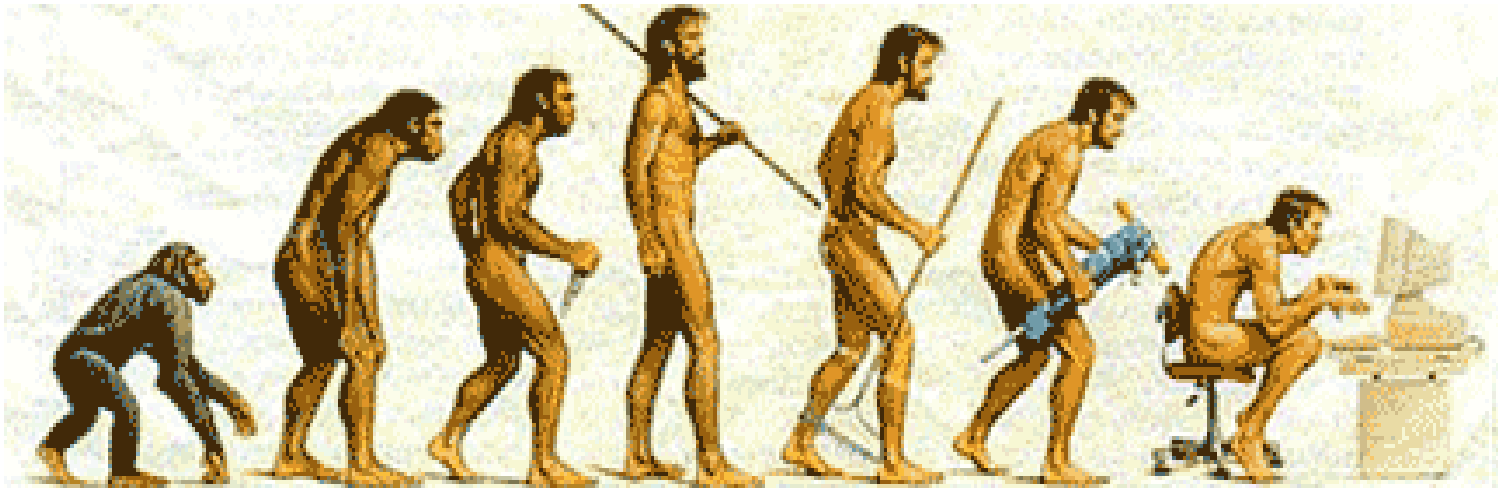
Promote physical activity and reduce ageism across generations: effects of an intergenerational program

Alexandre Mouton, Corentin Heldenbergh, Allison Flamion, Stéphane Adam & Marc Cloes

