

Distracted cycling

The use and risks of mobile phones and portable media players among Dutch cyclists

Overview

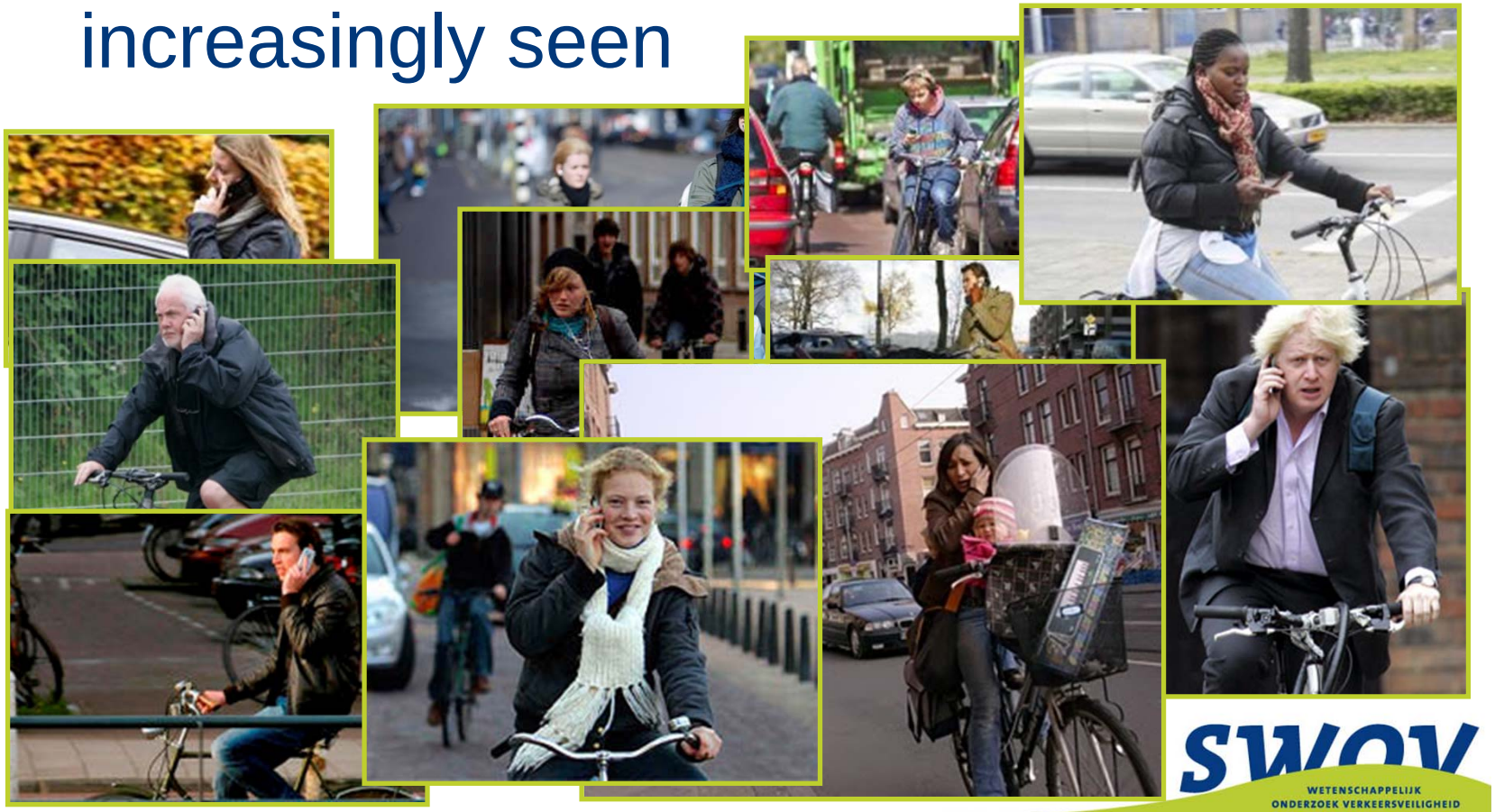
- Introduction
- Research questions
- Method
- Results
- Conclusions
- Questions

Introduction

- Who has a cell phone or portable media player?
- Who ONLY uses this at home/ work?

