



Brief Report

Examining burnout in the electrical sector in Ontario, Canada: A cross-sectional study

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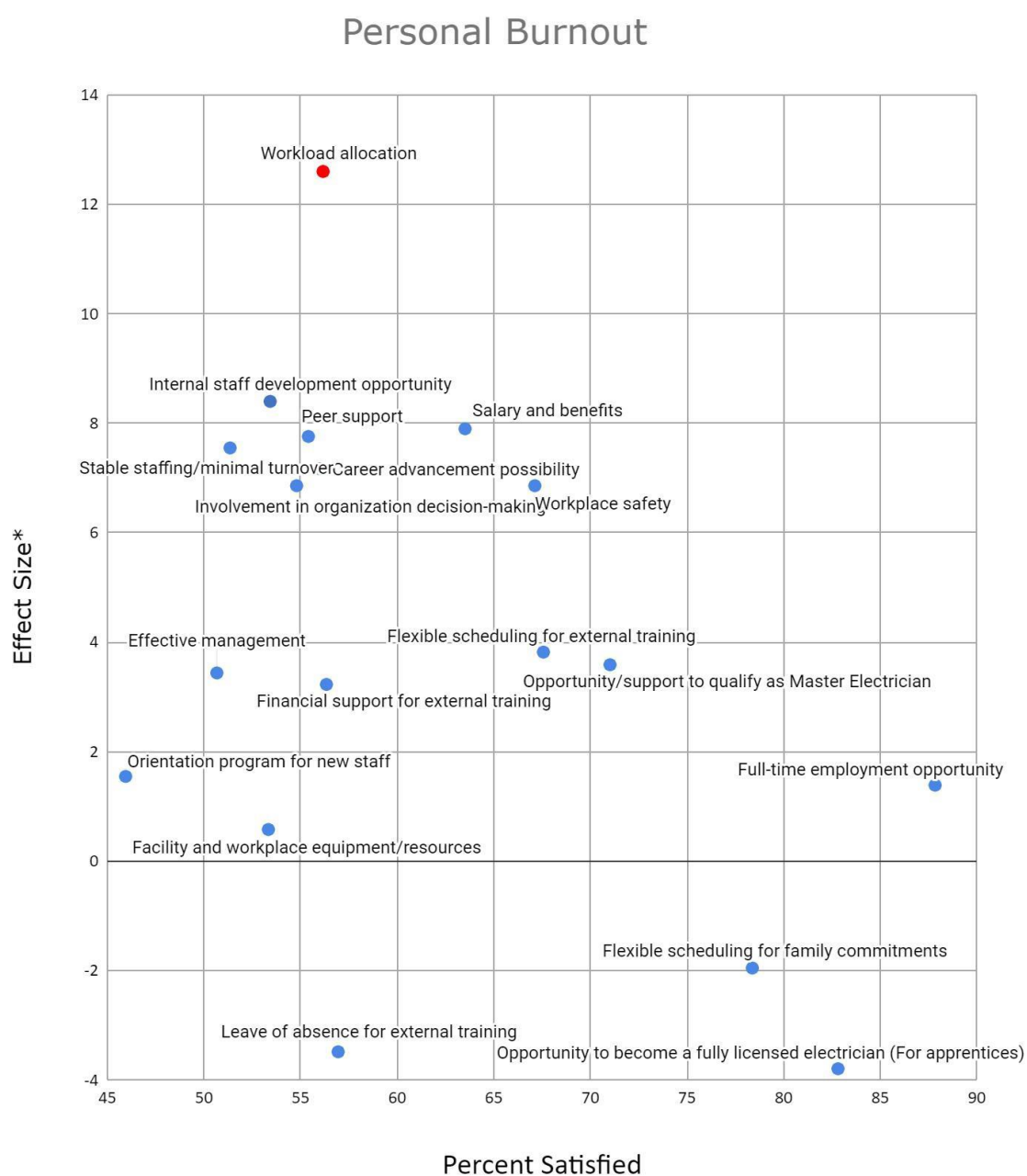


Figure S1. Impact of availability of work-related factors on personal burnout. * Effect size for a given work-related factor is calculated as the difference in average score of those dissatisfied with the factor and those satisfied with the factor. Red dots indicate the relationship between satisfaction with the factor and their average burnout score is significant to an alpha level of 0.05. Blue dots indicate the relationship is not significant to an alpha level of 0.05.

