

Table S1 The results of univariate analyses on differences between different types of workers for fathers.

		No shift	Regular	Rotating	Irregular	Total
Total number of workers		78 (17.3%)	149 (33.0%)	119 (26.3%)	106 (23.5%)	452 (100.0%)
Demographic Variables						
Single Parents ^a NS	Married parents	71 (91.0%)	131 (87.9%)	110 (92.4%)	91 (85.8%)	403 (89.2%)
	Single parents	7 (9.0%)	18 (12.1%)	9 (7.6%)	15 (14.2%)	49 (10.8%)
Income ^a *	≥\$800/week	72 (92.3%)	134 (89.9%)	115 (96.6%)	91 (85.8%)	412 (91.2%)
	<&800/week	6 (7.7%)	15 (10.1%)	4 (3.4%)	15 (14.2%)	40 (8.8%)
Tertiary Education ^a ***	Bachelor's or higher	50 (64.1%)	38 (25.5%)	28 (23.5%)	27 (25.5%)	143 (31.6%)
	Below bachelor's	28 (35.9%)	111 (74.5%)	91 (76.5%)	79 (74.5%)	309 (68.4%)
Number of Children ^a NS	≤2 children	62 (79.5%)	114 (76.5%)	87 (73.1%)	79 (74.5%)	342 (75.7%)
	≥3 or more	16 (20.5%)	35 (23.5%)	32 (26.9%)	27 (25.5%)	110 (24.3%)
Youngest child age ^b NS		5.50 (4.27)	5.93 (4.07)	4.81 (3.34)	5.24 (3.36)	5.40 (3.78)
Work-related Variables						
Occupational Type ^a ***	Manager/Administrator	13 (16.7%)	15 (10.1%)	11 (9.2%)	5 (4.7%)	44 (9.7%)
	Professional	46 (59.0%)	34 (22.8%)	31 (26.1%)	34 (32.1%)	145 (32.1%)
	Trades person	6 (7.7%)	27 (18.1%)	26 (21.8%)	9 (8.5%)	68 (15.0%)
	Clerical/service worker	2 (2.6%)	11 (7.4%)	12 (10.1%)	6 (5.7%)	31 (6.9%)
	Labourer or related worker	2 (2.6%)	21 (14.1%)	13 (10.9%)	6 (5.7%)	42 (9.3%)
	Other	9 (11.5%)	41 (27.5%)	26 (21.8%)	46 (43.4%)	122 (27.0%)
Work Hours ^a *	Work 40 hour or less per week	18 (23.1%)	49 (32.9%)	19 (16.0%)	22 (20.8%)	108 (23.9%)
	Work more than 40 hours per week	60 (76.9%)	100 (67.1%)	100 (84.0%)	84 (79.2%)	344 (76.1%)
Employment Type ^a ***	Permanent	67 (85.9%)	134 (89.9%)	108 (90.8%)	79 (74.5%)	388 (85.8%)
	Not permanent	11 (14.1%)	15 (10.1%)	11 (9.2%)	27 (25.5%)	64 (14.2%)
Job Quality ^a ***	High quality	63 (80.8%)	96 (64.4%)	58 (48.7%)	48 (45.3%)	265 (58.6%)
	Low quality	15 (19.2%)	53 (35.6%)	61 (51.3%)	58 (54.7%)	187 (41.4%)
Work-family conflict (1-5) ^b **		3.22 (.79)	3.28 (.79)	3.48 (.66)	3.58 (.67)	3.39 (.74)
Health & Wellbeing						
Distress Symptoms (10-50) ^b NS		19.95 (8.29)	19.59 (7.63)	20.13 (8.39)	21.70 (8.99)	20.29 (8.29)

^a N (% within the column); Pearson Chi-Square test. ^b Mean (SD); One-way ANOVA. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. NS not significantly associated.

Table S2 The results of univariate analyses on differences between different types of workers for mothers.

