

Introduction:

- At work, the PA's benefits go not only to the employees but also to the employers (Ecorys, 2017)
- The employment rate of Belgians aged 20 to 64 is 69,7% (Statbel, 2018)
- Belgians aged 18-64 perform 106 minutes of moderate physical activity per week (Bel et al., 2014)
- lack of data on physical activity in universities and more specifically in Liège
- University workers are sedentary during 69% of their working time (Fontaine, Piacentini & Liguori, 2014)
- ULiege employees are not sufficiently active (Dubru et al., 2018)

Question:

- What is the PA level of the employees of the Uliège?**
- The purposes of the present study consisted to supplement the previous data using accelerometry

Methods:

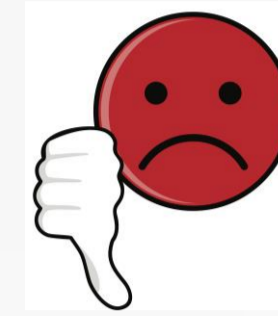
- Actigraph GT3X+ were provided to 48 subjects working at the ULiège
- Subjects were selected through a stratified sampling respecting the gender, age, and location of the workplace

Downtown						Campus (Sart-Tilman)					
♀			♂			♀			♂		
20-39	40-59	60+	20-39	40-59	60+	20-39	40-59	60+	20-39	40-59	60+
4	4	4	4	4	4	4	4	4	4	4	4
24						24					
Total = 48											

- and night as recommended by the literature (Migueles et al., 2017)
- Troiano et al. (2007)'s epochs and cut-points were chosen

Results:

1. Steps/day



[Recommendation = 10.000 steps/day](#)

Average = 8069 (\pm 6463) steps/day without significant difference according to gender or workplace; significant difference between <39 and 59> ($p < 0,01$)

Number of days with at least 10,000 steps	0	1	2	3	4	5	6	7
Number of subjects	18	11	5	5	3	3	1	1

Classification system of Tuderlock and Basset (2004)

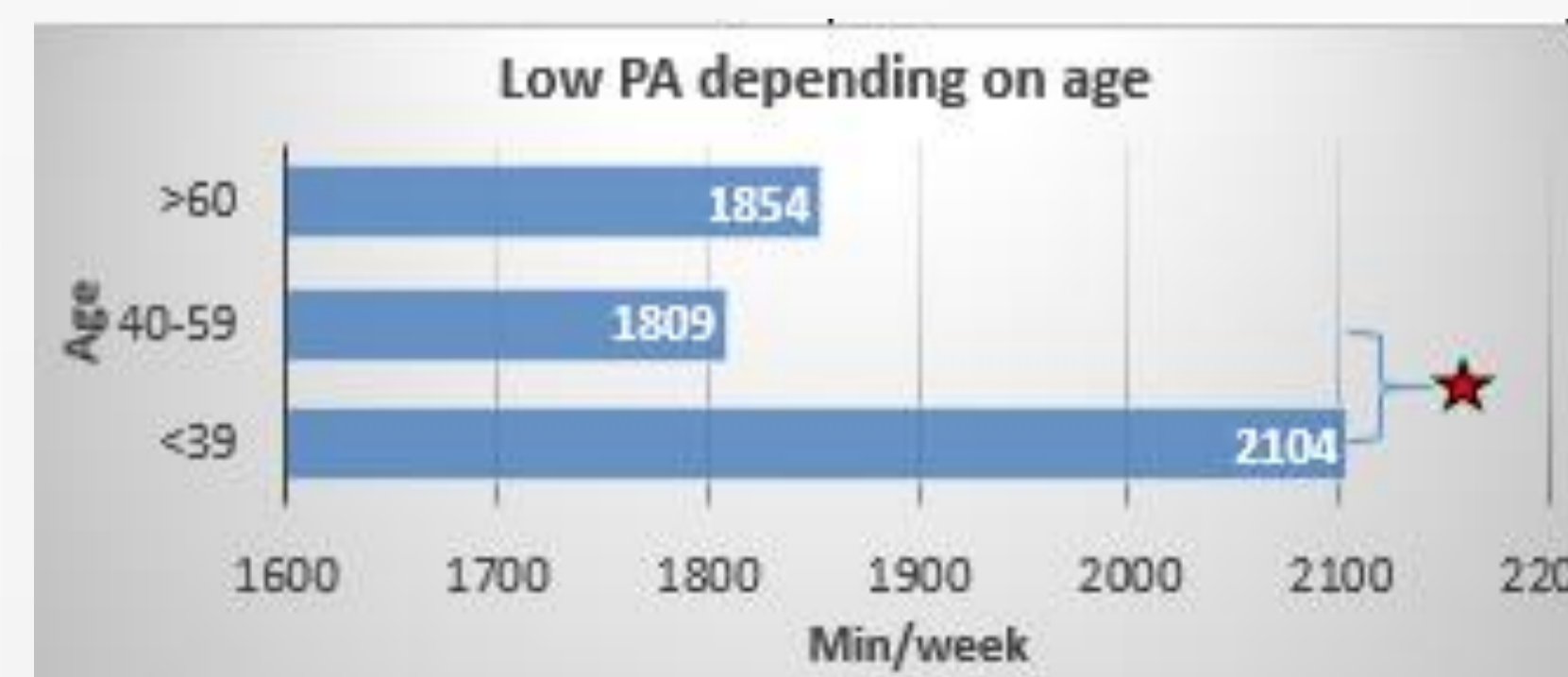
	Sedentary (<5000 steps/day)	Low active (5000 à 7499 steps/day)	Somewhat active (7500 à 9999 steps/day)	Active (\geq 10000 steps/day)	Highly active (\geq 12500 steps/day)
Subjects	8	14	14	7	4