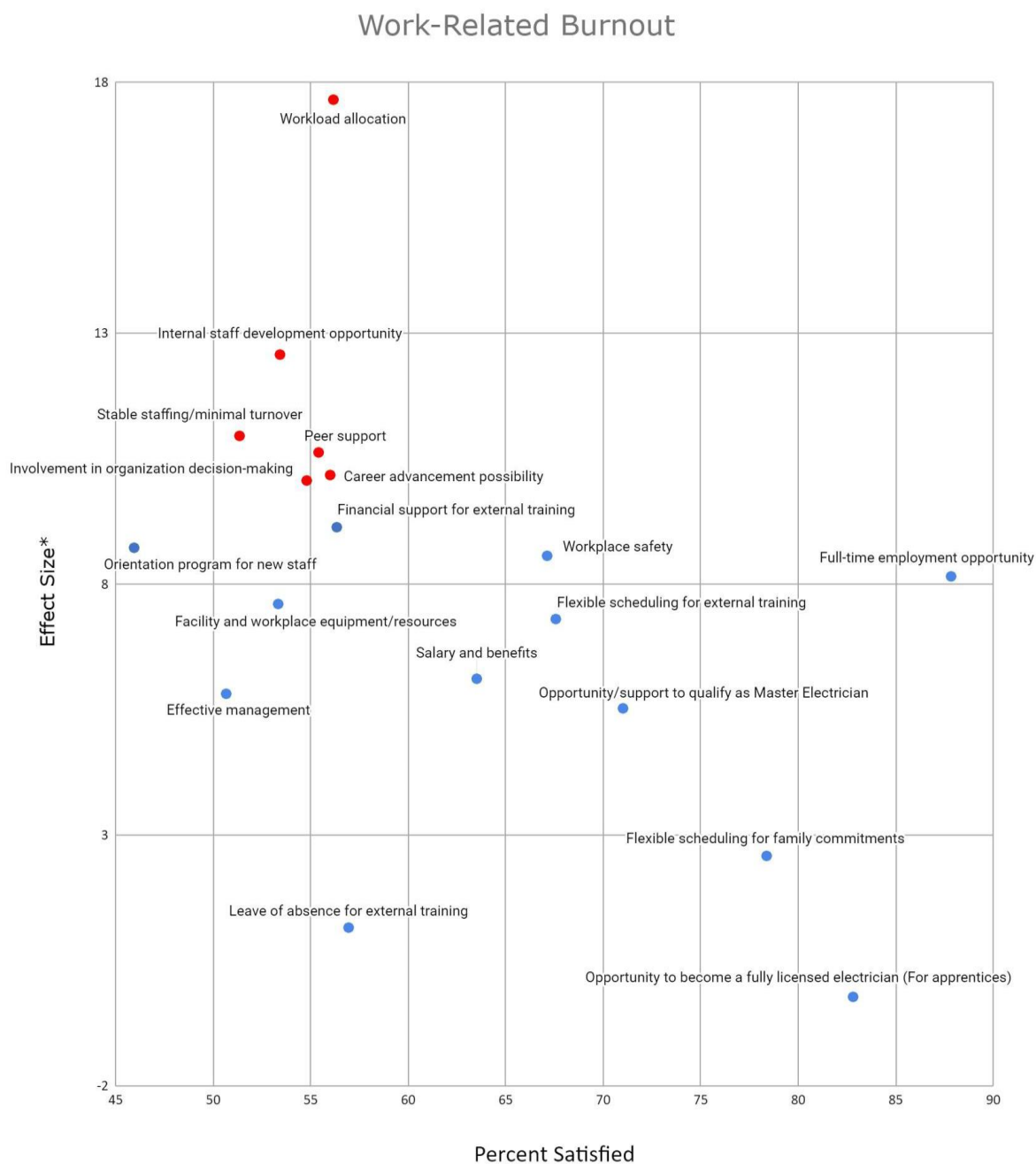


Figure S2. Impact of availability of work-related factors on work-related burnout. * Effect size for a given work-related factor is calculated as the difference in average score of those dissatisfied with the factor and those satisfied with the factor. Red dots indicate the relationship between satisfaction with the factor and their average burnout score is significant to an alpha level of 0.05. Blue dots indicate the relationship is not significant to an alpha level of 0.05.