Introduction

- Use of devices while cycling is increasingly seen



Devices

- Anything with which you can:
  - Listen to music
  - Make a phone call
  - Send/receive messages
  - Look up information

Research Questions

1. Use
   - How often?
   - Why?
   - How?
2. Risks
   - Bicycling
   - Role of device use

Method

- Internet survey (N=2553)
- Cyclist= at least once a week
- Age: 12-17/ 18-34/ 35-49/ 50+
- Crashes with/without injury

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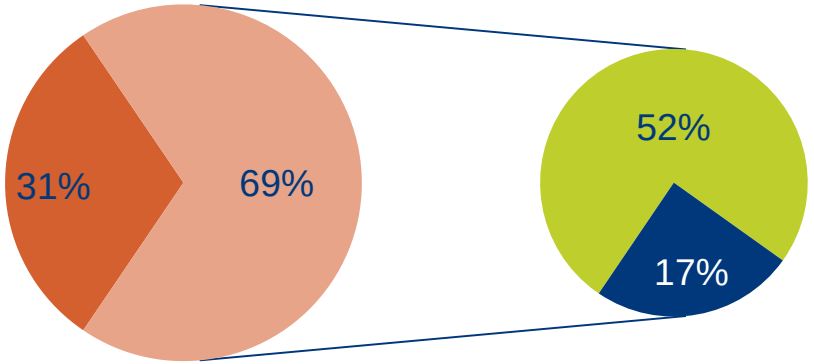
Device use while cycling



- No 31%
- Yes, at least occasionally 52%
- Yes, on (nearly) all trips 17%

- Frequent users:
  - 15% listens to music
  - 3% makes phone calls
  - 3% uses the phone to send/receive messages
  - 2% uses device to look up information

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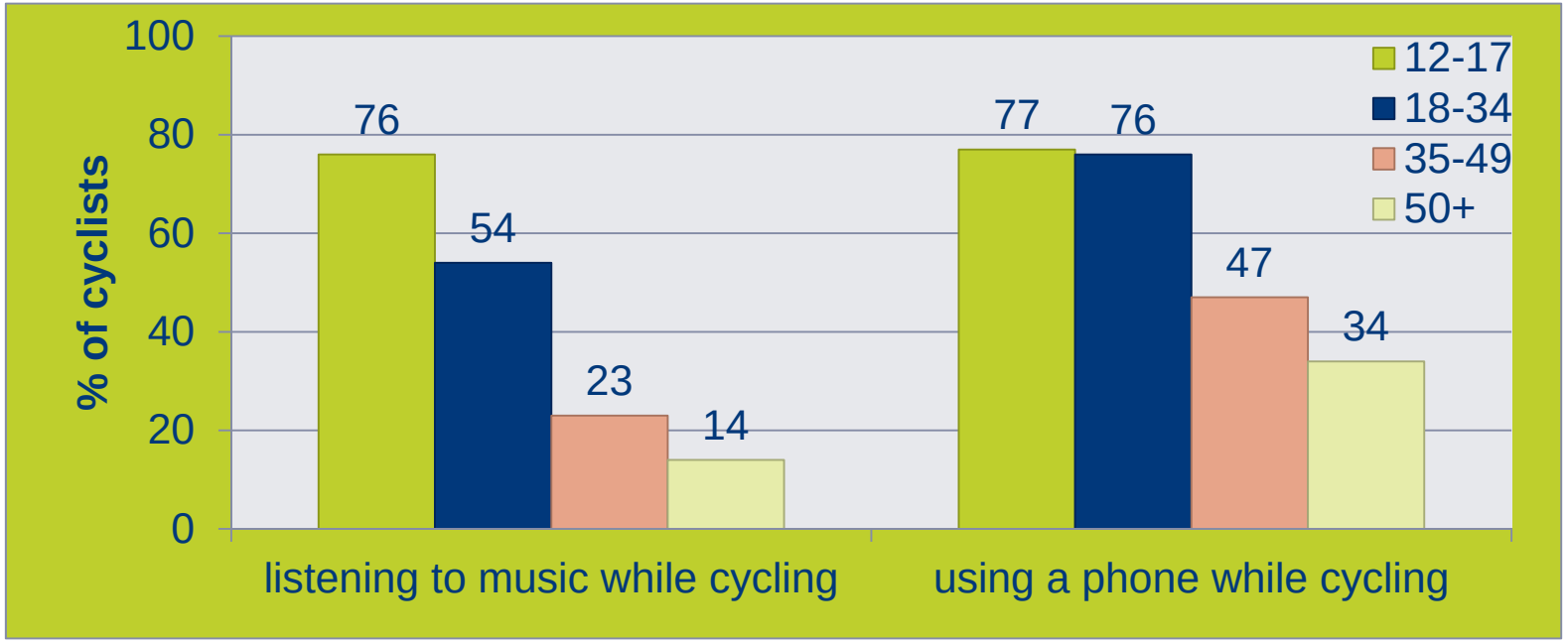
Phone vs. Music



