

Table S1A. Cross-sectional analyses: multivariable ordinal logistic regression with psychological and social work factors as independent variables and difficulties initiating sleep as dependent variable. Separate regressions were run with independent variables entered as categorical and continuous.

Psychological and social work factors		Confounders included ^a	Baseline sample			Follow-up sample		
			n	OR	99% CI	n	OR	99% CI
Quantitative job demands	1		582	1	ref	543	1	ref
	2		2063	1.34	1.07-1.67*	1843	1.30	1.02-1.64*
	3		2807	1.52	1.22-1.89**	2591	1.47	1.17-1.85*
	4		1455	2.03	1.61-2.58**	1282	1.70	1.33-2.18**
	5		462	2.70	2.01-3.64**	364	2.79	2.02-3.87**
	Continuous		7369	1.38	1.28-1.49**	6623	1.29	1.19-1.39**
Decision demands	1		124	1.00	ref	111	1.00	ref
	2		451	2.05	1.26-3.32*	386	0.93	0.55-1.57
	3		2899	2.35	1.51-3.65**	2752	1.18	0.74-1.90
	4		2531	2.81	1.80-4.39**	2244	1.40	0.87-2.25
	5		1126	3.68	2.32-5.83**	954	1.46	0.89-2.39
	Continuous		7131	1.39	1.28-1.51**	6447	1.21	1.11-1.33**
Decision control	1	Empowering leadership, support from superior	521	1.00	ref	506	1.00	ref
	2		2128	0.92	0.73-1.16	1891	0.92	0.73-1.18
	3		2752	0.86	0.68-1.08	2497	0.79	0.62-1.00
	4		1565	0.79	0.61-1.01	1386	0.71	0.54-0.92*
	5		365	0.75	0.54-1.05	314	0.48	0.33-0.70**
	Continuous		7331	0.90	0.83-0.97*	6594	0.81	0.74-0.88**
Control of work pacing	1	Decision control	1001	1.00	ref	882	1.00	ref
	2		1384	0.84	0.69-1.02	1181	1.06	0.86-1.30
	3		1593	0.97	0.80-1.17	1395	0.95	0.77-1.30
	4		1896	0.96	0.79-1.17	1772	0.99	0.80-1.23
	5		1483	0.89	0.72-1.11	1387	0.83	0.66-1.05
	Continuous		7357	0.98	0.92-1.04	6617	0.93	0.87-1.00*
Role clarity	1	Support from superior, empowering leadership, fair leadership	60	1.00	ref	46	1.00	ref
	2		154	1.16	0.56-2.41	125	1.27	0.54-2.97
	3		774	0.79	0.41-1.52	667	0.89	0.42-1.88
	4		2163	0.69	0.36-1.32	2003	0.96	0.46-2.01
	5		4179	0.59	0.31-1.12	3749	0.86	0.41-1.79
	Continuous		7330	0.79	0.73-0.86**	6590	0.90	0.82-0.99*

Role conflict	1		1324	1.00	ref	1194	1.00	ref
	2		2025	1.45	1.23-1.72**	1887	1.31	1.10-1.57**
	3		3129	2.02	1.72-2.36**	2768	1.75	1.48-2.07**
	4		659	2.86	2.28-3.59**	594	2.43	1.90-3.09**
	5		225	4.75	3.36-6.73**	179	4.27	2.88-6.32**
	Continuous		7362	1.57	1.47-1.69**	6622	1.50	1.39-1.62**
Predictability during the next month	1	Social climate	110	1.00	ref	103	1.00	ref
	2		217	1.08	0.63-1.87	187	1.31	0.72-2.39
	3		881	0.95	0.59-1.52	816	1.29	0.77-2.16
	4		2038	0.92	0.59-1.46	1820	1.04	0.63-1.72
	5		4079	0.70	0.45-1.11	3660	0.81	0.49-1.34
	Continuous		7325	0.83	0.77-0.89**	6586	0.81	0.75-0.88**
Support from superior	1	Fair leadership, Social climate	254	1.00	ref	256	1.00	ref
	2		377	0.70	0.48-1.03	367	0.59	0.40-0.87*
	3		1540	0.58	0.42-0.80*	1396	0.53	0.38-0.74**
	4		2136	0.47	0.35-0.65**	1935	0.44	0.32-0.62**
	5		3003	0.34	0.25-0.47**	2625	0.31	0.22-0.43**
	Continuous		7310	0.72	0.67-0.76**	6579	0.72	0.67-0.78**
Empowering leadership	1	Support from superior, fair leadership, social climate	707	1.00	ref	674	1.00	ref
	2		1067	1.00	0.79-1.26	990	0.98	0.77-1.26
	3		2624	0.93	0.74-1.16	2345	0.93	0.73-1.19
	4		1692	0.93	0.72-1.20	1533	0.82	0.63-1.08
	5		1216	0.78	0.58-1.04	1033	0.75	0.55-1.02
	Continuous		7306	0.92	0.86-1.00*	6575	0.90	0.83-0.98*
Fair leadership	1	Support from superior, social climate	170	1.00	ref	148	1.00	ref
	2		671	1.27	0.85-1.89	618	1.26	0.81-1.95
	3		4517	1.27	0.88-1.83	4093	1.49	0.99-2.24
	4		1858	1.21	0.83-1.78	1650	1.30	0.85-1.99
	5		94	1.83	1.01-3.33	70	1.54	0.76-3.16
	Continuous		7310	1.10	0.99-1.23	6579	1.06	0.94-1.19
Social climate	1	Fair leadership	94	1.00	ref	73	1.00	ref
	2		728	1.30	0.77-2.18	709	0.85	0.46-1.55
	3		5257	1.04	0.63-1.70	4773	0.75	0.42-1.35
	4		1197	0.78	0.47-1.31	994	0.56	0.31-1.03*
	5		45	1.16	0.49-2.73	42	0.95	0.37-2.48*
	Continuous		7321	0.77	0.69-0.86**	6591	0.82	0.72-0.93*

