# THE AGEING OFFICE POPULATION

Age and the physical work environment





## Introduction

- The office population (demographics) is getting older
  - Large babyboom generation is reaching retirement age
  - Active work population will shrink
  - People will have to work longer (e.g. intention to raise retirement age in many EU countries)
- → How can the office environment help to retain older workers by supporting their productivity and maintaining their satisfaction?





# Introduction<sup>2</sup>

- Older people can experience stress at work as a consequence of physical, cognitive and health changes (Hansson, Robson & Limas, 2001).
- Older people can experience more problems with vision (e.g. Mital, 1994; Pew & van Hemel, 2004) hearing (e.g. Mital, 1994; Wegman & McGee, 2004) and attention (Sharit & Czaja, 1994; Mani et al, 2005)
- Older people are more sensitive to auditive and visual distractions (Stenlun, 2004; Hasher et al., 1998)
- However, older employees report less work stress than younger employees (Hansson, Robson & Limas, 2001) so the possibility to compensate for the challenges seems to be important
- → Are there differences in satisfaction with the work environment and perceived productivity between age groups?

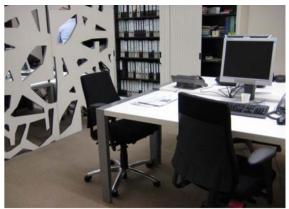


# Introduction<sup>3</sup>

- Offices in the Netherlands are changing
  - Popular in NL: 'the new (flexible) way of working'
  - Promoting flexibility (in work process and work environment)
  - Way to cut costs (reduce m², reduce internal moves, etc.)
  - New office types are implemented
- → Which office type is most supportive for the productivity and satisfaction of older workers?







### Methods

- Work environment diagnosis instrument WODI Classic and WODI Light
- Measured aspects
  - Satisfaction
  - Perceived support of productivity
  - Perceived importance of aspects
- In total 8.913 respondents (64 cases) gathered over 4 years
- SPSS (ANOVA, post hoc and Chi Square)
   Significance level: p ≤ 0.05
- Five age groups: < 31 year, 31-40 years,</li>
   41-50 years, 51-60 years, >60 years

	Total sample N = 8.913	
Gender	Male Female	63,2% 36,8%
Age	<31 years 31-40 years 41-50 years 51-60 years > 60 years	12,6% 25,0% 33,4% 26,6% 2,3%
Education	MO MBO HBO WO Other	9,7% 21,7% 34,2% 32,7% 1,3%



# Results

'how satisfied are you about...'

	1	2	3	4	5
Satisfaction with	<31 years	31-40 years	41-50 years	51-60 years	>60 years
Organization '	3.61 <sup>345</sup>	3.55 <sup>34</sup>	3.46 <sup>12</sup>	3.40 <sup>12</sup>	3.36 <sup>1</sup>
Content and complexity of work	3,88 <sup>3</sup>	3,93	3,98 <sup>1</sup>	3,96	3,95
Sharing own ideas about work environment	3,22	3,22	3,20	3,15	3,36
Accessibility of the building	3,84	3,74 <sup>4</sup>	3,77	3,85 <sup>2</sup>	3,87
Architecture and look of the building	3,29	3,25 <sup>4</sup>	3,24 <sup>45</sup>	3,37 <sup>23</sup>	3,45 <sup>3</sup>
Subdivision of the whole building	3,24 <sup>3</sup>	3,18	3,14 <sup>14</sup>	3,22 <sup>3</sup>	3,28
Number, diversity and funct. of workplaces	3,16 <sup>3</sup>	3,08 <sup>5</sup>	3,06 <sup>14</sup>	3,14 <sup>35</sup>	3,31 <sup>234</sup>
Adjacency and locality spaces	3,43 <sup>23</sup>	3,34 <sup>1</sup>	3,29 <sup>145</sup>	3,37 <sup>3</sup>	3,45 <sup>3</sup>
Openness and transp. work environment	3,40 <sup>234</sup>	3,28 <sup>1</sup>	3,27 <sup>1</sup>	3,31 <sup>1</sup>	3,40
Privacy	3,09 <sup>234</sup>	2,97 <sup>1</sup>	2,97 <sup>1</sup>	2,93 <sup>1</sup>	3,05
Functionality and comfort workplace	3,41	3,40	3,32	3,36	3,44
Ambiance and look of the interior	3,06 <sup>45</sup>	3,11 <sup>45</sup>	3,13 <sup>45</sup>	3,26 <sup>123</sup>	3,42 <sup>123</sup>
Possibilities for concentration	3,13 <sup>23</sup>	3,00 <sup>1</sup>	3,01 <sup>1</sup>	3,05	3,21
Possibilities for comm. and social interaction		$3.68^{3}$	3.60 <sup>12</sup>	3.63 <sup>1</sup>	3.65
Archive and storage facilities	3,17 <sup>345</sup>	3,12 <sup>345</sup>	2,97 <sup>12</sup>	2,97 <sup>12</sup>	2,90 <sup>12</sup>
ICT and supporting services	3,42	3,38	3,34	3,35	3,49
Facilities and facility management	3.46	3.48	3.43	3.43	3.50
Indoor climate	2,86 <sup>5</sup>	2,76 <sup>45</sup>	2,88 <sup>45</sup>	3,07 <sup>23</sup>	3,31 <sup>123</sup>
Lighting	3,51	3,41	3,55	3,52	3,60
Acoustics '	3.26 <sup>23</sup>	3.12 <sup>1</sup>	3.12 <sup>1</sup>	3.18	3.25
Possibilities for remote working	3.06 <sup>45</sup>	3.07 <sup>45</sup>	3.09 <sup>45</sup>	3.24 <sup>123</sup>	3.41 <sup>123</sup>

