125 years
Statistics
Netherlands

125 years Statistics Netherlands

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Data donation of personal physical activity trackers

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UNECE Expert Meeting on Statistical Data Collection and Sources
May 22-24, 2024, Geneva, Switzerland

Problem statement

Adherence to physical activity (PA) guidelines is measured with **Short Questionnaire to Assess Health-enhancing PA** (SQUASH).

The SQUASH is developed for national surveillance by the Dutch Health Institute.

This questionnaire suffers from measurement error due to:

- Recall bias
- Social desirability bias

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Objective alternatives

1. Research-grade devices

Send out a device and have respondents wear this

2. Data donation

Rely on respondents personal activity tracker by:

a) Copying the data (e.g., totals per day) from their personal activity tracker in a questionnaire

b) Downloading the data of their personal activity tracker and uploading this file

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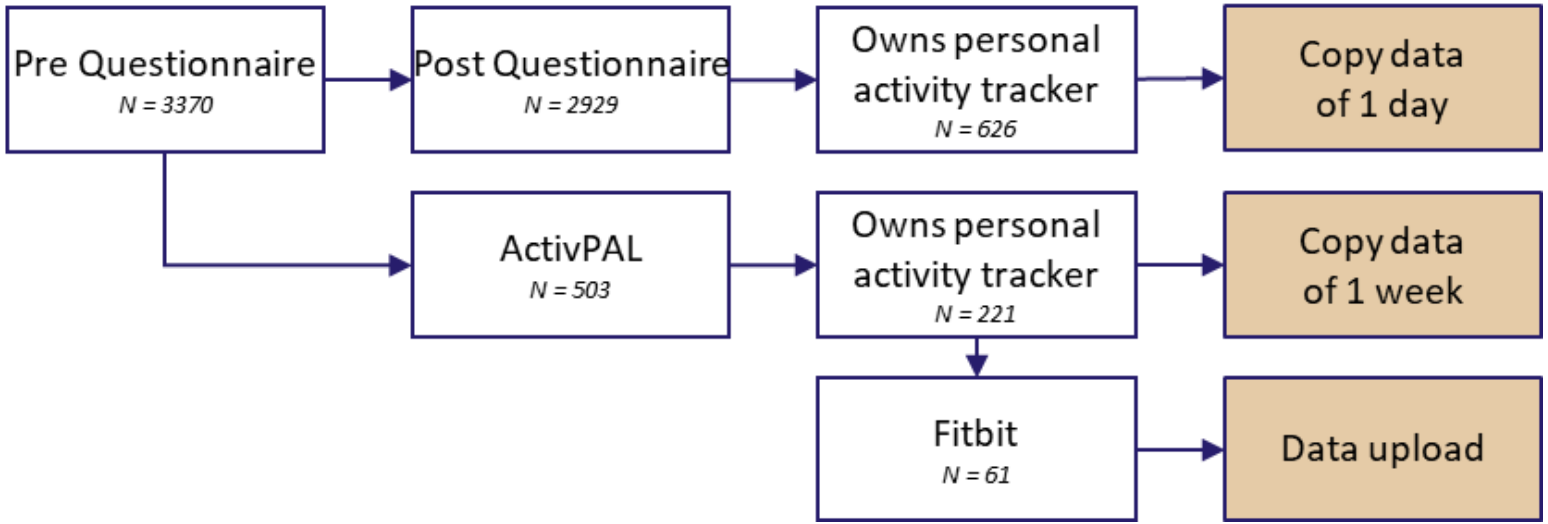
Study Design

Population: LISS panel – representative research panel



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Response

Response step	n	% of respondents in previous step
Invited to pre questionnaire	3874	100
Responded to pre questionnaire	3370	87.0
Invited to wear ActivPAL	615	18.2
Wore ActivPAL	503	81.8
Wore personal activity tracker in week of ActivPAL	221	44.9
Copy data of 1 week	**155**	**70.1**
Wore Fitbit in week of ActivPAL	61	27.6
Data upload	**34**	**55.7**
Invited to post questionnaire	3628	100
Responded to post questionnaire	2929	80.7
Owner of personal tracker[a]	626	21.4
Copy data of one day	**507**	**81.0**