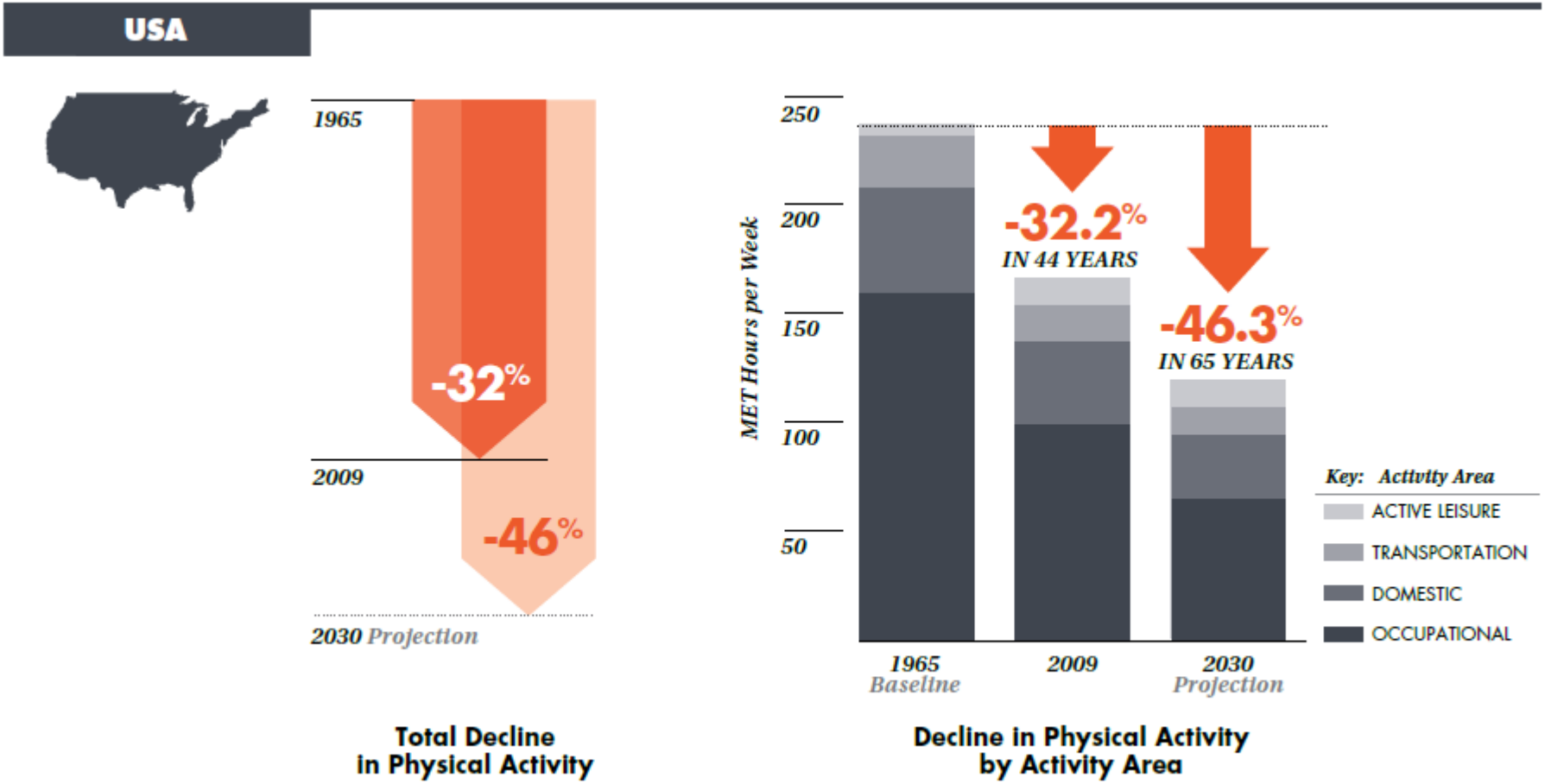
June 9, 2016

Being active…a forgotten need



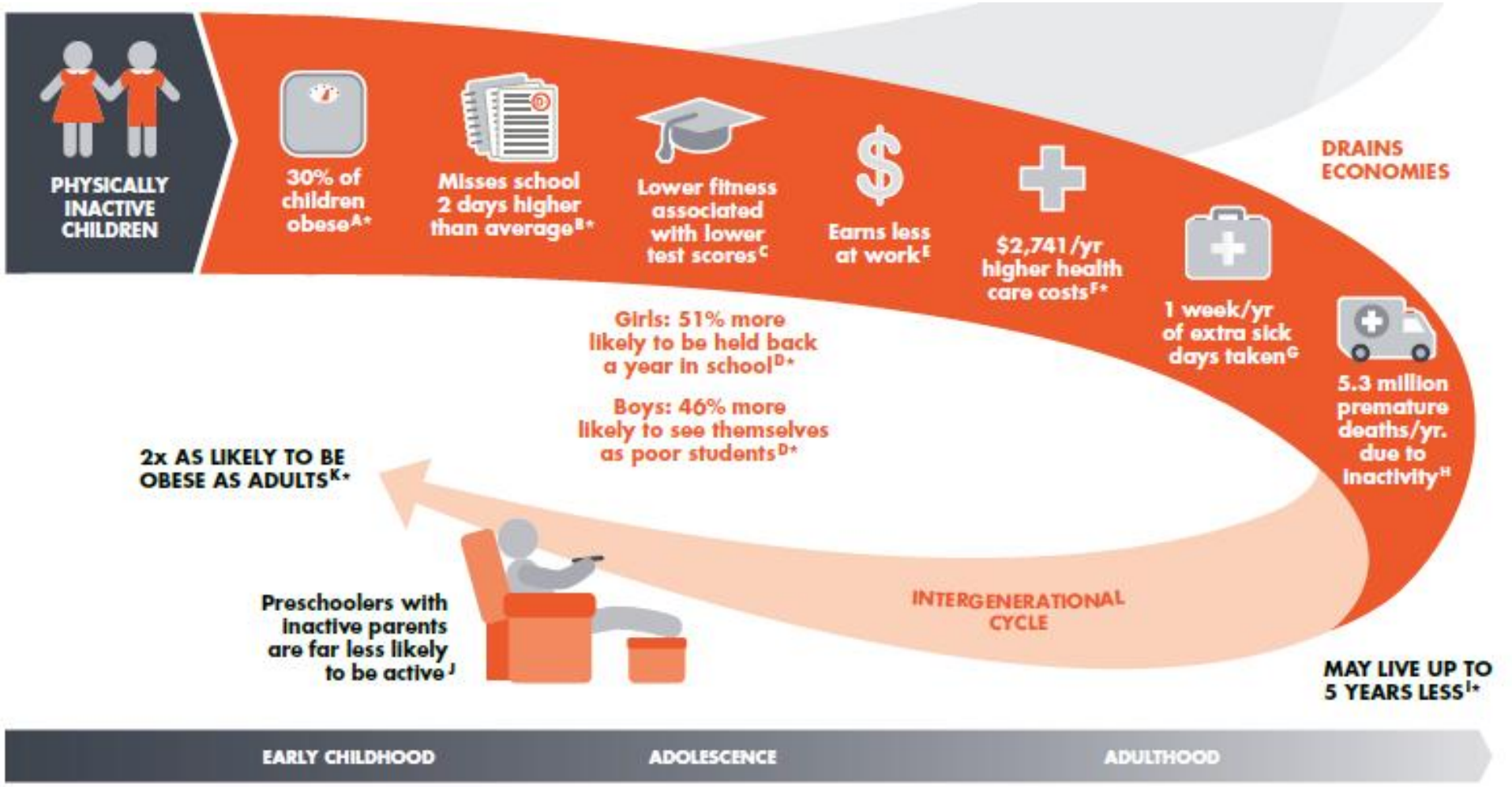
Eaton & Eaton (2003)

