

Table S1: Summary of literature on postoccupancy evaluation feedback on occupant-centric thermal comfort and building energy efficiency

ID	Journal	Authors, year	Country	Building type	Sample characteristics	Data collection methods	Sample size (N)	Data analysis approach	Evaluation Contents
1	Building and Environment	Agha-Hossein et al., 2013	UK	physical workplace	employees	online questionnaires, space measurements, informal behavior observations, and energy consumption measurement	N=162 ,pret-occupancy surveys; N=183 post-occupancy surveys	t-tests, Pearson correlation tests, and stepwise multiple regression analyses	Employee satisfaction, perceived productivity, self-reported productivity, well-being, and enjoyment; energy consumption
2	Energy and Buildings	Collinge et al., 2014	USA	office buildings	residents	POE survey; observed data	N=48 occupants	a 7-point, Likert-type scale; linear regression	satisfaction;
3	Building and Environment	Gonzalez-Caceres et al., 2019	Denmark	a social housing complex	residents	in-situ and laboratory measurements	N=400 apartments	NA	NA
4	Building and Environment	Göçer et al., 2018	Turkey	Suburban university campus	staff and students	behavioral mapping;	NA	spss;StarCCM + software	Outdoor thermal comfort survey, user satisfaction, space syntax and behavioral mapping, biometeorological assessments, tracking
5	Applied Energy	Menezes et al., 2012	UK		tenant	the TM22 methodology;in-depth monitoring;	NA	NA	NA
6	Journal of Building Engineering	Pannier et al., 2021	France	a multifamily house	a sociologist and engineer; inhabitant	Letters, calls, meetings, sensors, calorie counters, electrical switchboards, impulse meters, and indoor air quality sensors.	n=11,families	mind-map、 Cross-disciplinary analysis	Energy and comfort; Environmental assessment;

7	Building and Environment	Pastore and Andersen, 2019	Switzerland	green buildings	occupants	Online surveys, IEQ monitoring, point-in-time surveys, HDR cameras, spot luminance meters, illuminance sensors	n=4, Minergie office buildings;n=277 answers;	a 7-point Likert scale; Chi-square homogeneity test; Shapiro-Wilk tests and Q-Q plots; Mann-Whitney or Kruskal-Wallis tests; Spearman correlation with Holm correction for p-value adjustment; R software	Long-term and instantaneous comfort opinions; temperature, relative humidity, illumination, CO2 ppm, IEQ variables (temperature, light, air quality, and noise), and happiness
8	Building and Environment	Ponterosso et al., 2018	UK	offices	occupants; office employees	survey/questionnaire; physical environmental monitoring;temperature and relative humidity data loggers;online via Google Forms;	n=29 individuals	a 7-point Likert scale;	physically monitored thermal environment; light quality, air quality
9	Energy and Buildings	Pretlove and Kade, 2016	UK	low carbon housing	occupants	Social surveys;meetings, structured interviews;Monitor	n=7 new social housing dwellings	NA	built services technology, occupant behavior, environmental monitoring, resource consumption and generation metrics, occupant social surveys
10	Energy and Buildings	Colclough et al., 2022	Ireland	dwellings	retired and elderly tenants	telephone calls and visits; survey;	n=12 homes;n=8 dwellings and heat pump energy consumption	DEAP software	satisfaction survey; CO2 concentrations; records interior temperatures; compares energy consumption temperatures to DEAP estimates;Home heating, hot water, lights, and ventilation

