intentions to retire early among employees. In addition, unfavourable working conditions and conflicts between work and family equally contribute to the intentions to retire early.

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