A major decline in physical activity across generations…



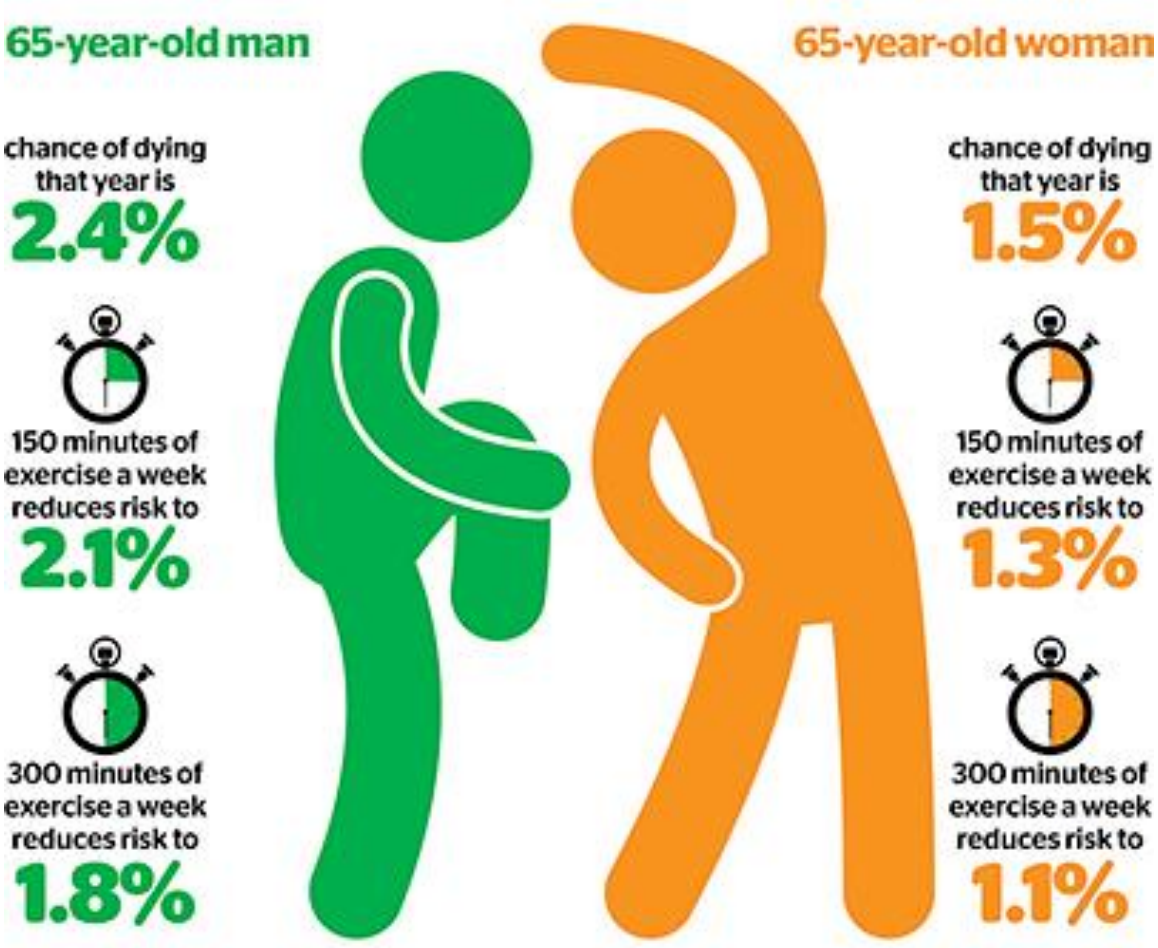
Morris (2013)
Designedtomove.org

…that leads to a dangerous intergenerational cycle



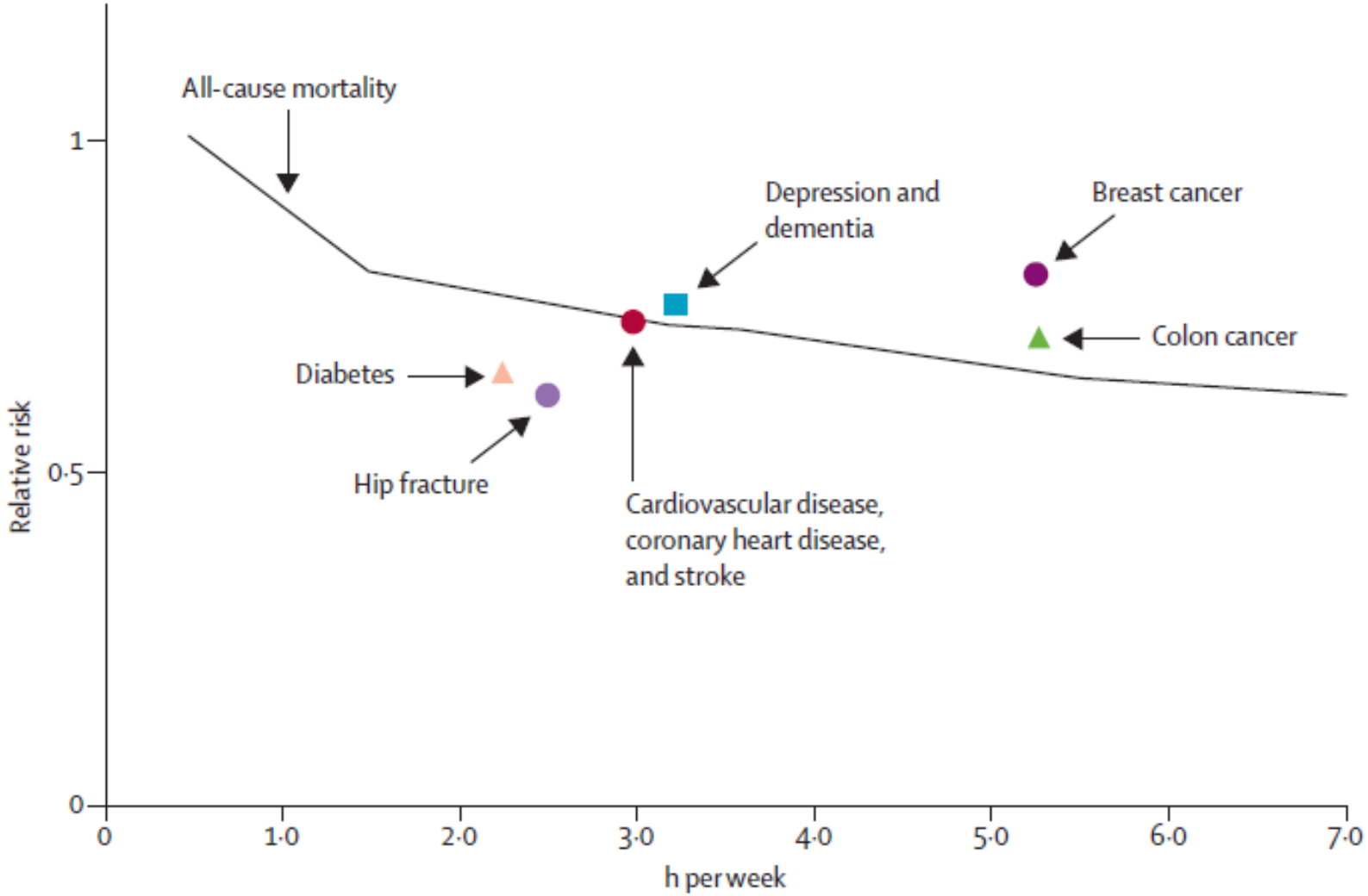
Morris (2013)
Designedtomove.org

Small effort, great gains



Harvard Medical School (2014)

Small effort, great gains



Kahn (2012)

Recommendations for older adults

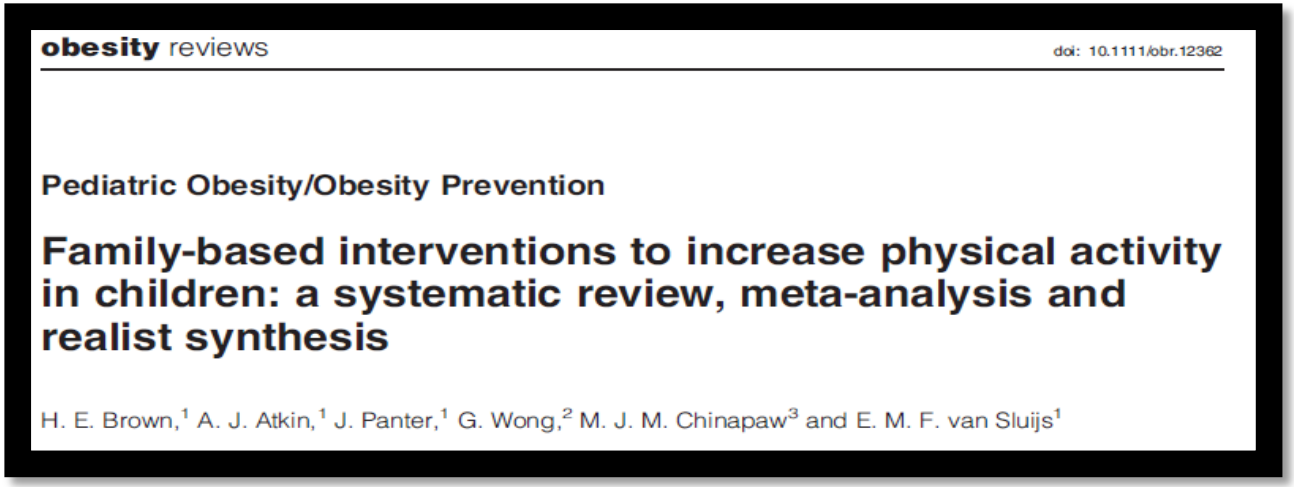
Start active, Stay active guidelines, www.bit.ly/startactive (2011)

Recommendations for kids

Start active, Stay active guidelines, www.bit.ly/startactive (2011)

Why don't we move together ?

- ✓ Innovative interventions are required to help older adults increase and maintain healthy levels of PA *(Flora & Faulkner, 2007)*
- ✓ Emerging approaches targeting specific intergenerational dyads, such as grandparent-grandchild pairs, are recommended *(Marcus et al., 2006)*
- ✓ First results of family-based interventions to increase PA are promising *(Brown et al., 2016)*



obesity reviews

doi: 10.1111/obr.12362

Pediatric Obesity/Obesity Prevention

Family-based interventions to increase physical activity in children: a systematic review, meta-analysis and realist synthesis

H. E. Brown,[1] A. J. Atkin,[1] J. Panter,[1] G. Wong,[2] M. J. M. Chinapaw[3] and E. M. F. van Sluijs[1]

Why don't we move together ?