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Motives

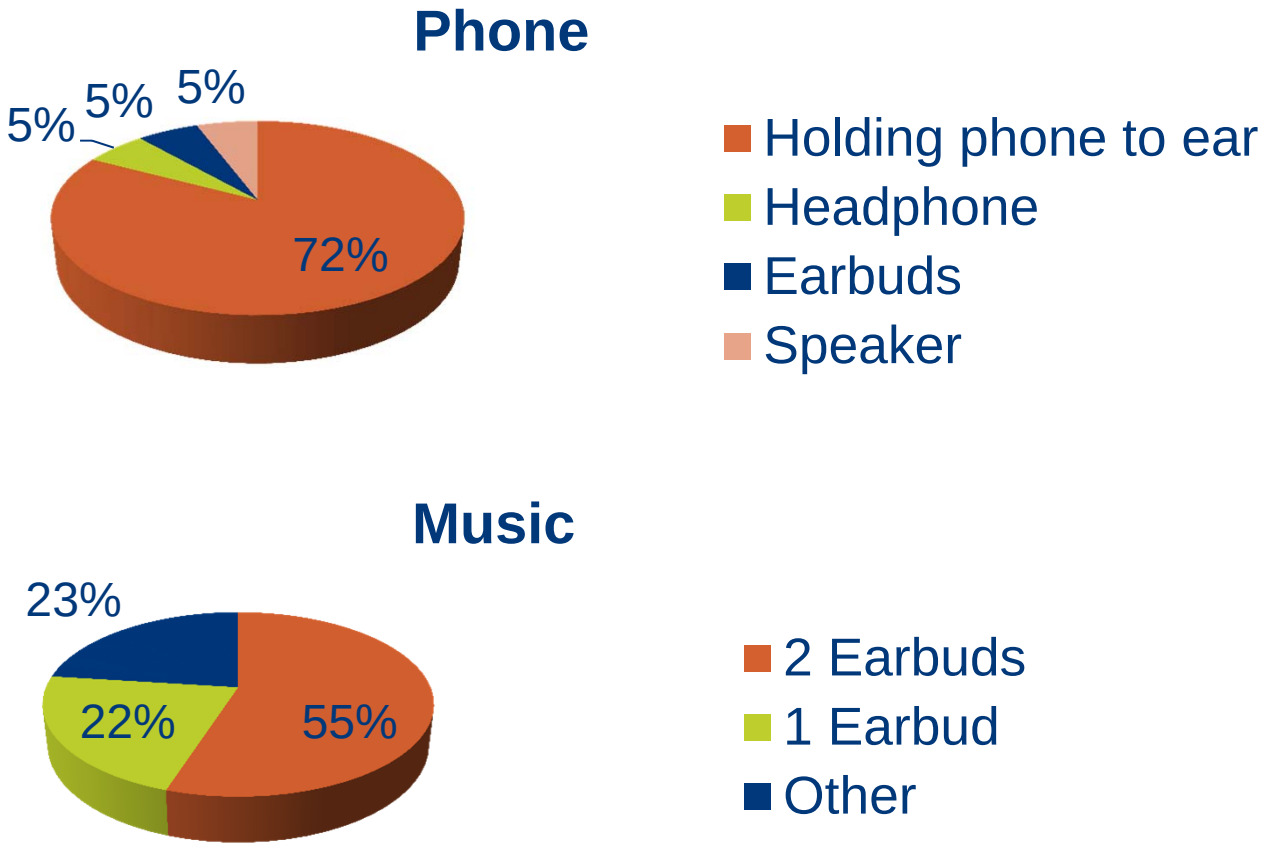
Phone:

- > 50%: “other” = necessity, making appointments, accessibility

Music:

- 40 % : “fun”
- 21%: “boredom”
- 12%: “habit”

Mode


Phone
5%
5%
5%
72%
Holding phone to ear
Headphone
Earbuds
Speaker
Music
23%
22%
55%
2 Earbuds
1 Earbud
Other

