

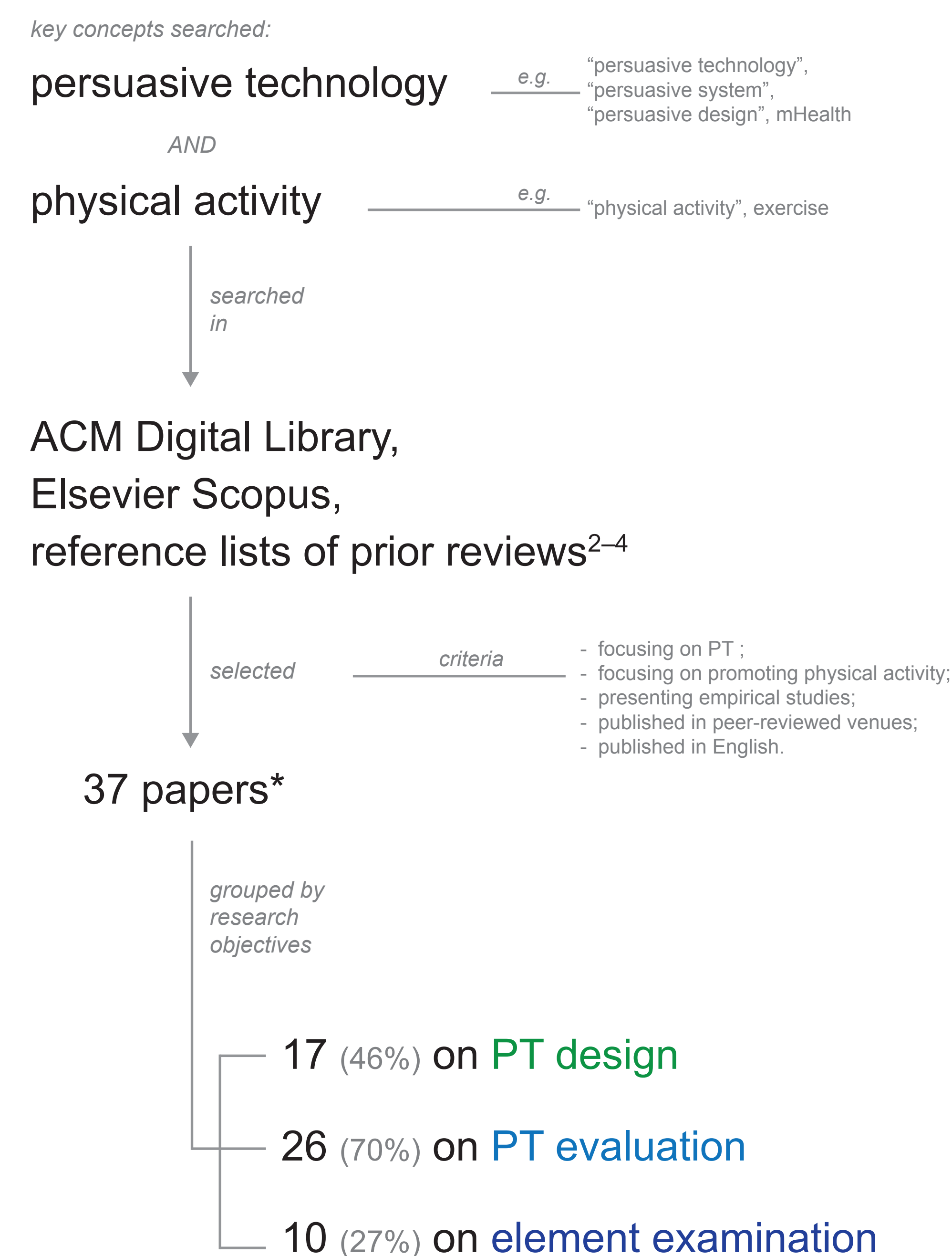
# A Review of Empirical Studies on Persuasive Technology for Physical Activity: Common Practices and Current Trends