2. Low PA

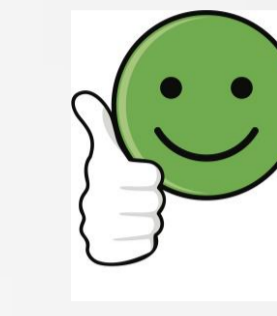
Average = 1918 (\pm 564) minutes/week, with significant difference according to gender ($p < 0,05$) but not the workplace ($p = 0,922$)

Difference depending on age

<39 / 40-59	$p = 0.09$
<39 / >60	$P = 0.14$
40-59 / >60	$P = 0.81$



3. Moderate PA



[Recommendation = 150 minutes/week](#)

Weekly :

Average = 223 (\pm 165) minutes/week without any significant differences according to gender, workplace or age.

Daily :

Average = 32 (\pm 40) minutes/day with significant difference according to age

4. Vigorous PA



[Recommendation = 75 minutes/week](#)

Weekly :

Average = 22,65 (\pm 55,86) minutes/week without any significant differences according to gender, workplace or age. 57% of the subjects did not practice any vigorous PA minutes

Daily:

Significant differences according to gender and age

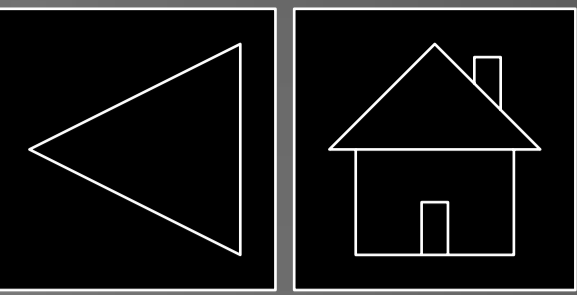
Conclusion :

- Large disparity in the individual results
- Workplace did not impact de PA level
- Employees not active enough and too sedentary at work
- It would be urgent to implement an institutional policy promoting physical activity at the ULiège
- Interesting challenge for the PE department

References :