		No shift	Regular	Rotating	Irregular	Total
Total number of workers		264 (34.9%)	209 (27.6%)	90 (11.9%)	193 (25.5%)	756 (100.0%)
Demographic Variables						
Single Parents ^a NS	Married parents	226 (85.6%)	165 (78.9%)	74 (82.2%)	149 (77.2%)	614 (81.2%)
	Single parents	38 (14.4%)	44 (21.1%)	16 (17.8%)	44 (22.8%)	142 (18.8%)
Income ^a ***	≥\$800/week	218 (82.6%)	129 (61.7%)	66 (73.3%)	126 (65.3%)	539 (71.3%)
	<&800/week	46 (17.4%)	80 (38.3%)	24 (26.7%)	67 (34.7%)	217 (28.7%)
Tertiary Education ^a ***	Bachelor's or higher	203 (76.9%)	122 (58.4%)	58 (64.4%)	130 (67.4%)	513 (67.9%)
	Below bachelor's	61 (23.1%)	87 (41.6%)	32 (35.6%)	63 (32.6%)	243 (32.1%)
Number of Children ^a **	≤2 children	213 (80.7%)	159 (76.1%)	57 (63.3%)	132 (68.4%)	561 (74.2%)
	≥3 or more	51 (19.3%)	50 (23.9%)	33 (36.7%)	61 (31.6%)	195 (25.8%)
Youngest child age ^b NS		6.48 (5.21)	6.39 (5.22)	6.03 (5.23)	6.91 (5.26)	6.51 (5.22)
Work-related Variables						
Occupational Type ^a ***	Manager/Administrator	35.9 (13.3%)	9 (4.3%)	6 (6.7%)	6 (3.1%)	56 (7.4%)
	Professional	168 (63.6%)	110 (52.6%)	56 (62.2%)	131 (67.9%)	465 (61.5%)
	Trades person	0 (0.0%)	3 (1.4%)	1 (1.1%)	1 (0.5%)	5 (0.7%)
	Clerical/service worker	42 (15.9%)	60 (28.7%)	14 (15.6%)	25 (13.0%)	141 (18.7%)
	Labourer or related worker	0 (0.0%)	2 (1.0%)	1 (1.1%)	3 (1.6%)	6 (0.8%)
	Other	19 (7.2%)	25 (12.0%)	12 (13.3%)	27 (14.0%)	83 (11.0%)
Work Hours ^a NS	Work 40 hour or less per week	170 (64.4%)	157 (75.1%)	58 (64.4%)	136 (70.5%)	521 (68.9%)
	Work more than 40 hours per week	94 (35.6%)	52 (24.9%)	32 (35.6%)	57 (29.5%)	235 (31.1%)
Employment Type ^a ***	Permanent	218 (82.6%)	167 (79.9%)	77 (85.6%)	117 (60.6%)	579 (76.6%)
	Not permanent	46 (17.4%)	42 (20.1%)	13 (14.4%)	76 (39.4%)	177 (23.4%)
Job Quality ^a ***	High quality	206 (78.0%)	132 (63.2%)	44 (48.9%)	74 (38.3%)	456 (60.3%)
	Low quality	58 (22.0%)	77 (36.8%)	46 (51.1%)	119 (61.7%)	300 (39.7%)
Work-family conflict (1-5) ^b NS		3.46 (.79)	3.43 (.82)	3.56 (.75)	3.60 (.73)	3.50 (.78)
Health & Wellbeing						
Distress Symptoms (10-50) ^b *		18.31 (6.33)	20.46 (7.73)	19.92 (7.55)	19.65 (7.58)	19.44 (7.25)

^a N (% within the column); Pearson Chi-Square test. ^b Mean (SD); One-way ANOVA. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. NS not significantly associated.

Table S3 The effect of covariates on psychological distress via work-family conflict (simple mediation model)

	<i>Total effect</i>			<i>Direct effect</i>			<i>Indirect effect</i>		
	<i>Effect</i>	<i>SE</i>	<i>t</i>	<i>Effect</i>	<i>SE</i>	<i>t</i>	<i>Effect</i>	<i>SE</i>	<i>95%CI</i>
<i>Single parents</i> ^a	2.89	.60	4.84***	1.83	.57	3.20**	1.05	.21	.66 – 1.49
<i>Number of children</i> ^b	1.11	.50	2.22*	.61	.48	1.27	.50	.17	.19 – .84
<i>Income</i> ^c	.79	.64	1.24	1.12	.61	1.84†	-.33	.21	-.75 – .08
<i>Part-time work</i> ^d	-1.41	.80	-1.77†	-.47	.76	-.62	-.94	.29	-1.54 – -.38
<i>Over-time work</i> ^e	.83	.50	1.67†	.58	.47	1.21	.26	.16	-.05 – .57
<i>Trades person</i> ^f	-1.52	1.17	-1.30	-1.06	1.11	-.95	-.46	.36	-1.21 – .22
<i>Professional</i> ^g	-1.02	.83	-1.24	-1.73	.79	-2.20*	.71	.26	.20 – 1.23
<i>Clerical or service worker</i> ^h	.30	.99	.30	-.45	.94	-.48	.75	.33	.14 – 1.42
<i>Labourer</i> ⁱ	-.77	1.34	-.58	-.57	1.27	-.45	-.20	.43	-1.01 – .68
<i>Other</i> ^j	-.42	.94	-.44	-.64	.90	-.72	.23	.29	-.34 – .82
<i>Job quality</i> ^k	2.45	.49	5.04***	1.82	.46	3.91***	.63	.16	.32 – .94
<i>Permanent position</i> ^l	-.21	.59	-.35	.01	.56	.02	-.22	.20	-.63 – .16

^a Single parents: 0 = married parents, 1 = single parents; ^b Number of children: 0 = 2 children or less; 1 = 3 or more children; ^c Income: 0 = more than \$800/week or prefer not to say, 1 = less than \$800/week; ^d Part-time work: 0 = work more than 20 hours/week, 1 = work less than 20 hours/week; ^e Over-time work: 0 = work less than 40 hours/week, 1 = work more than 40 hours/week; ^f Trades person: 0 = any other occupation, 1 = Trades person; ^g Professional: 0 = any other occupation, 1 = Professional; ^h Clerical or service worker: 0 = any other occupation, 1 = Clerical or service worker; ⁱ Labourer: 0 = any other occupation, 1 = labourer; ^j Other: 0 = Managers/Administrators, Trades person, Professional, Clerical or service worker, or Labourer; 1 = other occupations; ^k Job quality: 0 = high quality, 1 = low quality; ^l Permanent position: 0 = permanent position, 1 = not permanent position.