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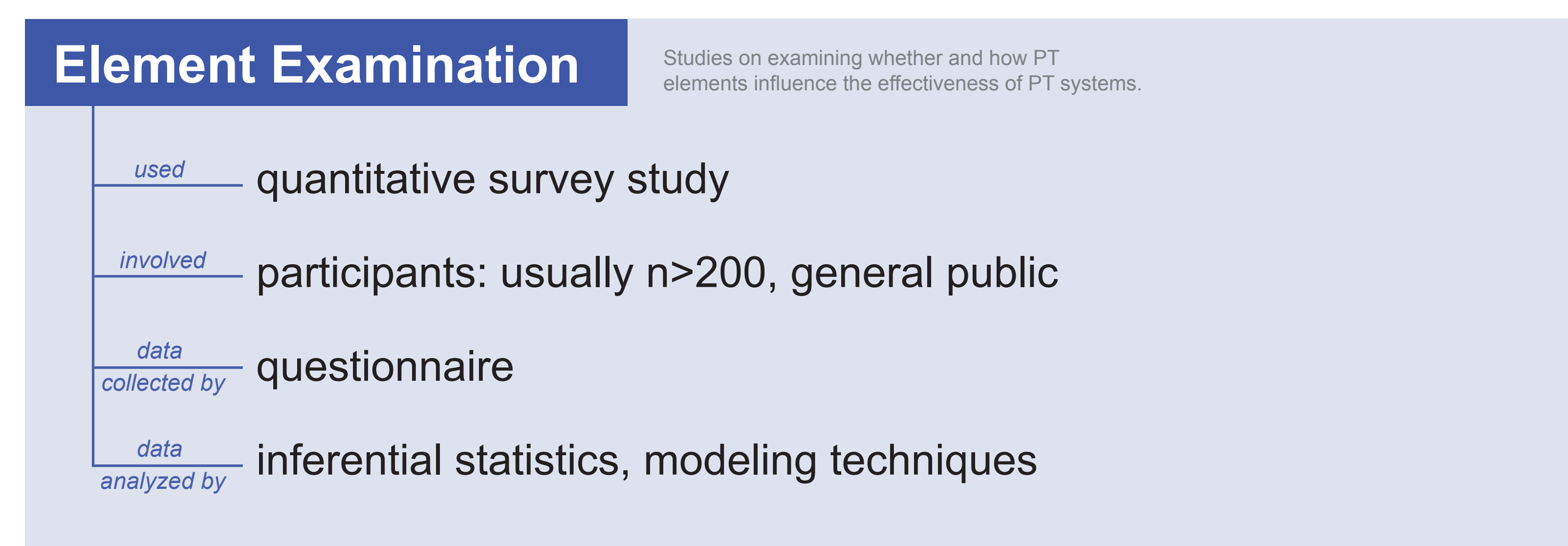
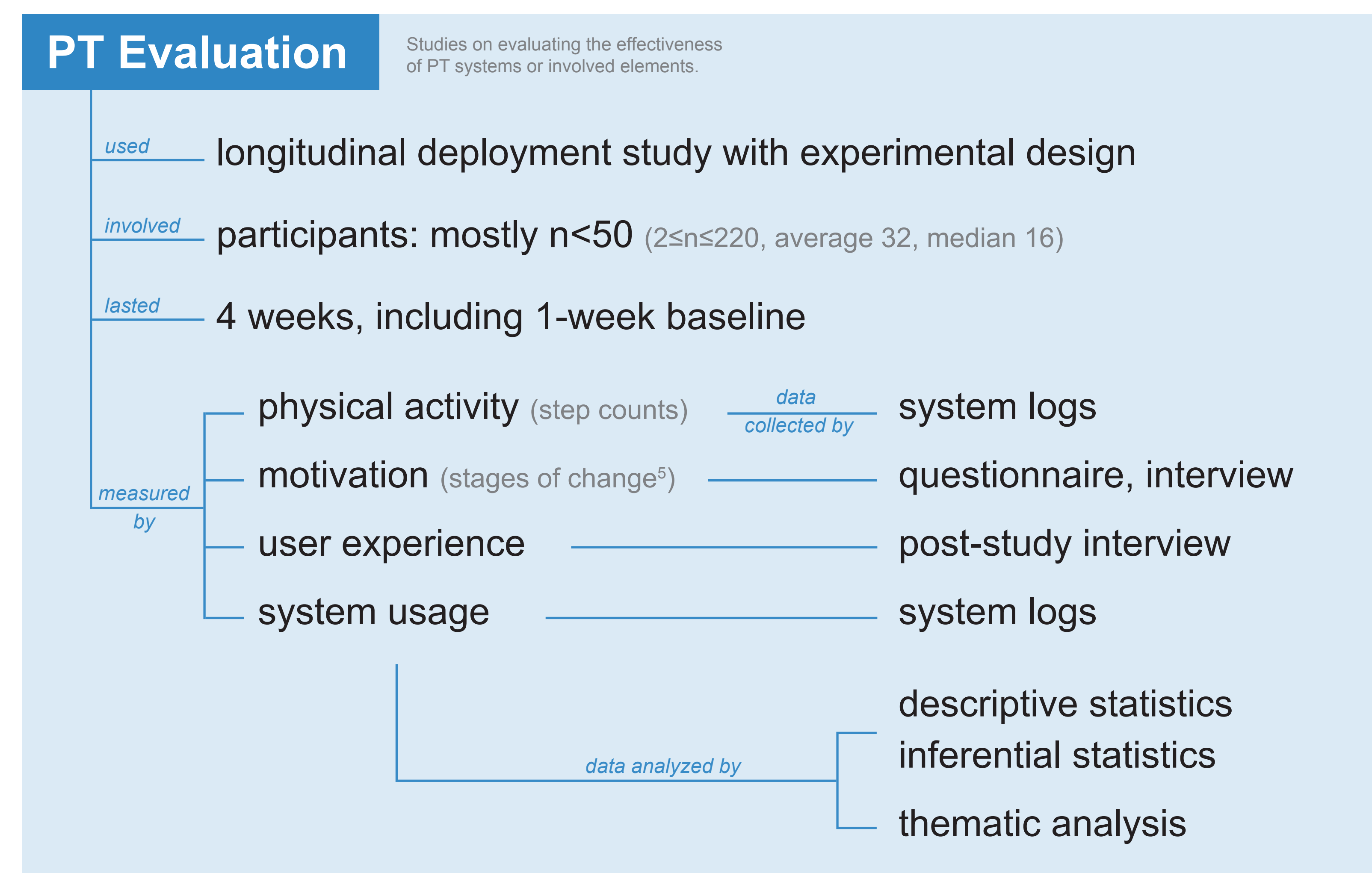
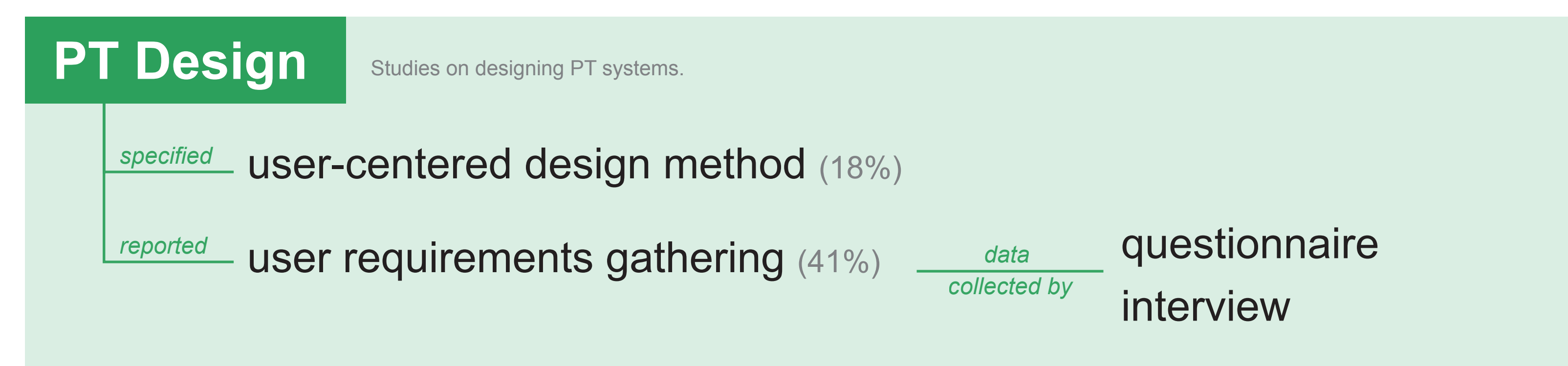
## RESEARCH QUESTIONS

How are empirical studies of **persuasive technology (PT)** conducted? How does this vary across different research objectives (design vs evaluation vs persuasive element examination)?

## METHODS



## COMMON PRACTICES



## TRENDS AND OPPORTUNITIES

Commonality in research topics and methods

- "Effects-oriented" trend: Studies fundamentally revolved around the effectiveness of PT systems or behaviour change strategies.
- Common methodologies were used for similar research objectives.

Technology-driven trend

- Most studies tried to match existing behaviour change strategies or system features to users, instead of centering on user needs.

Limited generalizability of findings

- Significant variance in evaluated system designs.
- Great variance in examined persuasive elements.

Insufficient attention to design process

- Design process was often not reported in detail; thus, the rationale of PT design remains unclear.
- Target users were rarely involved in the design process, especially teenagers and older adults.

## NEXT STEPS

Developing this review into a full paper.

Investigating how to better design behaviour change technology to support the needs of older adults living alone for physical activity.

- Understanding user needs and identifying design opportunities via semi-structured interviews.
- Designing prototypes and clarifying the rationale of PT design for older adults through an iterative co-design process.
- Evaluating PT system developed based on the prototypes via a deployment study.