Commitment to the organization	1	Support from superior, fair leadership, social climate	269	1.00	ref	273	1.00	ref
	2		509	1.07	0.75-1.53	448	0.90	0.62-1.31
	3		1794	0.80	0.58-1.10	1667	0.82	0.59-1.13
	4		2132	0.73	0.53-1.00*	1872	0.70	0.51-0.98
	5		2514	0.58	0.42-0.81**	2302	0.56	0.40-0.78*
	Continuous		7218	0.80	0.74-0.86**	6562	0.80	0.74-0.86**
Positive challenges at work	1	Decision control, role conflict, support from superior, fair leadership, social climate, commitment to the organization	91	1.00	ref	85	1.00	ref
	2		194	0.80	0.43-1.47	193	0.72	0.38-1.34
	3		1278	0.74	0.43-1.26	1251	0.74	0.43-1.29
	4		2478	0.72	0.43-1.23	2328	0.71	0.41-1.22
	5		2946	0.66	0.39-1.13	2518	0.62	0.35-1.07
	Continuous		6987	0.90	0.83-0.99	6375	0.89	0.81-0.98*

^a Sex, age, and skill level were included in all multivariable analyses.

* P < 0.01.

** P < 0.0008, the Bonferroni-corrected threshold based on number of factors tested (0.01/13).

Table S1B. Cross-sectional analyses: multivariable ordinal logistic regression with psychological and social work factors as independent variables and disturbed sleep as dependent variable. Separate regressions were run with independent variables entered as categorical and continuous.

Psychological and social work factors		Confounders included ^a	Baseline sample			Follow-up sample		
			n	OR	99% CI	n	OR	99% CI
Quantitative job demands	1		582	1.00	ref	546	1.00	ref
	2		2063	1.34	1.07-1.67*	1829	1.40	1.11-1.77**
	3		2807	1.52	1.22-1.89**	2593	1.58	1.26-1.97**
	4		1455	2.03	1.61-2.58**	1279	1.80	1.41-2.30**
	5		462	2.70	2.01-3.64**	365	3.21	2.33-4.41**
	Continuous		7369	1.38	1.28-1.49**	6612	1.32	1.22-1.42**
Decision demands	1	Positive challenges at work	124	1.00	ref	114	1.00	ref
	2		451	2.05	1.26-3.32**	382	1.41	0.84-2.38
	3		2899	2.35	1.51-3.65**	2749	1.60	1.00-2.57
	4		2531	2.81	1.80-5.83**	2239	1.80	1.12-2.90*
	5		1126	3.68	2.32-5.83**	953	2.05	1.25-3.35**
	Continuous		7131	1.39	1.28-1.51**	6437	1.21	1.11-1.33**
Decision control	1		5254	1.00	ref	510	1.00	ref
	2		2133	0.85	0.68-1.07	1895	0.86	0.68-1.09
	3		2763	0.73	0.58-0.91**	2497	0.73	0.59-0.92
	4		1572	0.62	0.49-0.79**	1391	0.64	0.50-0.82**
	5		366	0.55	0.40-0.75**	314	0.42	0.30-0.59**
	Continuous		7358	0.81	0.75-0.87**	6607	0.79	0.73-0.85**
Control of work pacing	1		1003	1.00	ref	879	1.00	ref
	2		1384	0.81	0.66-0.98	1174	0.95	0.77-1.17
	3		1594	0.88	0.73-1.07	1383	0.88	0.72-1.08
	4		1896	0.83	0.69-1.00	1777	0.91	0.75-1.10
	5		1484	0.71	0.59-0.86**	1394	0.77	0.63-0.95*
	Continuous		7361	0.91	0.86-0.96**	6607	0.92	0.87-0.98**
Role clarity	1	Support from, superior, fair leadership, social climate	59	1.00	ref	45	1.00	ref
	2		154	1.15	0.55-2.41	124	1.20	0.51-2.82
	3		772	0.78	0.40-1.52	664	0.94	0.44-2.02
	4		2158	0.69	0.36-1.32	2004	0.92	0.44-1.95
	5		4161	0.58	0.30-1.12	3723	0.77	0.36-1.63
	Continuous		7304	0.79	0.73-0.86**	6560	1.19	0.77-0.92**