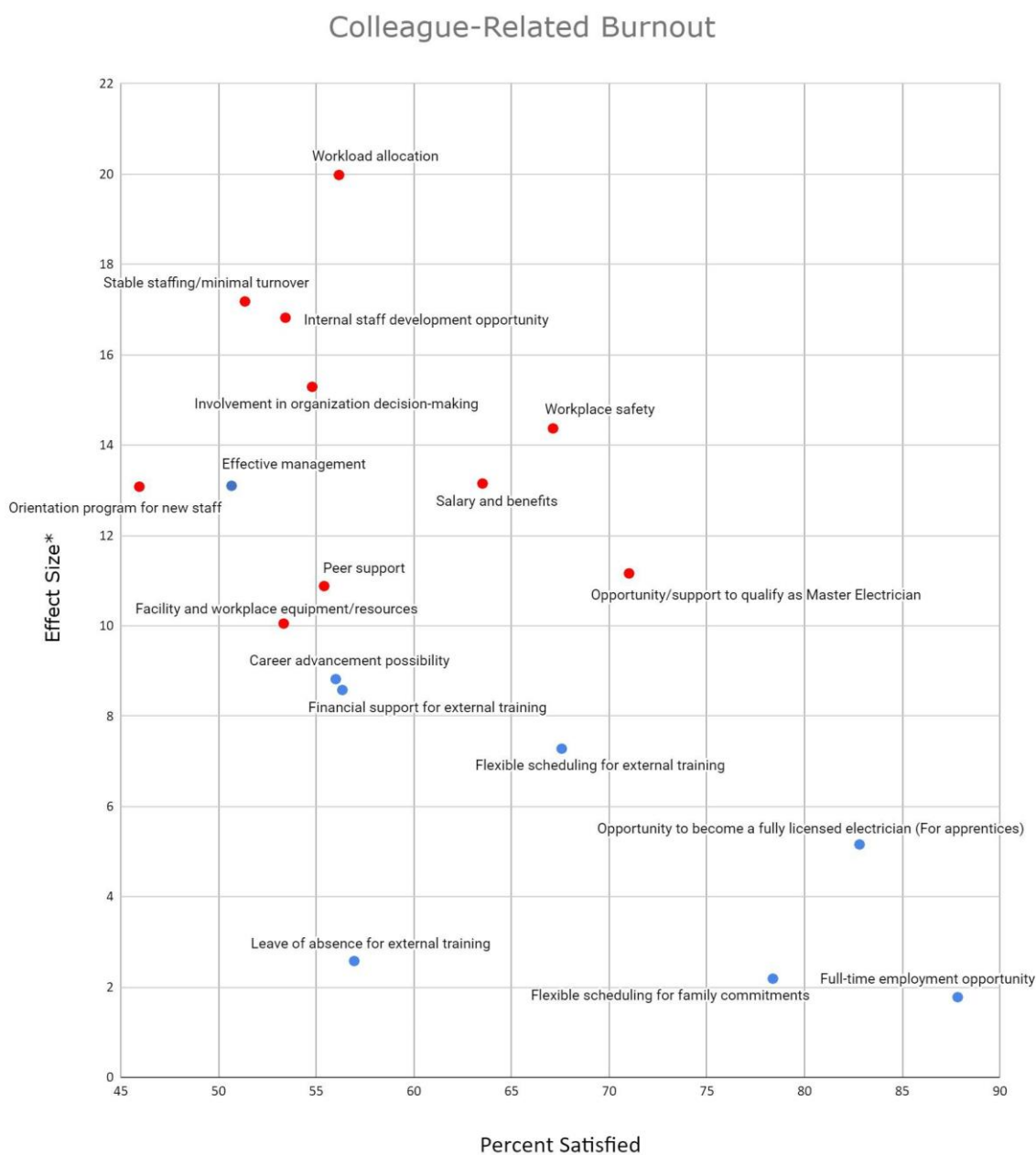


Figure S3. Impact of availability of work-related factors on colleague-related burnout. * Effect size for a given work-related factor is calculated as the difference in average score of those dissatisfied with the factor and those satisfied with the factor. Red dots indicate the relationship between satisfaction with the factor and their average burnout score is significant to an alpha level of 0.05. Blue dots indicate the relationship is not significant to an alpha level of 0.05.

Table S1. Association between the availability/satisfaction of work-related factors and the experience of burnout (n = 82).

