

# The role of occupational class on the association between sickness absence and disability pension: A Swedish register-based twin study<sup>1</sup>

by Björg Helgadóttir, PhD,<sup>2</sup> Jurgita Narusyte, PhD, Annina Ropponen, PhD, Gunnar Bergström, PhD, Lisa Mather, PhD, Victoria Blom, PhD, Pia Svedberg, PhD

1. *Supplementary tables*

2. *Correspondence to: Björg Helgadóttir, Division of Insurance Medicine, Department of Clinical Neuroscience, Karolinska Institutet, Berzeliusväg 3, 171 77 Stockholm, Sweden. [E-mail: bjorg.helgadottir@ki.se]*

**Table A.1.** Cox proportional hazard ratios (HR) with 95% confidence intervals (CI) for the association between long-term sickness absence (>14 days) due to mental disorders at baseline and all-cause disability pension during follow-up, stratified by occupational class (n=42 984 for whole cohort, n=676 for discordant twins (338 twin pairs)).

Long term sickness absence (>14 days) (binary)	N	Person years	IR per 100 000 person years	Model 1	Model 2	Discordant twins	
				HR (95% CI)	HR (95% CI)	N	HR (95% CI)
No sickness absence	41	226 449	379	Ref		618	
	618						
Sickness absence >14 days	1366	7111	1828	<b>4.37 (3.62–5.27)</b>	<b>4.37 (3.61–5.28)</b>	58	<b>2.11 (1.39–3.22)</b>
<b>Stratified analysis</b>							
<b>White-collar</b>							
No sickness absence	18	99 927	323	Ref		167	
	706						
Sickness absence >14 days	672	3488	1605	<b>4.69 (3.52–6.25)</b>	<b>4.68 (3.51–6.24)</b>	7	1.50 (0.60–3.74)
<b>Blue-collar</b>							

No sickness absence	16 505	88 817	506	Ref		180	
Sickness absence >14 days	556	2897	1899	<b>3.78 (2.84–5.05)</b>	<b>3.57 (2.67–4.77)</b>	18	1.67 (0.80–3.49)

#### **Duration of sickness absence**

No sickness absence	41 618	226 449	379	Ref		618	
Sickness absence >14 days & <6 months	1073	5760	1111	<b>2.67 (2.06–3.46)</b>	<b>2.66 (2.05–3.46)</b>	31	1.16 (0.70–1.94)
Sickness absence ≥6 months	293	1351	4883	<b>11.38 (8.83–14.66)</b>	<b>11.18 (8.64–14.46)</b>	27	<b>5.82 (2.34–14.44)</b>

#### **Stratified analysis**

##### **White-collar**

No sickness absence	18 706	99 927	323	Ref		167	
Sickness absence >14 days & <6 months	526	2821	815	<b>2.40 (1.58–3.66)</b>	<b>2.38 (1.56–3.62)</b>	2	0.33 (0.06–2.00)
6 months or longer	146	667	4950	<b>13.94 (9.76–19.91)</b>	<b>14.38 (10.05–20.56)</b>	5	5.00 (0.81–31.00)

##### **Blue-collar**

No sickness absence	16 505	88 817	506	Ref		180	
Sickness absence >14 days & <6 months	440	2356	1273	<b>2.52 (1.73–3.67)</b>	<b>2.41 (1.65–3.52)</b>	14	1.17 (0.54–2.53)

Sickness absence $\geq$ months	116	541	4623	<b>9.45 (6.18–14.46)</b>	<b>8.37 (5.41–12.94)</b>	4	---
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IR=Incidence rate; HR=Hazard ratio; CI=Confidence interval; N=number of individuals; Ref=Reference group

Model 1: Adjusted for sex and age

Model 2: Adjusted for sex, age, participation in SALT or STAGE, children under 18 living at home, marital status, urban/rural environment, and employment status.

Discordant twins: This model adjusted for age, sex, genetics, and shared environment.

--- The number of people in these categories was too small to estimate a hazard ratio.

**Table A.2.** Cox proportional hazard ratios (HR) with 95% confidence intervals (CI) for the association between long-term sickness absence >14 days due to musculoskeletal disorders at baseline and all-cause disability pension during follow-up, stratified by occupational class (n=42 984 for whole cohort, n=676 for discordant twins (338 twin pairs)).

Long term sickness absence (>14 days) (binary)	N	Person years	IR per 100000 person years	Model 1	Model 2	Discordant twins	
				HR (95% CI)	HR (95% CI)	N	HR (95% CI)
No sickness absence	41266	225 045	357	Ref		589	
Sickness absence >14 days	1718	8515	2184	<b>4.89 (4.16–5.73)</b>	<b>5.04 (4.28–5.93)</b>	87	<b>4.17 (2.47–7.03)</b>
<b>Stratified analysis</b>							
<b>White-collar</b>							
No sickness absence	18842	10 0812	322	Ref		160	
Sickness absence >14 days	536	2604	2074	<b>5.39 (4.02–7.23)</b>	<b>5.43 (4.05–7.29)</b>	14	<b>10.00 (1.53–65.41)</b>
<b>Blue-collar</b>							

No sickness absence	16029	86 660	438	Ref		158
Sickness absence >14 days	1032	5054	2454	<b>4.40 (3.59–5.39)</b>	<b>4.64 (3.77–5.69)</b>	40

#### Duration of sickness absence

No sickness absence	41266	22 5045	357	Ref		589
Sickness absence >14 days & <6 months	1475	7578	1359	<b>3.11 (2.53–3.82)</b>	<b>3.18 (2.58–3.92)</b>	51
Sickness absence ≥6 months	243	938	8852	<b>17.09 (13.58–21.50)</b>	<b>17.59 (13.94–22.19)</b>	36

#### Stratified analysis

##### White-collar

No sickness absence	18842	10 0812	322	Ref		160
Sickness absence >14 days & <6 months	473	2385	1132	<b>2.97 (2.00–4.41)</b>	<b>2.99 (2.01–4.44)</b>	8
6 months or longer	63	219	12 332	<b>28.88 (18.88–44.19)</b>	<b>30.21 (19.69–46.35)</b>	8

##### Blue-collar

No sickness absence	16029	86 660	438	Ref		158
Sickness absence >14 days & <6 months	859	4371	1578	<b>2.89 (2.23–3.75)</b>	<b>3.06 (2.35–3.97)</b>	24
Sickness absence ≥6 months	173	682	8060	<b>12.94 (9.77–17.14)</b>	<b>13.17 (9.90–17.52)</b>	16

IR=Incidence rate; HR=Hazard ratio; CI=Confidence interval; N=number of individuals; Ref=Reference group

Model 1: Adjusted for sex and age

Model 2: Adjusted for sex, age, participation in SALT or STAGE, children under 18 living at home, marital status, urban/rural environment, and employment status.

Discordant twins: This model adjusted for age, sex, genetics, and shared environment.

--- The number of people in these categories was too small to estimate a hazard ratio.