- ✓ Intergenerational interactions could also combat aging stereotypes across generations *(Ory et al., 2003)*

Ageism = stereotyping and discriminating individuals or groups on the basis of their age

- ✓ To date, research in the field is weak *(Mouton, Henrioulle & Cloes, 2014)*

AIM

Examine the effects of an intergenerational PA program
on PA behaviours and aging stereotypes of grandparent-grandchild pairs

Methods

1 Recruitment

- ✓ Intergenerational grandparent-grandchild pairs were recruited in two Belgian municipalities

No significant differences between groups before the intervention

Combined groups for the results

	COMMUNE D'ESNEUX	Herstal Ville sportive
	N = 5	N = 12
	64,7 ± 3,2 y	65 ± 4,2 y
	7,8 ± 1,3 y	8,9 ± 2,2 y

- ✓ Grandparents should be autonomous and older than 50
- ✓ Grandchild should be in primary (elementary) school (5-12)

2 Program development

- ✓ Adapted from a previous intervention (Mouton, Renier & Cloes, 2015)
- ✓ One weekly session of PA (1h) <u>right after school during 12 weeks</u>

Cooperation
Body expression
Agility
Strength
Balance
Flexibility

3 Assessment tools

Before (T0) & after (T1) intervention


Sociodemographics	X	X
Representations about old/young people *(5 words each)*	X	X
Network of Relations Inventory – NRI *(21 likert scale items)*	X	X
Grandchild-granparent relationship quality *(37 diverse items)*	X	X
Fraboni ageism scale *(23 likert scale items)*	X	
Older adults Physical Activity Questionnaire (QAPPA)	X	
Short-form Health Survey (SF-36)	X	
UCLA Loneliness scale *(17 likert scale items)*	X	
Senior Fitness Test *(7 physical tests for balance, strength, flexibility and endurance)*	X	
Child well-being *(7 likert scale items with smiley icons)*		X

After each session: satisfaction questionnaire *(10 likert scale items with smiley icons)*