Role conflict	1		1324	1.00	ref	1192	1.00	ref
	2		2025	1.45	1.23-1.72**	1876	1.25	1.05-1.49
	3		3129	2.02	1.72-2.36**	2768	1.68	1.42-1.98**
	4		659	2.86	2.28-3.59**	595	2.25	1.78-2.86**
	5		225	4.75	3.36-6.73**	180	3.17	2.16-4.66**
	Continuous		7362	1.57	1.47-1.69**	6611	1.44	1.34-1.55**
Predictability during the next month	1	Social climate	110	1.00	ref	101	1.00	ref
	2		217	1.08	0.63-1.87	186	1.08	0.60-1.94
	3		881	0.95	0.59-1.52	818	1.09	0.66-1.79
	4		2038	0.92	0.59-1.46	1813	0.98	0.60-1.59
	5		4079	0.70	0.45-1.11	3660	0.81	0.50-1.31
	Continuous		7325	0.83	0.77-0.89**	6578	0.86	0.80-0.93**
Support from superior	1	Fair leadership, social climate	254	1.00	ref	254	1.00	ref
	2		377	0.70	0.48-1.03	371	0.55	0.37-0.81**
	3		1540	0.58	0.42-0.77**	1396	0.52	0.38-0.73**
	4		2136	0.47	0.35-0.65**	1931	0.41	0.30-0.57**
	5		3003	0.34	0.25-0.47**	2620	0.29	0.21-0.41**
	Continuous		7310	0.72	0.67-0.76**	6572	0.71	0.66-0.76**
Empowering leadership	1	Support from superior, social climate	707	1.00	ref	673	1.00	ref
	2		1067	1.00	0.79-1.26	993	0.95	0.75-1.21
	3		2624	0.93	0.74-1.16	2338	0.83	0.65-1.06
	4		1692	0.93	0.72-1.20	1529	0.74	0.57-0.97
	5		1216	0.78	0.58-1.04	1035	0.73	0.54-0.99*
	Continuous		7306	0.92	0.86-1.00*	6568	0.89	0.82-0.97**
Fair leadership	1	Support from superior, social climate	170	1.00	ref	149	1.00	ref
	2		671	1.27	0.85-1.89	617	1.14	0.74-1.76
	3		4517	1.27	0.88-1.83	4086	1.43	0.96-2.14
	4		1858	1.21	0.83-1.78	1649	1.21	0.79-1.84
	5		94	1.83	1.01-3.33*	71	1.34	0.67-2.69
	Continuous		7310	1.10	0.99-1.23	6572	1.04	0.92-1.17
Social climate	1	Support from superior, fair leadership	94	1.00	ref	72	1.00	ref
	2		726	1.25	0.74-2.10	705	0.79	0.43-1.43
	3		5252	1.13	0.69-1.86	4759	0.88	0.49-1.56
	4		1193	0.94	0.56-1.58	994	0.74	0.41-1.35
	5		45	1.39	0.59-3.28	42	1.10	0.43-2.78
	Continuous		7310	0.89	0.79-1.01	6572	0.98	0.86-1.11

Commitment to the organization	1	Support from superior, fair leadership, social climate	269	1.00	ref	275	1.00	ref
	2		509	1.07	0.75-1.53	446	0.96	0.67-1.37
	3		1794	0.80	0.58-1.10	1664	0.85	0.62-1.16
	4		2132	0.73	0.53-1.00	1869	0.70	0.51-0.96*
	5		2514	0.58	0.42-0.81**	2301	0.56	0.41-0.78**
	Continuous		7218	0.80	0.74-0.86**	6555	0.80	0.74-0.85**
Positive challenges at work	1	Support from superior, social climate	92	1.00	ref	84	1.00	ref
	2		197	0.81	0.44-1.39	195	0.67	0.36-1.23
	3		1291	0.71	0.42-1.19	1256	0.67	0.39-1.16
	4		2514	0.65	0.39-1.10	2333	0.60	0.35-1.02
	5		2994	0.57	0.34-0.96*	2535	0.53	0.31-0.91*
	Continuous		7088	0.85	0.79-0.92**	6403	0.84	0.78-0.92**

^a Sex, age, and skill level were included in all multivariable analyses.

* P < 0.01.

** P < 0.0008, the Bonferroni-corrected threshold based on number of factors tested (0.01/13).