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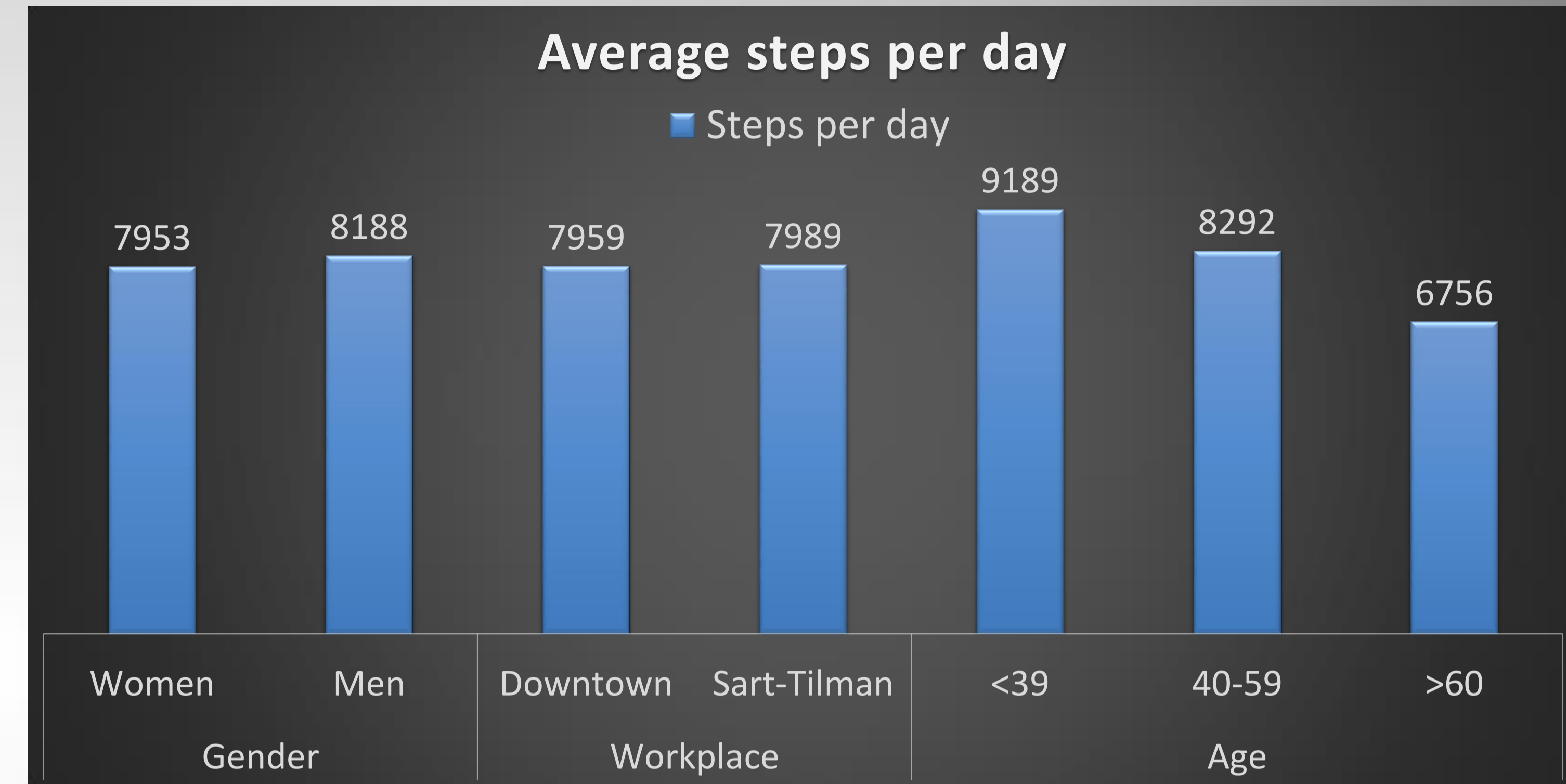
Analysis of physical activity at work of university employees by accelerometry



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rates and reasons for refusal	
Causes	Number
Travel	1
Climber	1
Non-compatible clothes	1
On holiday	2
Sick Days	2
Lack of time	3
Not interested	3
Total = 13	



	Gender		Workplace		Age		
	Women	Men	Downtown	Sart-Tilman	A = <39	B = 40-59	C = >60
Daily low PA	289'	258'	275'	273'	299'	258'	265'
	P = 0.003522		P = 0.922		A/B : p = 0.0016 A/C : p = 0.0089 B/C : p = 0.5495		
Daily moderate PA	29'	35'	29'	35'	41'	32'	24'
	P = 0.219		P = 0.6626		A/B : p = 0.1312 A/C : p = 0.0017 B/C : p = 0.1027		
Daily vigorous PA	1.13'	5.4'	3.11'	3.36'	4.36'	4.2'	1.21'
	P = 0.033		P = 0.7		A/B : p = 0.9561 A/C : p = 0.0241 B/C : p = 0.2648		