**References for the tests are mentioned in the bibliography*

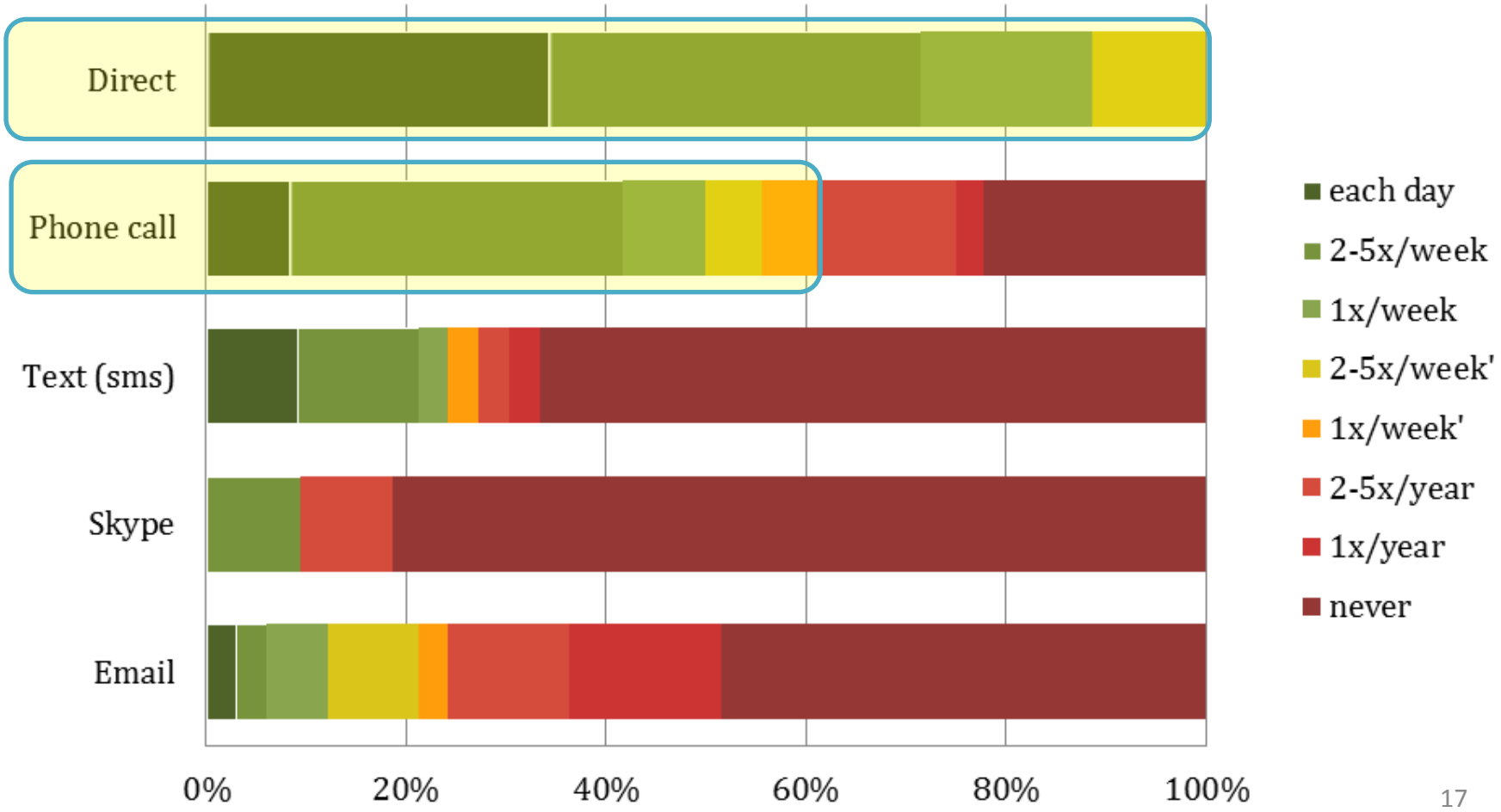
3 Assessment tools

**References for the tests are mentioned in the bibliography*

Results

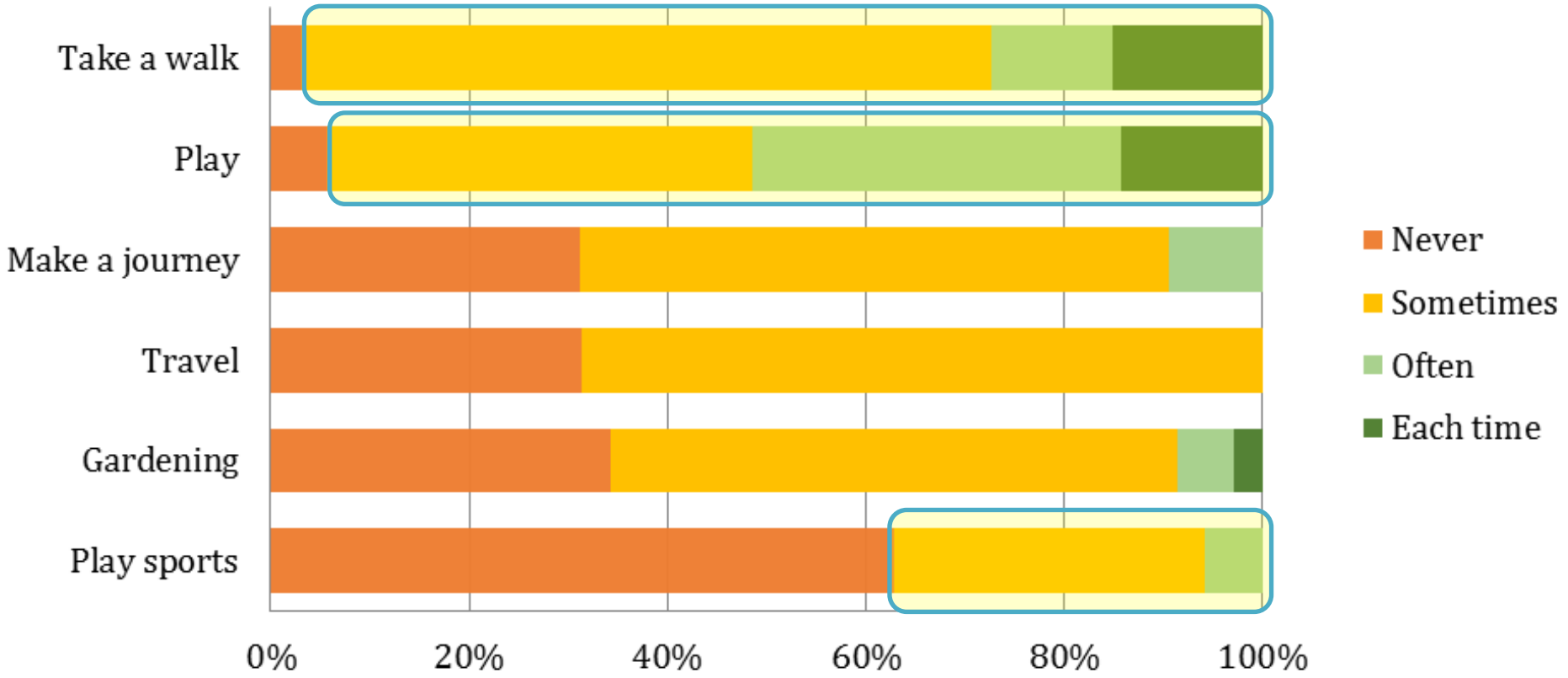
1 Grandparent-Grandchild Relations

✓ Direct relation or phone call on a regular basis



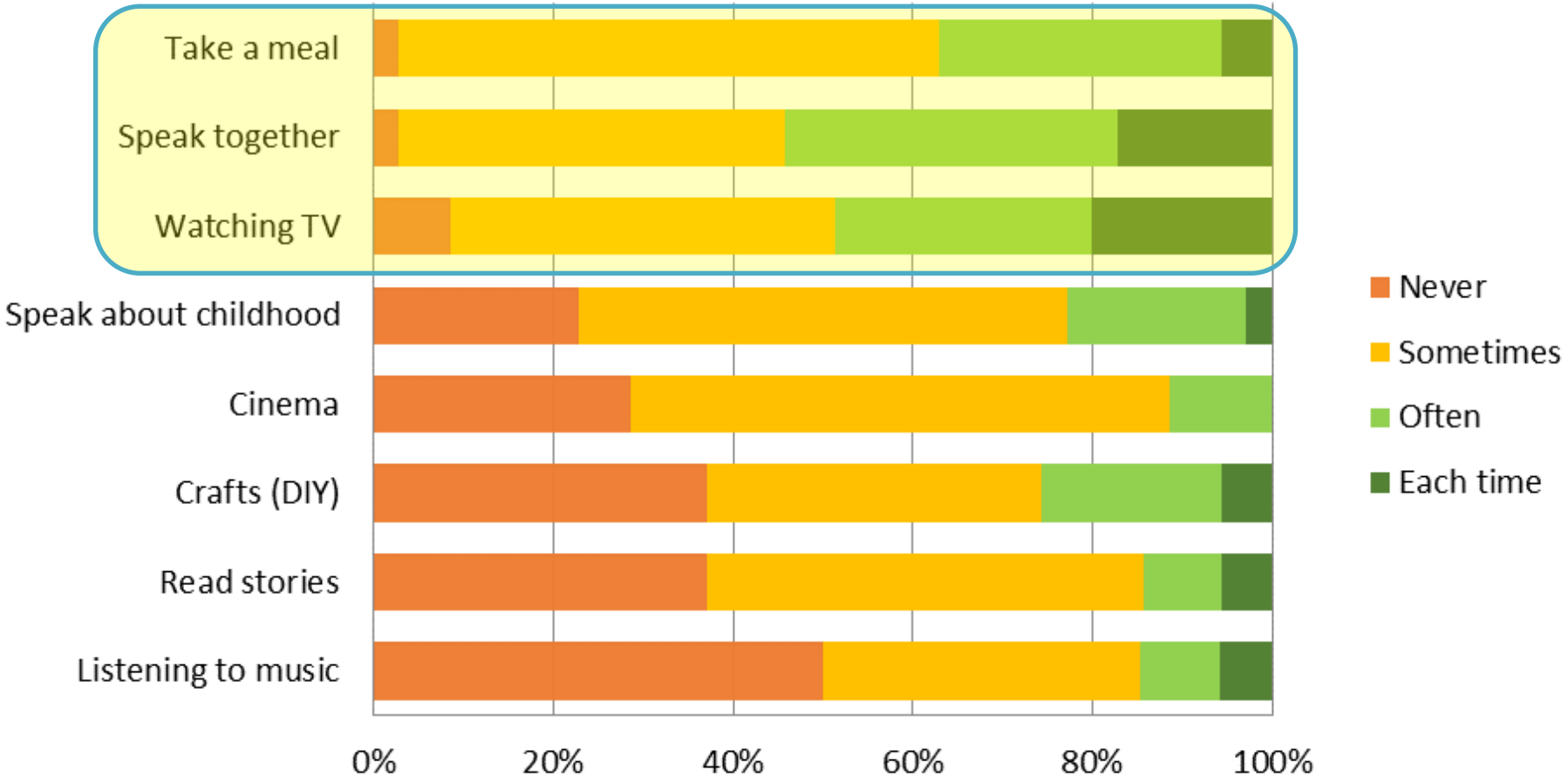
1 Grandparent-Grandchild Relations

✓ Mostly play or take a walk when they meet, but rarely play sport



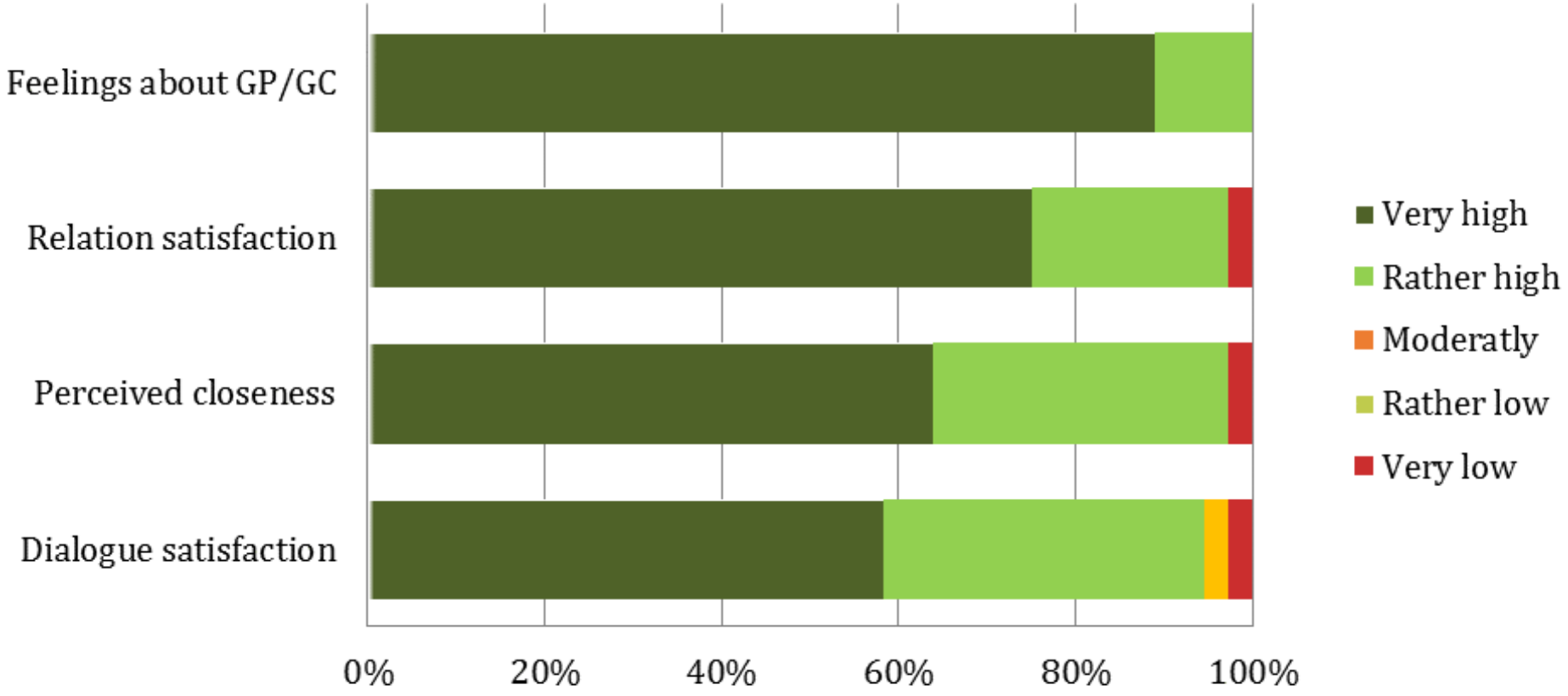
1 Grandparent-Grandchild Relations

✓ Used to eat and speak together regularly, but also watching TV



1 Grandparent-Grandchild Relations

✓ High levels of feelings, closeness and satisfaction with the relation



2 Pre-Post intervention analysis

Sociodemographics
Representations about old/young people *(5 words each)*
Network of Relations Inventory – NRI *(21 likert scale items)*
Grandchild-granparent relationship quality *(37 diverse items)*
Fraboni ageism scale *(23 likert scale items)*
Older adults Physical Activity Questionnaire (QAPPA)
Short-form Health Survey (SF-36)
UCLA Loneliness scale *(17 likert scale items)*
Senior Fitness Test *(7 physical tests for balance, strength, flexibility and endurance)*
Child well-being *(7 likert scale items with smiley icons)*

No significant differences !

