

Comfort: what the users think

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Building Use Studies

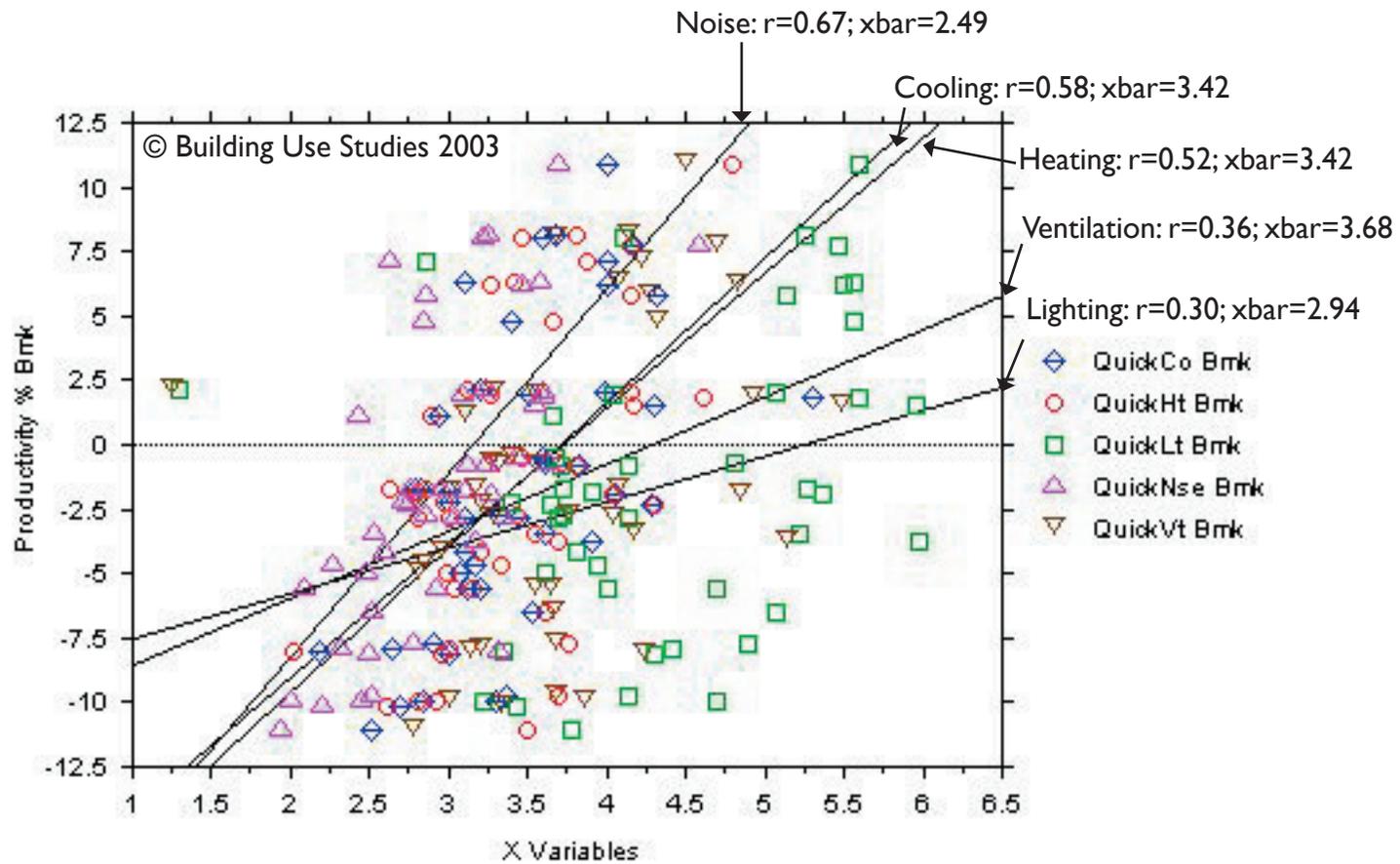
Anything wrong?



This is better ...