<sup>\*</sup>ANOVA is significant (p $\leq$ .05) Sample N = 8.913



# Results<sup>2</sup>

#### 'how productive do you feel...'

	1 1	2	3	4	5
Support of productivity	< 31 years	31-40 years	41-50 years	51-60 years	>60 years
Support of the workplace environment to the own productivity	3,28 <sup>234</sup>	3,12 <sup>1</sup>	3,12 <sup>1</sup>	3,11 <sup>15</sup>	3,25 <sup>4</sup>
Support of the workplace environment to the productivity of the team as a whole	3,27 <sup>234</sup>	3,16 <sup>1</sup>	3,11 <sup>15</sup>	3,12 <sup>15</sup>	3,26 <sup>34</sup>
Support of the workplace environment to the productivity of the organization as a whole	3,17 <sup>234</sup>	3,09 <sup>13</sup>	3,04 <sup>125</sup>	3,06 <sup>15</sup>	3,19 <sup>34</sup>

<sup>\*</sup>ANOVA is significant (p≤.05) Sample N = 6.504 (WODI Light)

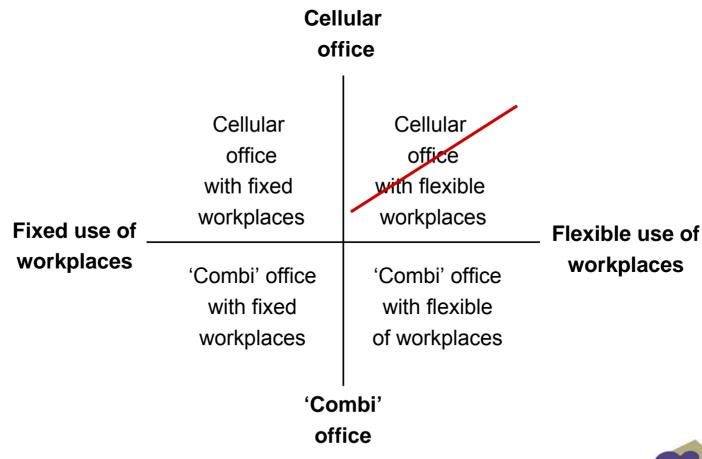
# Results<sup>3</sup>

#### 'what is the most important aspect...'

<31 vears	<31 vears 31 - 4		ars 41 - 50 vears		·s	51 - 60 vears		> 60 vears	
Functionality and comfort workpl.	58,80%	Functionality and comfort workpl.	53,80%	Functionality and comfort workpl.	49,00%	Functionality and comfort workpl.	52,80%	Functionality and comfort workpl.	50,00%
Possibilities for concentration	39,80%	Possibilities for concentration	40,20%	Possibilities for concentration	39,20%	Accessibility of the building	42,90%	Accessibility of the building	45,20%
Possibilities for communication	31,80%	Possibilities for communication	32,00%	Possibilities for communication	31,50%	Possibilities for concentration	35,00%	Possibilities for concentration	29,80%
Accessibility of the building	27,00%	Indoor climate	30,50%	Accessibility of the building	27,70%	Possibilities for communication	25,90%	Indoor climate	21,40%
Indoor climate	21,30%	Accessibility of the building	27,50%	Indoor climate	25,80%	Indoor climate	22,20%	Possibilities for communication	19,00%

# Results<sup>4</sup>

#### 'what is the best office type...'



# Results<sup>5</sup>

#### 'what is the best office type...'

- Overall people are most satisfied with combi-office with fixed workplaces, except for concentration and privacy (cellular office)
- The combi-office with fixed workplaces is also perceived as the most supportive for productivity
- Group 51-60 years show in general the same pattern
- Group > 60 years show less significant differences between office types (e.g. no difference for concentration and team/organization productivity) nevertheless combi-office with fixed workplaces is the most supportive for the own productivity and satisfaction (except for privacy)

## Conclusions<sup>1</sup>

- → Are there differences in satisfaction with the work environment and perceived productivity between age groups?
- Oldest and youngest employees are in general more satisfied with aspects
  of the office environment and feel more supported in their productivity
- Age group 41-60 is most critical (U-shape)
- Older employees are more satisfied than the other groups with the interior of the office, indoor climate and remote working.
- Older employees are less satisfied than younger colleages about the organization in general and the archive facilities
- Furthermore, older workers give more importance to the accessibility of the building

## Conclusions<sup>2</sup>

- → Which office type is most supportive for the productivity and satisfaction of older workers?
- A combi-office with fixed workplaces seems to be the most supportive for the productivity and satisfaction of the older workers (except for privacy)
- Office type seems to have less influence on the satisfaction and productivity
  of the oldest age group (>60 years) in comparison with the other age groups

## Discussion

- It is remarkable that there are noticeable differences between the 51-60 and >60 age groups
- To get more insight in the reasons for found differences in satisfaction and productivity, further research is needed