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Representativity

Participation	Gender	Age	Educational level	Adherence to PA guidelines
Owning a personal tracker		Younger	Higher	More
Copy data of one day			Higher	
Copy data of 1 week		Younger		
Data upload		Younger		Less

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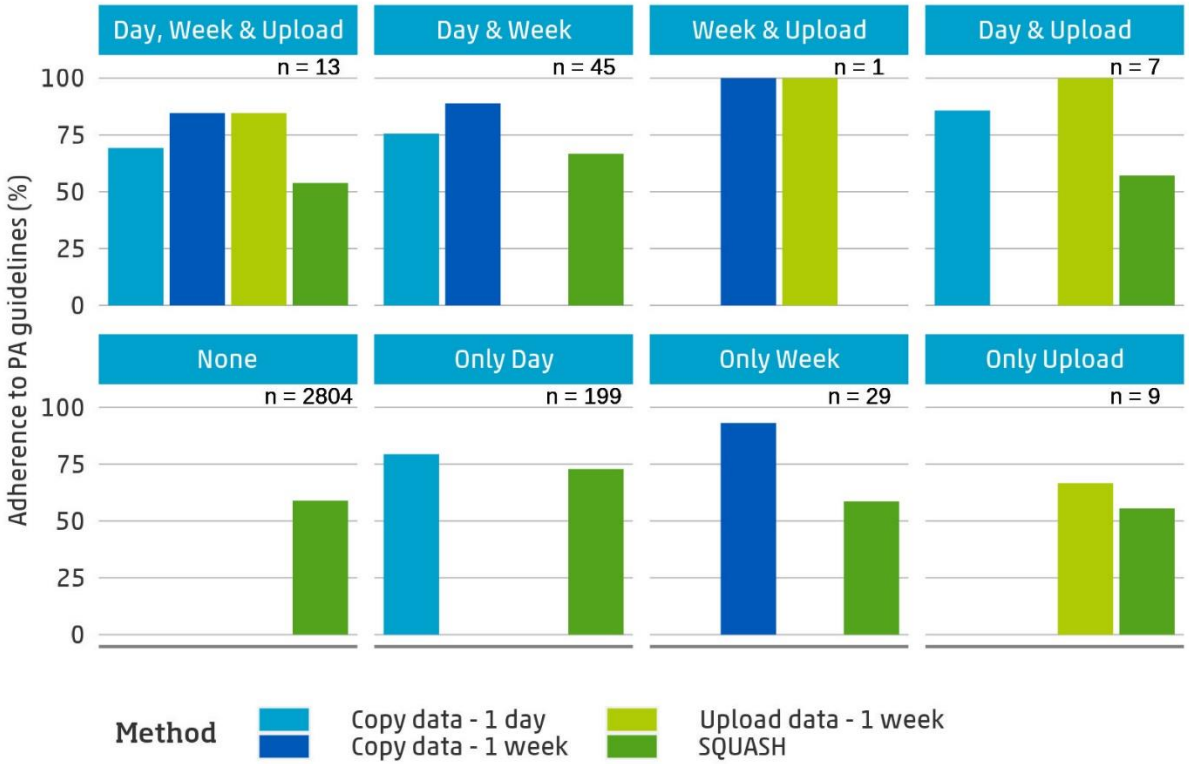
Adherence to PA guidelines



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Discussion & conclusion

- Response: low due to ownership
- Representativity: dependency on activity
- Adherence to PA guidelines: inflated

- Most feasible: coping data the data of one day
- But is that good enough for implementation?
- Possibility for combining sources?

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Questions?

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