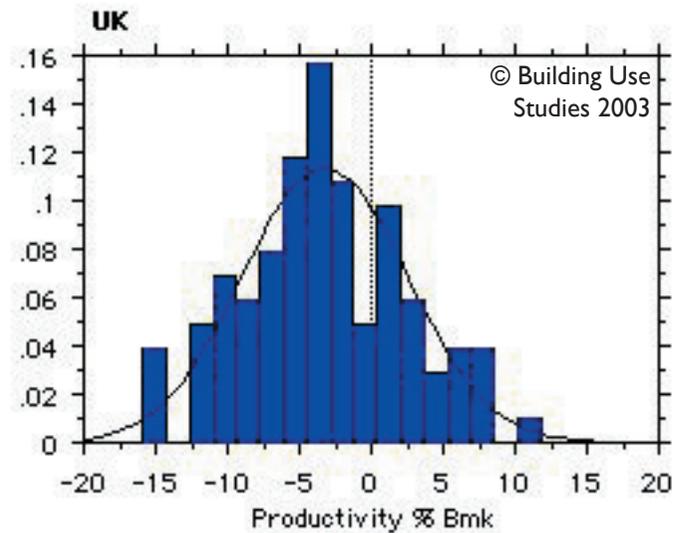
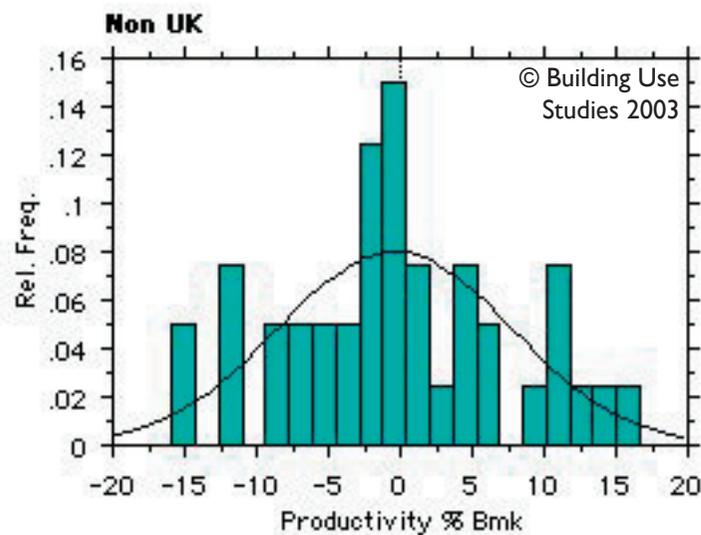


Quickness of response ...



All variables are significant at $p=0.04$ or higher

Perceived productivity ...



Occupants tend to ...

- Act in **response** to random, external events rather than in anticipation of them.
- **Take decisions** to use switches and controls only **after an event** has prompted them to do so.
- Often wait before they take action and, typically, when they reach a **“crisis of discomfort”**.
- **Over-compensate**.
- Operate the most **convenient** rather than the most appropriate controls.
- Take the **easiest** and quickest option.
- **Leave systems** in their switched state.

Better outcomes are usually achieved where occupants understand design intentions

Blinds down, lights on ...



Excellent buildings: occupants' hitlist

1. Stable thermal conditions, winter and summer, with effective user intervention if conditions become uncomfortable.
2. Rapid response when things go wrong (especially with respect to 1., and, additionally, for safety and security).

Where 1. and 2. do not apply, at least the ability to trade-off one undesirable thing against another (e.g., in the height of summer, too hot or too noisy but not both).

3. Convenience, with action brought to the point of need, coupled with ease of use.
4. Absence of unwanted interruptions.
5. Adjustable furniture, especially chair and VDU.
6. Cleanliness.
7. Natural light almost always preferred to artificial, but not if glare or solar gain out of control.
8. A modest image for the building with no gratuitous design gestures.
9. No conspicuous waste.

What works well ... ?

Two types of buildings performed particularly well for their users:

- 1 Technologically complex, and often deep-plan, buildings which demanded a lot from their management - and got it.
- 2 Simpler, often shallow plan, buildings designed deliberately to reduce the management requirements.

Sadly, many buildings we survey fall into a third category - those which demand more than their management is prepared or able to give.

These are particularly common in the public sector, in which the business case for more management is particularly hard to justify.