

Electronic Supplementary Material

Indoor environment quality and work performance in “green” office buildings in the Middle East

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Appendices

Appendix A Demographic breakdown of participants in each building classification (N.B. the number of occupants is presented with absolute values as well as relative within parentheses in the table body; relative number of occupants is broken down per category and adds to 100% within the same type of building; CB indicates conventional building)

	Category	CB ($n_{\text{occupants}} = 241$)		LEED ($n_{\text{occupants}} = 261$)	
Gender	Female	95	(39%)	128	(49%)
	Male	146	(61%)	133	(51%)
Job category	Administrative	62	(26%)	86	(33%)
	Sales	37	(15%)	50	(19%)
	Design	37	(15%)	39	(15%)
	Executive	37	(15%)	36	(14%)
	Other	68	(28%)	50	(19%)
Working experience	0.0, 0.5)	31	(13%)	22	(8%)
	[0.5, 1.0)	37	(15%)	23	(9%)
	[1.0, 2.5)	54	(22%)	61	(23%)
	[2.5, 5.0)	37	(15%)	65	(25%)
	[5.0, ∞)	82	(34%)	90	(34%)
Daily working hours	0, 1	—		2	(1%)
	1, 3	—		6	(2%)
	3, 5	4	(2%)	7	(3%)
	5, 7	10	(4%)	6	(2%)
	7, 8	24	(10%)	31	(12%)
	8, ∞	203	(84%)	209	(80%)
Education level	High school	15	(6%)	14	(5%)
	College	23	(10%)	10	(4%)
	Bachelors	158	(66%)	194	(74%)
	Master	45	(19%)	43	(16%)
Number of people in the same office	[0, 1)	106	(44%)	39	(15%)
	[2, 4)	98	(41%)	35	(13%)
	[4, 10)	17	(7%)	22	(8%)
	[10, 24)	20	(8%)	150	(57%)
	[24, ∞)	—		15	(6%)
Net monthly earning (JD)	[0, 400)	21	(9%)	17	(7%)
	[400, 700)	56	(23%)	94	(36%)
	[700, 1000)	76	(32%)	61	(23%)
	[1000, 1300)	16	(7%)	39	(15%)
	[1300, 1600)	24	(10%)	24	(9%)
	[1600, 2000)	16	(7%)	3	(1%)
	[2000, ∞)	32	(13%)	23	(9%)

Appendix B Technical specifications of instruments used in monitoring thermal conditions and CO₂

Measurement type	Sensor	Variable	Unit	Valid range	Accuracy
Spot measurement	HD 32.3	T_a	°C	[0, 50]	±0.1
		RH	%	[0, 100]	±0.8
		V_a	m/s	[0.1, 5]	±0.2
Time series (Raspberry-Pi-based sensors)	Maxim IC DS18B20	T_a	°C	[−10, 85]	±0.5
	AdaFruit DHT22	RH	%	[0, 100]	±2
	Sensair K30	CO ₂	ppm	[0, 5000]	±30