2 Pre-Post intervention analysis

Ageism*

 Perceived by  → -0,41 ± 1,77

 Perceived by  → 0,49 ± 1,74

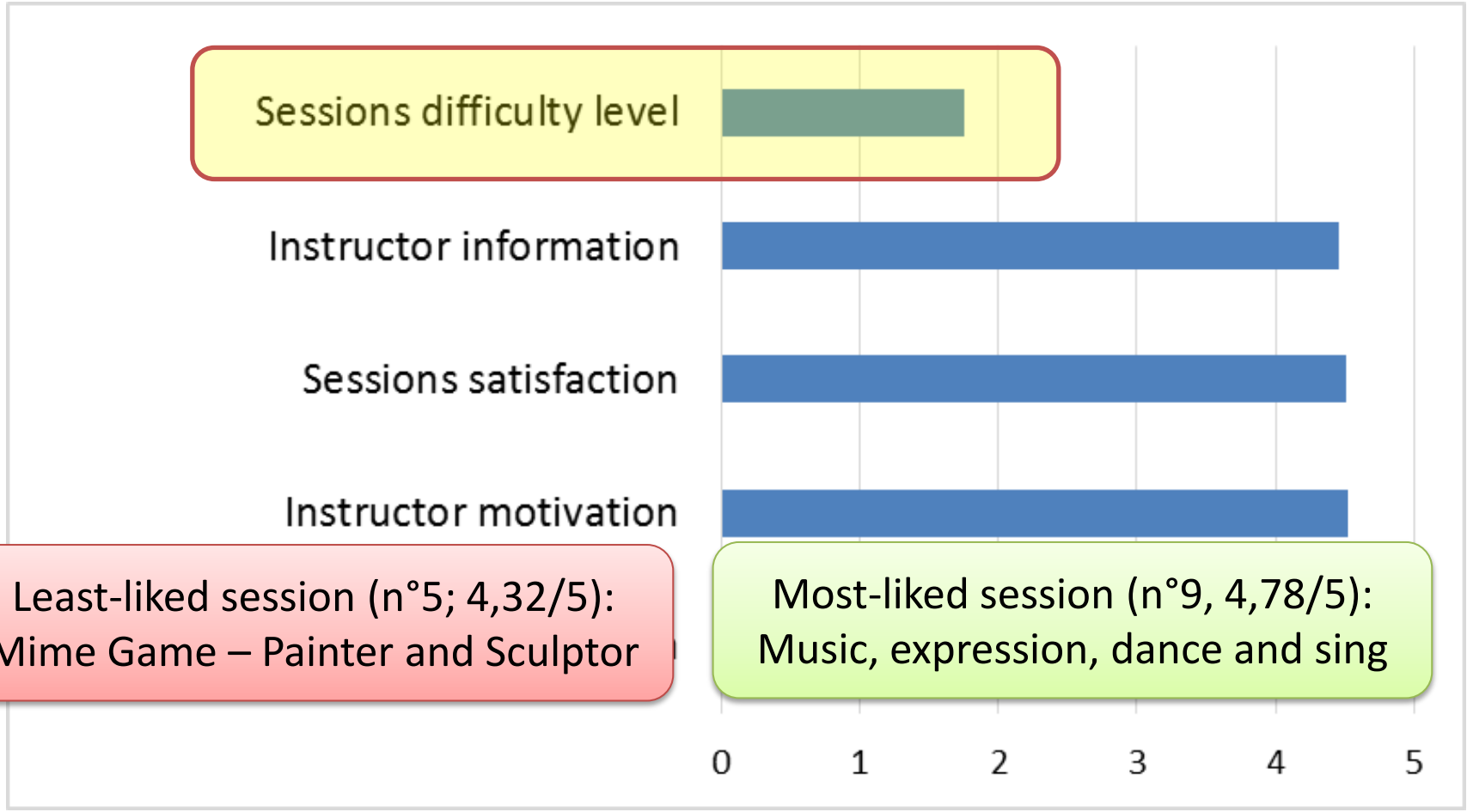
 Perceived by  → 2,02 ± 1,44

 Perceived by  → 2,25 ± 0,59

*-5 to +5 scale

3 Satisfaction with the intervention

✓ High levels of satisfaction, low perceived difficulty level



Karageorghis & Priest, 2012

Conclusions

✓ Quality of the Grandparent-Grandchild relationship was already high at baseline

→ The intervention supported those good relations, but didn't improve it significantly

✓ Senior physical activity level high at baseline (mean = 2812 MET-min/semaine)

→ Volunteer bias : people already concerned about PA

✓ Participants were highly satisfied about the intervention, but perceived difficulty level was low

→ Increase difficulty level in order to observe significant physical improvements

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Tilff, le 17/12/20

M. Cloes

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Force des jambes	**14** Répétitions	**14** Répétitions	=
Force des bras	**17** Répétitions	**20** Répétitions	↑ 2 ans
Souplesse des jambes	**+16** Cm	**-4** Cm	↑ 5 ans
Souplesse des bras	**-2** Cm	**-3** Cm	↑ 2 ans
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