Mode

	speaker	always 1 e	always 2 e	it varies	phone to	don't phor
12-17	6	5	4	9	71	6
18-34	1	2	4	6	80	6
35-49	2	6	4	4	68	16
50+	5	8	3	2	63	19

	speaker	always 1 e	always 2 e	it varies	don't listen to music	
12-17	7	28	43	19	2	
18-34	3	18	59	12	9	
35-49	1	24	57	5	13	
50+	7	25	54	1	13	

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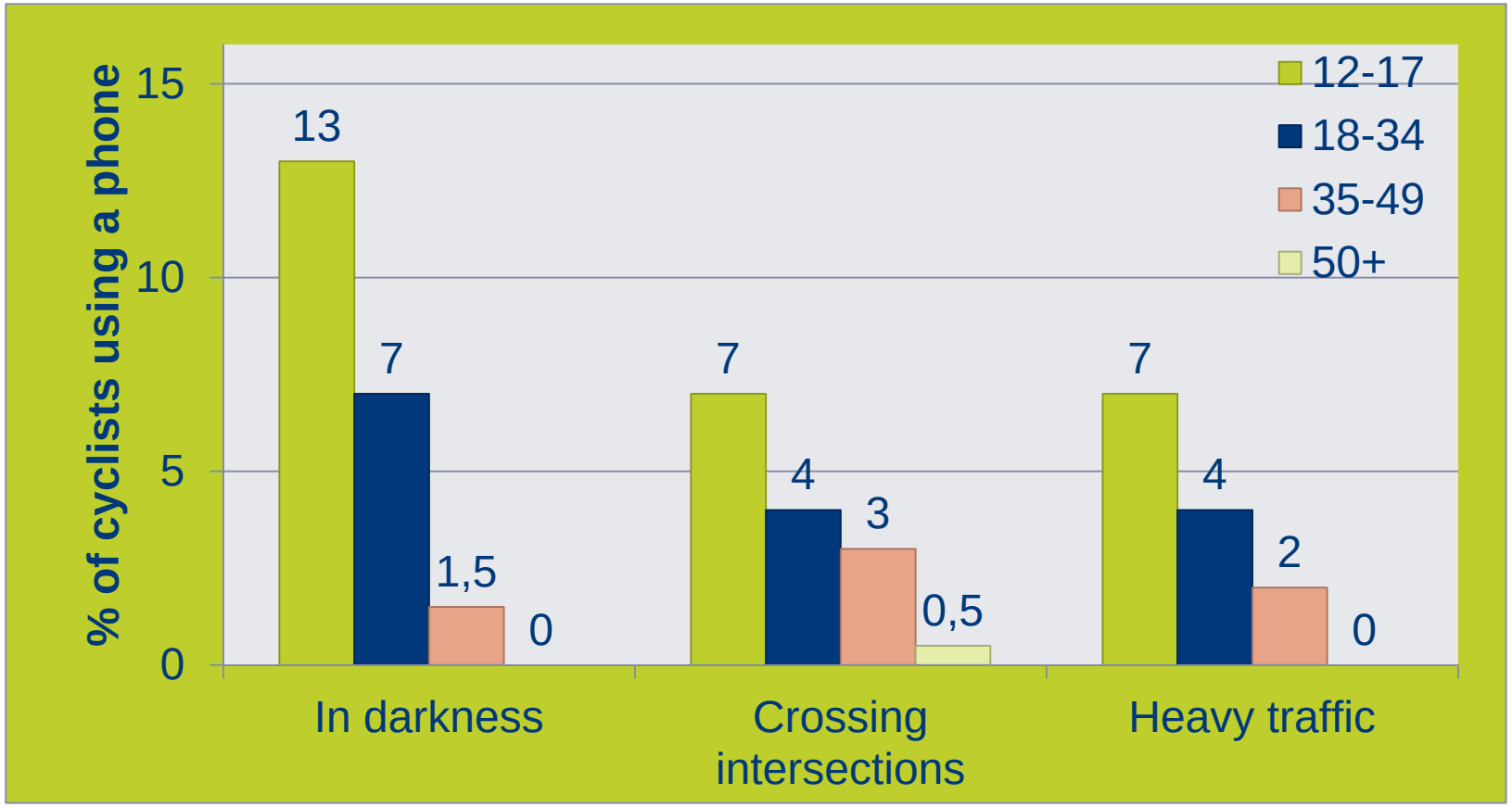
Use in demanding situations