Factors	Satisfied with availability of work-related factors (%)	Personal burnout				Work-related burnout				Colleague-related burnout				Total burnout			
		Mean satisfied	non-Mean satisfied	Mean difference*	p value**	Mean satisfied	non-Mean satisfied	Mean difference*	p value**	Mean satisfied	non-Mean satisfied	Mean difference*	p value**	Mean satisfied	non-Mean satisfied	Mean difference*	p value**
Career advancement possibility	56.0	42.02	34.85	7.17	0.16	43.70	33.52	10.18	0.04	42.94	34.12	8.82	0.08	43.74	33.49	10.25	0.04
Effective management	50.7	39.74	36.30	3.44	0.49	40.95	35.13	5.82	0.25	44.64	31.54	13.10	0.09	42.51	33.61	8.90	0.08
Facility and workplace equipment/resources	53.3	38.31	37.73	0.58	0.91	42.06	34.45	7.61	0.13	43.36	33.31	10.05	0.05	41.40	35.03	6.37	0.21
Financial support for external training	56.3	37.82	34.59	3.23	0.51	41.15	32.01	9.14	0.06	40.89	32.31	8.58	0.08	41.00	32.13	8.87	0.07
Flexible scheduling for external training	67.6	40.08	36.26	3.82	0.47	42.44	35.13	7.31	0.17	42.42	35.14	7.28	0.17	42.42	35.14	7.28	0.17
Flexible scheduling for family commitments	78.4	35.97	37.92	-1.95	0.75	39.53	36.94	2.59	0.67	39.22	37.03	2.19	0.72	37.53	37.49	0.04	1.00
Full-time employment opportunity	87.8	38.72	37.33	1.39	0.86	44.67	36.51	8.16	0.28	39.06	37.28	1.78	0.82	41.28	36.98	4.30	0.57
Internal staff development opportunity	53.4	41.49	33.09	8.40	0.09	43.72	31.14	12.58	0.01	45.99	29.17	16.82	<0.001	44.69	30.29	14.40	0.00
Involvement in organization decision-making	54.8	40.76	33.90	6.86	0.17	42.52	32.45	10.07	0.04	45.38	30.09	15.29	0.00	43.70	31.48	12.22	0.01
Leave of absence for external training	56.9	34.52	38.00	-3.48	0.48	37.16	36.00	1.16	0.82	37.97	35.39	2.58	0.60	36.89	36.21	0.68	0.89
Orientation program for new staff	45.9	38.21	36.66	1.55	0.76	41.51	32.78	8.73	0.08	43.51	30.43	13.08	0.01	41.51	32.78	8.73	0.08
Peer support	55.4	41.80	34.04	7.76	0.12	43.39	32.76	10.63	0.03	43.53	32.65	10.88	0.03	43.52	32.66	10.86	0.03
Salary and benefits	63.5	42.52	34.62	7.90	0.13	41.39	35.27	6.12	0.24	45.85	32.70	13.15	0.01	43.78	33.89	9.89	0.06
Stable staffing/minimal turnover	51.4	41.38	33.83	7.55	0.13	43.13	32.17	10.96	0.03	46.32	29.14	17.18	<0.001	44.50	30.87	13.63	0.01
Workload allocation	56.2	44.08	31.48	12.60	0.01	46.92	29.26	17.66	<0.001	48.22	28.24	19.98	<0.001	47.70	28.65	19.05	<0.001
Workplace safety	67.1	41.60	34.74	6.86	0.19	42.75	34.18	8.57	0.10	46.65	32.28	14.37	0.01	44.69	33.23	11.46	0.03
Opportunity to become a fully license electrician (For apprentices)	82.8	29.36	33.15	-3.79	0.54	32.32	32.54	-0.22	0.97	36.77	31.61	5.16	0.40	32.95	32.41	0.54	0.93
Opportunity/support to qualify as Master Electrician	71.0	37.55	33.96	3.59	0.50	38.93	33.40	5.53	0.30	42.93	31.77	11.16	0.04	40.50	32.76	7.74	0.15

Note: *: Mean difference (also referred to as “Effect size”) is calculated as the mean burnout score by those not satisfied with the availability of a work-related factor subtract the mean burnout score of those satisfied with the work-related factor. Higher mean difference (positive) indicates that the dissatisfaction of a work-related factor is associated with a higher burnout score. **: The p-value was obtained from the Mann-Whitney U test.

Table S2. Comparison of burnout scores over a two years period.

Type of burnout	Personal burnout		Work-related burnout		Colleague-related burnout	
	Mean [<i>SD</i>]	Burnout rate (%)*	Mean [<i>SD</i>]	Burnout rate (%)*	Mean [<i>SD</i>]	Burnout rate (%)*
After year 1 (<i>n</i> = 40)	33.48 [16.60]	17.5	25.63 [13.21]	5.0	17.56 [16.32]	5.0
After year 2 (<i>n</i> = 82)	40.51 [19.95]	33.3	33.02 [19.04]	19.8	23.29 [19.40]	13.6

Note: *Burnout rate indicates the percentage of respondents who have experienced either a moderate, a high, or a severe level of burnout.

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