11	Building Research & Information	Elsayed et al.,2022	Italy	residential apartment	Survey six-month post-retrofit residents.	online survey (sent e-mail) 、(Measuring instruments)	N=8	a 7-point satisfaction scale	occupant satisfaction survey、 compare energy bills pre-post retrofit、 measuring interior air temps and humidity in situ
12	Building and Environment	Hirning et al.,2013	Australia	green buildings	Full-time employees conducted at their workplaces	Questionnaires, fisheye lens approach, HDR photos, luminance map, glare detection	N=64 respondents	a two-sample t-test、 the program Evalglare	discomfort glare (physical data were)
13	Energy and Buildings	Silva et al.,2017	Brazil	residential buildings	the residents of the apartments	questionnaires 、 physical measurements (In situ measurements)	N=16 adult apartments of low power consumption (F=12;M=4)	Wöhler and DIFF Airflow equipment	indoor air quality and ventilation.
14	Building and Environment	Li et al., 2018	China	green building	Owner, Designer, Contractor, End User, Academic, NGOs	mail, email, fax, street surveys, interviews, questionnaires	semi-structured interviews=28; questionnaireN=847	develop a quantitative method (a quantitative and objective method)	NA
15	Journal of Building Engineering	Tang et al.,2020	China	nonresidential buildings	10 Chongqing buildings' four-season occupant surveys,	physical measurement、 A questionnaire-based occupant survey、	N=637	multiple pairwise tests、 the Holm-Bonferroni method、 Linear and non-linear regression analysis tests、	Indoor environment satisfaction, Link environmental factors to occupant satisfaction
16	Frontiers of Architectural Research	David Jiboye.,2012	Nigeria	residential building	residents	A field survey、 (questionnaire survey)	N=100	descriptive statistics and the Pearson Chi-square test (satisfaction) 、 Likert scale、 a 3-item rating scale. SPSS	residential satisfaction
17	Building and Environment	Huang et al., 2022	China	sports buildings	exercisers	environmental measurements; a questionnaire survey	N=5 sports buildings; n=324 exercisers	a 5-point Likert scale: SPSS software	satisfaction

18	Energy and Buildings	Choi et al.,2012	USA	office buildings	the building occupants	On-site measurements: questionnaire, handheld instruments, data logger, PDA, camera, spot, and continuous measurements	N= 402 workstations (F=212 M=190) ; 20 Federal buildings.	cross-sectional, 7-point scale, two-sample t-test, one-way ANOVA, ordinal logistic regression	Occupant satisfaction, environmental quality, user satisfaction, and building system technical qualities.
19	Frontiers of Architectural Research	Mustafa. , 2017	Iraq	Teaching building	experts' rating survey , building users' satisfaction survey	Questionnaire surveys、 Field survey	evaluators: N=10; items:N=40; students: N=120	Kendall's tau correlation, SPSS, a two-tailed alpha level of 0.05, Sloven's formula, a 5-point Likert scale	users' satisfaction
20	Building and Environment	Hou et al.,2020	Netherlands	dormitory building	dormitory users	face-to-face interviews, questionnaire survey	N=104	Analytic Hierarchy Process (AHP) computations, Salty's nine-point scale, gap analysis, cross-comparison in preference technique	users' expectation and satisfaction
21	Building and Environment	Ildiri et al., 2022	USA	multi-office	North American staff from six companies routinely occupied each office	A web link to the survey	N=1300+	Chi-square test, descriptive and inferential statistics, linear mixed-effects analysis, lme4 R package. patriarchal eta-squared (η^2), 5-point Likert scale, 7-point scale	occupant satisfaction、 health, well-being, productivity
22	Building and Environment	Martinez-Molina et al.,2017	Spain	primary school	pupils and teachers	A quantitative field data logger method with a qualitative questionnaire method	questionnaires: N=188	using an energy simulation software(DesignBuilder/Energyplus)	Evaluation of subjective thermal comfort, PMV, Dissatisfaction Rate