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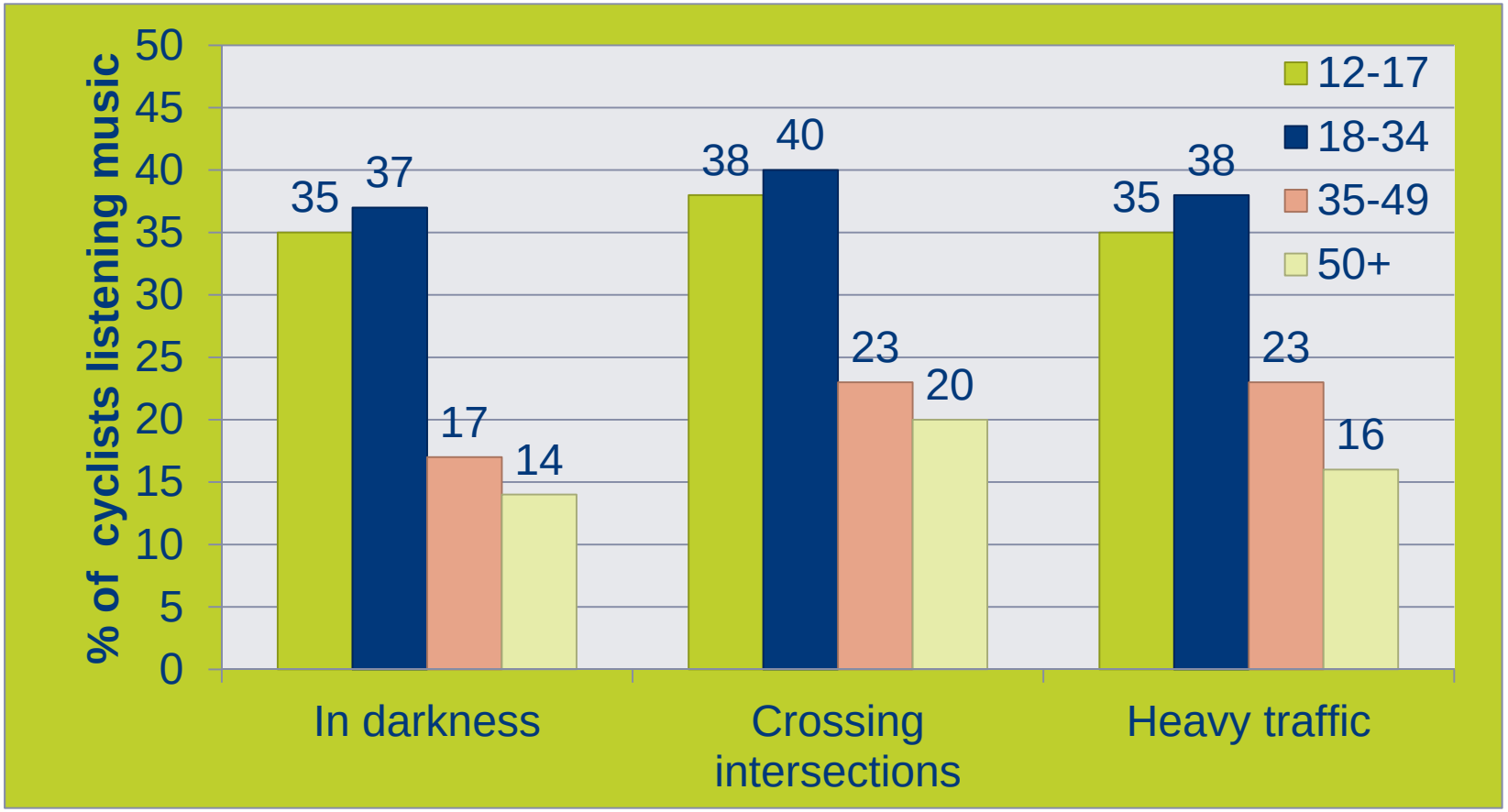
Use in demanding situations



