Towards Needs-Based Work Environments

Optimising PE Fit and TE Fit in ABW Environments

ERES 2017, Jan Gerard Hoendervanger

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The Psychology of Activity-Based Working

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The Psychology of Activity-Based Working

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Activity-Based Work Environment

Depending on the activity at hand, workers choose an appropriate place to work

→ Variety of places (settings) for different activities

→ Switching between places when switching between activities

→ Non-assigned workplaces

(→ Reduced number of workplaces – high occupancy rates)

(→ Open and transparent design – focus on interaction, limited privacy)
Why are ABW environments so popular?

**Efficiency:** less workplaces are needed if these are shared, because more work is done at home and at third places.

**Effectiveness:** different types of workplaces are needed to facilitate the diversity of tasks that are carried out.
Findings from previous research (and observations in practice)

- Satisfaction with ABW environments is often below expectations, with lack of privacy, concentration and assigned workstations as major issues (e.g., Van der Voordt, 2004; Bodin Danielsson & Bodin, 2009; De Been & Beijer, 2014)

- Striking differences between cases/locations, even within the same organisation (e.g., Brunia et al., 2016)

- In non-territorial offices, workers tend to use the same workstation most of the time (e.g., Qu et al., 2010; Appel-Meulenbroek et al., 2011).
1. Flexibility in Use; Switching behaviour and satisfaction in ABW environments

Hoendervanger et al. (2016), Journal of CRE

- Switching frequencies are related to activity profile and external mobility
- Most important reasons (not) to switch have a social or psychological nature
How about individual differences?
2. Individual differences in satisfaction with ABW environments

- High need for privacy → low satisfaction
- Long service / high age
- High job autonomy → high satisfaction
- High interaction
- High internal mobility

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Antecedents of dissatisfaction

• User behaviour

→ Discrepancies between intended and actual use of work settings?

• Personal characteristics (e.g., need for privacy, age)

• Job characteristics (e.g., activity profile, autonomy, interaction, mobility)

• Case characteristics (e.g. design, implementation, organisational context)
3. Satisfaction with ABW environments as a function of user behaviour

- Setting
  - Open plan
  - Private room

- Activity
  - High concentration
  - Low concentration

Perceived fit

Need for privacy

Satisfaction with work environment
Data collection

- Experience sampling
- Mobile technology

→ Detailed, reliable, person-related data

www.myplace2work.com
Example: Individual focus work at org. X

= 53% of all measured activities
3. Satisfaction with ABW environments as a function of user behaviour

• Discrepancies between intended and actual use of activity settings are very common practice (50% of the observations), mostly concentration work in open plan areas.

• These discrepancies produce experiences of perceived misfit, which contribute substantially to low satisfaction ratings ($R^2_{Adj.} = .35$).

• This is particularly true for workers high in need for privacy.

*Both task-environment fit and person-environment fit are important with respect to privacy/concentration in ABW environments.*
4. Virtual Reality experiment

5. Lab experiment in Virtual Reality Activity
   - High concentration
   - Low concentration
   - Open plan
   - Private room

Perceived fit
Need for privacy
Task performance
5. Individual differences in switching behaviour within ABW environments

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How to optimise satisfaction with ABW environments?

• Change user behaviour – choosing and switching between settings

  → Only as far as ABW fits personal and job characteristics

• Optimise workspace design

  • Improve quality and quantity of settings for focus work
  • Limit distractions and interruptions in open plan areas

• Recognise individual differences

  • Encourage and facilitate differentiated work patterns within teams
  • Provide assigned (multifunctional) workstations if needed
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