† $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table S4 The effect of covariates on psychological distress via work-family conflict, conditional on genders (moderated-mediation model)

<i>Conditional Direct effect</i>									
	<i>Effect</i>	<i>Fathers</i>			<i>Mothers</i>				
		<i>SE</i>		<i>t</i>	<i>Effect</i>	<i>SE</i>		<i>t</i>	
<i>Single parents^a</i>	1.65	.67		2.45*	.45	1.72		.26	
<i>Number of children^b</i>	.49	.60		.82	.09	1.42		.06	
<i>Income^c</i>	.45	.66		.68	-3.70	1.70		-2.18*	
<i>Part-time work^d</i>	-.55	.79		-.69	-2.55	2.73		-.94	
<i>Over-time work^e</i>	.71	.60		1.18	2.22	1.40		1.58	
<i>Trades person^f</i>	-1.53	3.28		-.47	-1.47	6.50		-.23	
<i>Professional^g</i>	-1.49	.86		-1.74†	-1.28	1.52		-.84	
<i>Clerical or service worker^h</i>	-.35	.99		-.35	.43	2.04		-.21	
<i>Labourerⁱ</i>	-4.65	3.00		-1.55	-8.79	5.98		-1.47	
<i>Other^j</i>	-.70	1.11		-.63	-.33	2.02		-.16	
<i>Job quality^k</i>	1.45	.57		2.52*	.63	1.29		.49	
<i>Permanent position^l</i>	-.58	.65		-.89	-2.80	1.57		-1.78†	
<i>Conditional Indirect effect</i>									
	<i>Fathers</i>			<i>Mothers</i>			<i>Differences between fathers and mothers</i>		
	<i>Effect</i>	<i>SE</i>	<i>95%CI</i>	<i>Effect</i>	<i>SE</i>	<i>95%CI</i>	<i>Index</i>	<i>SE</i>	<i>95%CI</i>
<i>Single parents^a</i>	1.09	.39	.33 – 1.85	1.00	.24	.53 – 1.48	-.09	.44	-.93 – .77
<i>Number of children^b</i>	.40	.26	-.10 – .93	.56	.21	.16 – .98	.17	.33	-.47 – .81
<i>Income^c</i>	-.68	.43	-1.51 – .15	-.30	.23	-.76 – .15	.38	.46	-.51 – 1.29
<i>Part-time work^d</i>	-1.48	1.27	-3.96 – 1.02	-.93	.28	-1.52 – -.39	.54	1.27	-2.02 – 3.03
<i>Over-time work^e</i>	.49	.28	-.05 – 1.07	.30	.20	-.09 – .72	-.19	.34	-.86 – .48
<i>Trades person^f</i>	-.29	.38	-1.05 – .45	-.71	1.07	-2.96 – 1.31	-.42	1.09	-2.71 – 1.70
<i>Professional^g</i>	.75	.34	.10 – 1.46	.62	.29	.08 – 1.22	-.12	.32	-.75 – .51
<i>Clerical or service worker^h</i>	1.43	.57	.34 – 2.58	.54	.33	-.09 – 1.20	-.90	.56	-2.00 – .18
<i>Labourerⁱ</i>	-.20	.48	-1.15 – .76	.83	.65	-.38 – 2.16	1.02	.73	-.35 – 2.54
<i>Other^j</i>	.00	.34	-.67 – .65	.70	.38	-.04 – 1.44	.70	.38	-.05 – 1.45
<i>Job quality^k</i>	.67	.23	.23 – 1.13	.64	.21	.24 – 1.06	-.03	.29	-.61 – .53
<i>Permanent position^l</i>	-.14	.39	-.91 – .63	-.27	.23	-.72 – .17	-.13	.43	-.99 – .74

^a Single parents: 0 = married parents, 1 = single parents; ^b Number of children: 0 = 2 children or less; 1 = 3 or more children; ^c Income: 0= more than \$800/week or prefer not to say, 1 = less than \$800/week; ^d Part-time work: 0 = work more than 20 hours/week, 1 = work less than 20 hours/week; ^e Over-time work: 0 = work less than 40 hours/week, 1 = work more than 40 hours/week; ^f Trades person: 0 = any other occupation, 1 = Trades person; ^g Professional: 0 = any other occupation, 1 = Professional; ^h Clerical or service worker: 0= any other occupation, 1 = Clerical or service worker; ⁱ Labourer: 0= any other occupation, 1 = labourer; ^j Other: 0 = Managers/Administrators, Trades person, Professional, Clerical or service worker, or Labourer; 1 = other occupations; ^k Job quality: 0=high quality, 1=low quality; ^l Permanent position: 0= permanent position, 1= not permanent position.

Bold for significance. † $p < 0.1$; * $p < 0.05$;