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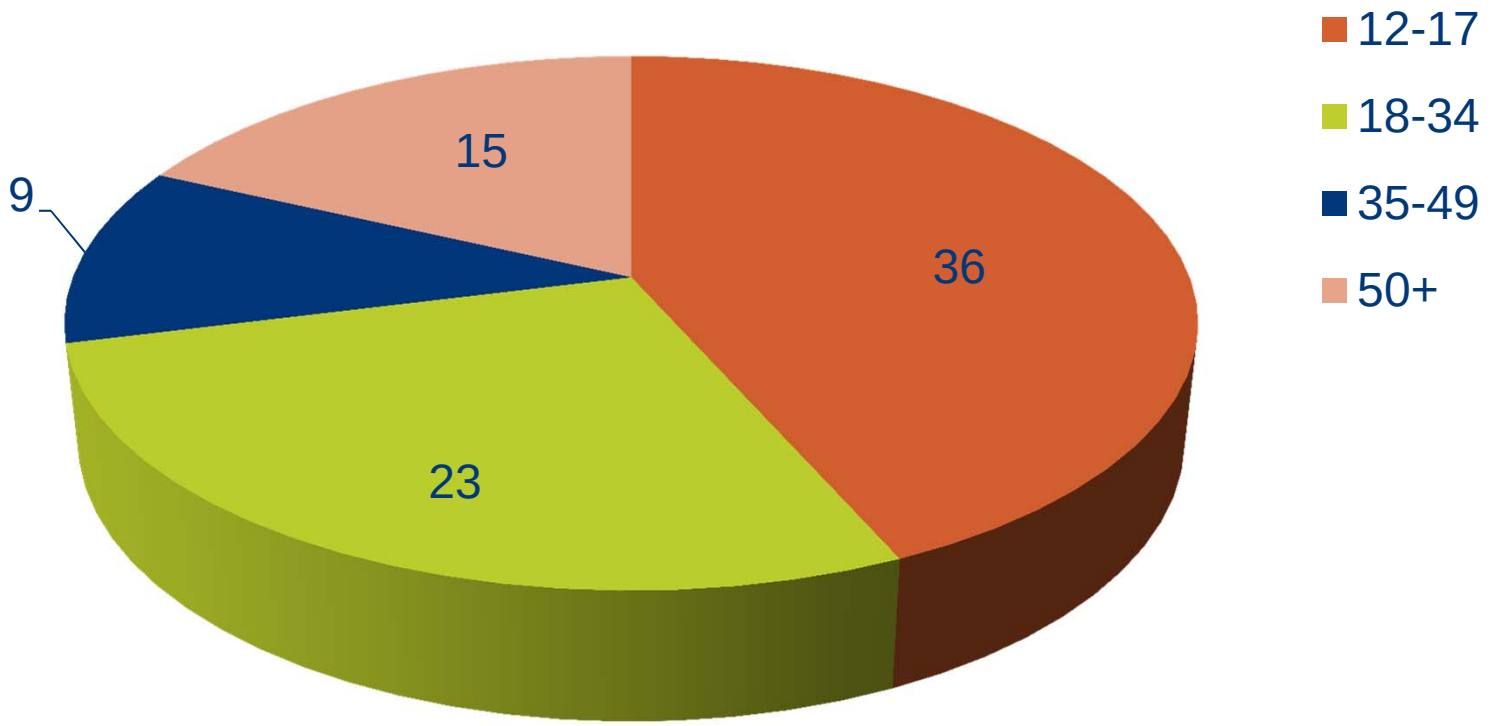
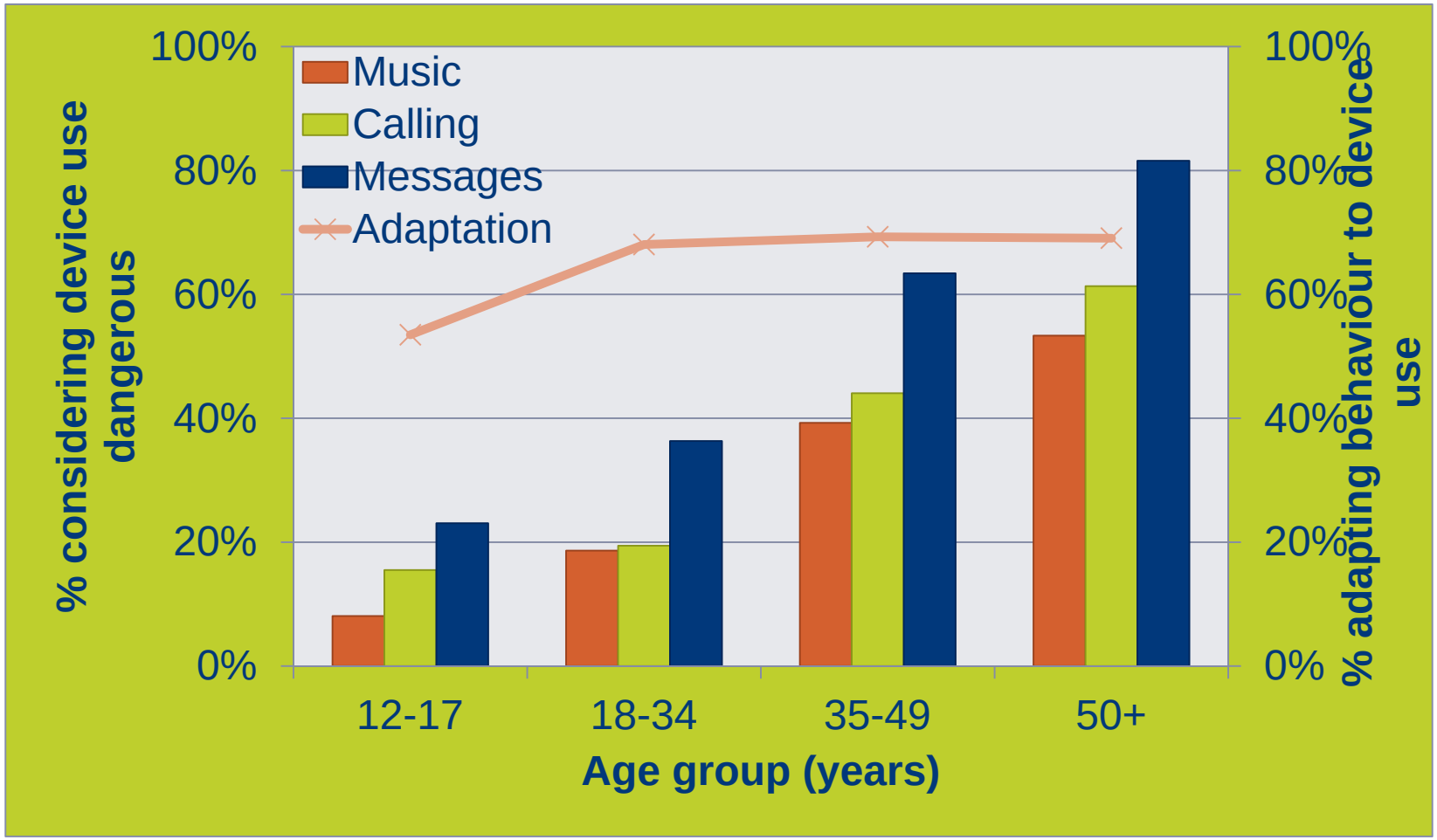
Reported distraction



