Users’ perceptions of building performance – an analysis of the occupants’ comments

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Introduction and Aims

• The PROBE Studies (CIBSE Journal and BRI, 2001/2)

• The BUS Methodology.
• A 45 factor questionnaire (scored on 7 point scales)
• Comments invited on 10 factors.

Main Aims
• Investigate the nature of the comments
• Compare the comments to the scores
Occupant Survey and Analysis

- 55 buildings and 4,500 occupants
  - 40 commercial; 15 institutional
  - 39 sustainable; 16 conventional

- The ten factors where comments were invited
  - design; needs; meeting rooms; storage; desk space;
  - noise; lighting; comfort; health; productivity.

- Scoring response rate - 91.6%
- Commenting response rate - 30%
- Positive, Negative, Balanced, No comment
Numbers and percentages of comments on each factor
Number and Nature of Comments

- “No Comment”
- Range – from Design at 58% to Comfort at 79%

- Averages: No Comment – 70%
  - Negative -17.4%
  - Positive – 6.0%
  - Balanced – 6.6%

- Ratios – Negative to Positive: Design – 1.6:1
  - Average – 2.9:1
  - Noise – 5.7:1
  - Storage – 10:1
Numbers and percentages of comments on each factor
Comments cf. Scores

Design

Overall Comfort

No Comment  Negative  Balanced  Positive

Design

Overall Comfort
Comments cf. Scores

• Good Scores >>>>>> Positive Comments

• Poor Scores >>>>>> Negative Comments

• However, good scores do not preclude negative (perhaps helpfully intentioned) comments

• But NOT vice versa
Comments cf. Scores

Meeting Rooms

No Comment  Negative  Balanced  Positive

Storage
Comments cf. Scores

Lighting

Noise
Comments cf. Scores

No Comment  Negative  Balanced  Positive

Health

Productivity
Building Type comparisons

• Sustainable cf. Conventional
• No Comment and Balanced very similar
• Sustainable building occupants had higher proportion of positive and lower proportion of negative comments

• Sustainable Commercial cf. Conventional Commercial
• Sustainable buildings had a negative to positive comments ratio of 2:1 cf. 4:1 for the conventional.

• Commercial cf. Institutional
• Commercial buildings had negative to positive comments ratio of 3:1 cf. 4:1 for the Institutional.
Commercial vs. Institutional

- **Commercial**
  - No Comment: 24782, 71%
  - Negative: 6038, 17%
  - Balanced: 2264, 6%
  - Positive: 2176, 6%

- **Institutional**
  - No Comment: 3970, 65%
  - Negative: 1324, 22%
  - Balanced: 476, 8%
  - Positive: 330, 5%
Conclusions

• Users’ comments are an excellent and reliable indicator of building performance

• Occupants evaluations of their buildings are very discerning – good scores can be accompanied by negative comments, though rarely vice versa.

• The ratio of negative to positive comments averaged 3:1 - a possible benchmark?

• Sustainable buildings received more positive comments and fewer negative comments than the conventional.
Want to know more about user surveys?

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- Published by Routledge, UK, 2010, in English
- and by China Architecture and Building Press, 2013 in Chinese
Thank you