23	International Journal of Disaster Risk Reduction	Dikmen and Elias-Ozkan, 2016	Turkey	reconstruction housing	beneficiaries, villagers, seasonal occupants in Turkish villages,	Field surveys, face to face interviews, surveys and photographs, questionnaires, take photos	N=40 permanent users;	a Likert scale of 3; Analysis of variance (ANOVA), Single factor ANOVA tests,	occupants needs, satisfaction rate, evaluate design
24	Frontiers of Architectural Research	Mundo et al., 2015	Mexico	restored industrial building	Visitors, artists, gallery managers, and staff	Observations, historical research, conversion strategy analysis, walkthrough, and user survey	N=34	the statistical software SPSS	evaluate users' new building use
25	Alexandria Engineering Journal	El-Darwish and El-Gendy, 2018	Egypt	higher educational buildings	occupants	Walkthrough, observation, questionnaires, focus groups, interviews, workshops, and discussions, tracking, measure, analyze performance	N= 30 (Thirty occupants in each location)	TESTO 480 and Design Builder use a 7-point bipolar Likert scale, 7 bi-polar scale mean questionnaire	function, performance, occupants satisfaction
26	Sustainable Cities and Society	Kansara and Ridley, 2012	UK	buildings in a Zero Carbon City	occupants, designers, facility managers, and building owners	Interviews and walk through, meetings; 250 portable data loggers;	Small groups of students	BUS Survey	resident's satisfaction and building performance
27	Health & Place	Carnemolla et al., 2021	Australia	aged care setting	staff caring for seniors	Four staff focus groups; in an open semi-structured format	n = 4, Care and ancillary staff; n = 4, Household Staff; n = 5, Household staff; n=3, Management staff	Inductive and deductive focus group data analysis using Hall's scale of proxemics to map themes and data spatially	study a new residential aged care facility's architecture
28	Building Research & Information	Sharmin and Khalid, 2022	UK	low-income settlement	Residents, architects, researchers, contractors,	monitoring, questionnaires, transect walks, photography, semi-	22 residents in 15 case-study households	sociotechnical approach, Tiny Tag data-loggers, ASHRAE 7-point scale	homeowners' use of and satisfaction

29	Sustainability	Ning&Chen., 2016	China	University Dormitories	charities, leaders, experts All students live in university dorms for more than a year	structured interviews, focus groups face-to-face interview, structured-questionnaire, focus groups, fieldwork,	questionnaires: N=341	a five-point scale, t-test of the satisfaction level, linear regression, Descriptive Analysis	students' residential satisfaction, the specific satisfaction factors, overall satisfaction
30	Sustainability	Bai et al.,2022	China	Poverty Alleviation Relocation Housing	occupants, the residents of the resettlement areas	in-depth interviews, field questionnaires, walkthrough surveys, random interviews	N=422	SPSS, Cronbach's alpha coefficient, the Likert scale	User Satisfaction
31	Sustainability	Khoo et al.,2022	China	Green Public Building	households, occupants, adults over 18 and household head	a questionnaire-based survey, field Studies, an interview with the project architect of HKHA, face-to-face, Field inspections	N=400	a post hoc Tukey's Honest Significant Difference (HSD) test, a series of OLS regressions, one-way ANOVA tests and Tukey's test, least squares (OLS), a 5-point Likert scale	Green awareness, behaviors, and occupant satisfaction
32	Sustainability	Asojo et al.,2021	USA	Workplace	employees who work in the facility as invitation emails with embedded links	online occupancy surveys,	N= 12 indoor environmental quality categories; n = 130,pre-design survey ; n = 102,post-design survey	a 7-point Likert scale, Mann-Whitney U tests and Chi-square tests,	occupants' satisfaction, 12 indoor environmental quality

33	Sustainability	Byrne and Morrison, 2019	Australia	Residential building	residents	a structured interview, text probes, hygiene and transport diaries, interviews (in the semi-structured interview) , a disposable camera, mobile phones, Text messages	14 residents inhabiting 13 homes (n = 14)	5-scale and 7-scale Likert question, NVivo software	Motivations, The most important features of a home,
34	International Journal of Environmental Research and Public Health	Sidenius et al.,2017	Denmark	Garden	patients	landscape analysis,systematic observations, logbooks, interviews , behaviour mapping, semi-structured interviews, questionnaire,mail	N=14 volunteers	GIS on an iPad	effects of the design on patients' health outcomes
35	Buildings	Lei et al.,2022	Singapore	Workplace	Staff from the office	field observations, questionnaire surveys, self-evaluation by respondents	N=161 in Singapore; N=50 in China(M=102;F=99)	SPSS, cross-comparisons, Kruskal-Wallis test, Spearman's correlation analysis, Friedman's two-way analysis of variance by ranks, three subscales examined	agreement
36	Energies	Bortolini and Forcada, 2021	Brazil	academic building zones	student, lecturer	questionnaire survey,	N=26 higher educational buildings; N=1013 occupants	SPSS, Goodman and Kruskal's gamma (G) and the Spearman correlation (rs) tests, the Chi-square (χ^2) test, the Spearman correlation test	occupants' satisfaction