Compensatory behaviour

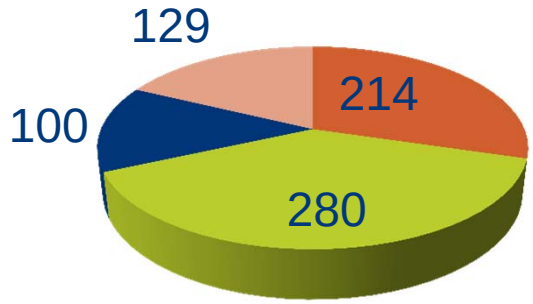
- 6 out of 10 reports compensating for device use
- Younger cyclists (12-34 yrs)
  - Paying better attention
- Older cyclists:
  - Selective use of devices
  - Helmet

Risk perception & adaptation



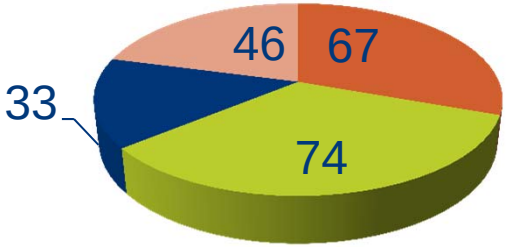
Reported crashes

All (detailed) crashes



- Hitting an obstacle
- Without hitting anything
- Crashing into another RU
- Another RU crashing into you

Crashes with injury



- Hitting an obstacle
- Without hitting anything
- Crashing into another road user
- Another RU crashing into you

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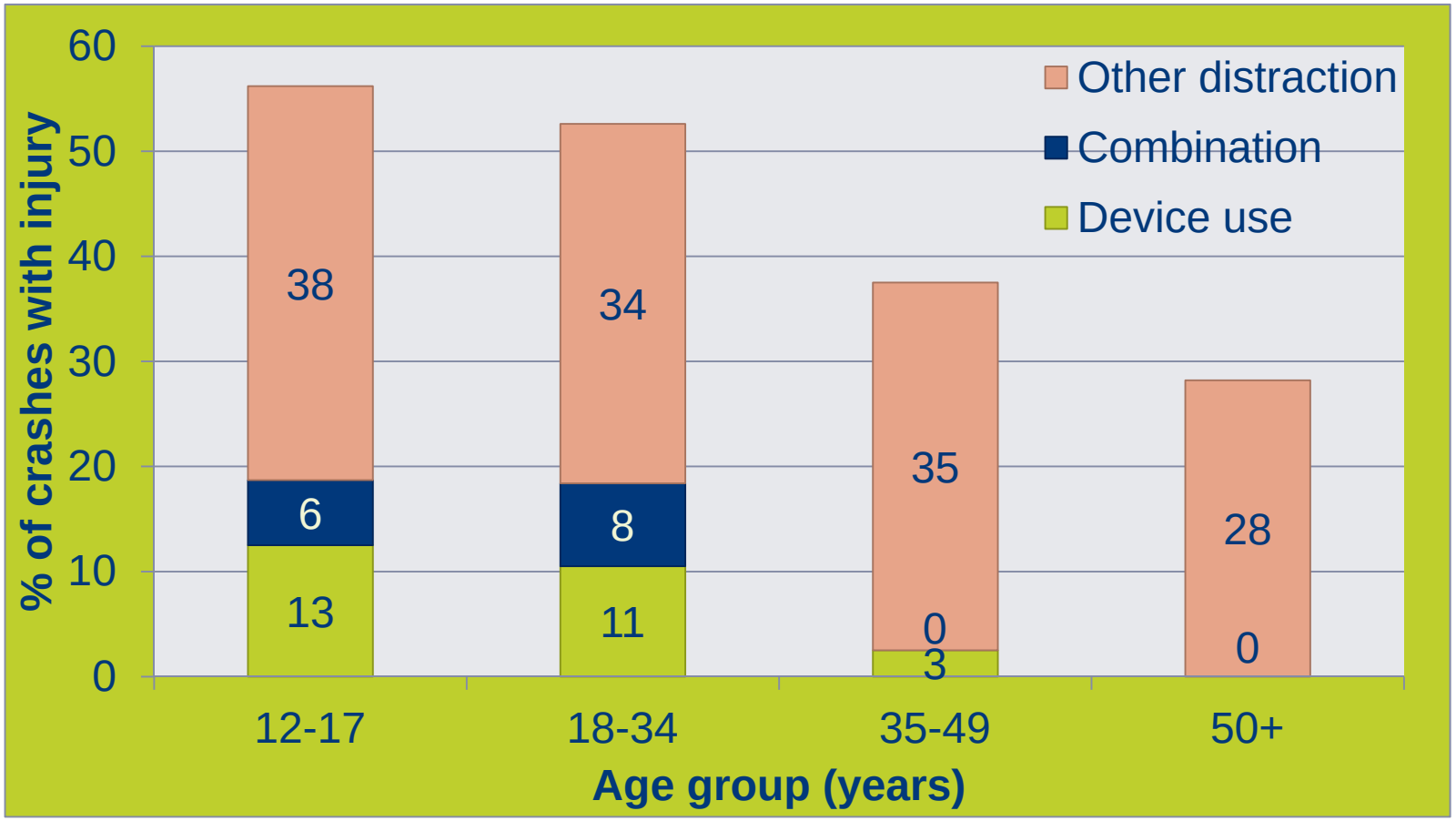
Distractions



Device use & crashes

- Crashes with injury:
  - Reported by 5 % of cyclists
- (Potential) contribution of device use to crashes:
  - 10% of all (detailed) crashes
  - 9% of crashes with injury

Device use & crashes

- Logistic regression:
  - Device use = significant ánd independent predictor of bike crashes
- Estimate (!) of crash risk:
  - factor 1,3 (30%) higher for cyclists using the phone and listening to music on all trips vs. cyclists who never do.

Conclusions: Use

- Device use is common:
  - 7 out of 10
  - Mostly among young cyclists
- Young cyclists
  - Use ↑
  - Perceived risk ↓ & Adaptation ↓

Conclusions: Risk

- (Potential) contribution of device use to crashes:
  - 10% of all (detailed) crashes
  - 9% of crashes with injury
- 30% higher crash risk
  - Modest: compare BAC 0.5 g/l: 40% higher

Questions & discussion

Thank you for your attention!

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