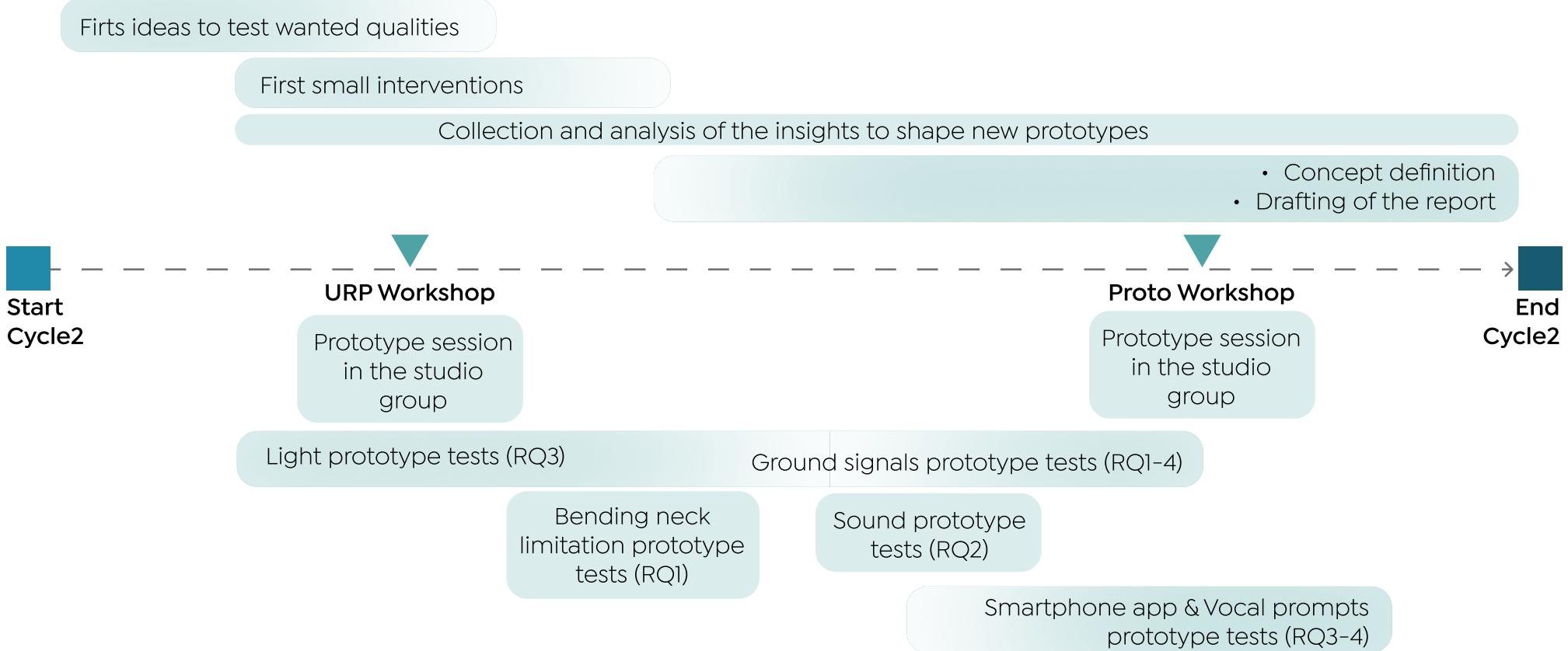


Prototype plan

Prototype & Direction



RQ1: What catches the attention of pedestrians that use the phone? What catches the attention of pedestrians that don't use their phone?

RQ2: How people can communicate implicitly without eye contact?

RQ3: How pedestrians with phones can show others that they are aware of the surrounding?

RQ4: How can we make pedestrians with the phone more aware of their actions in a playful and not restrictive way?

Prototype1

Prototype & Direction

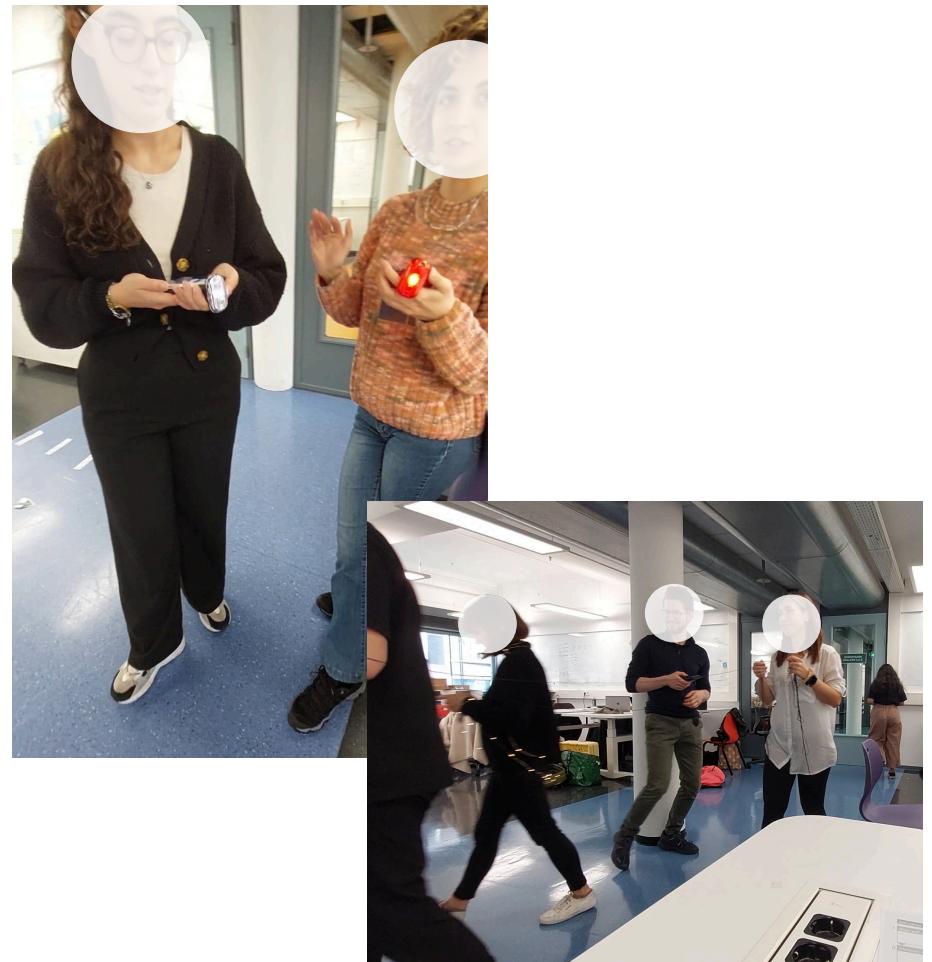
Lights

Many variations have been made, to find out if this kind of intervention is able to catch the attention of the pedestrian with/ without the phone or neither of them.



Main insights

- Lights are NOT very helpful for pedestrian with the phone because people's gaze is already focused on the smartphone
- Light can help pedestrian that are not using their phone



See appendix p. 89 for details about methods, procedure and sample size

Prototype2

Prototype & Direction

Sounds

By prototyping different soundtracks, my interest was to understand how sound influences people's awareness related to human motion. Specifically what kind of sounds can be recognized as a human source

1. White noise sound



2. Person's step sound



3. Heartbeats sound



Main insights

- Sounds, as the heartbeats, can be related to human vital parameters. It makes people look around and check the environment.
- The sound tracks 1 and 2 made the participant confused



See appendix p. 90 for details about methods, procedure and sample size

Prototype3

Prototype & Direction

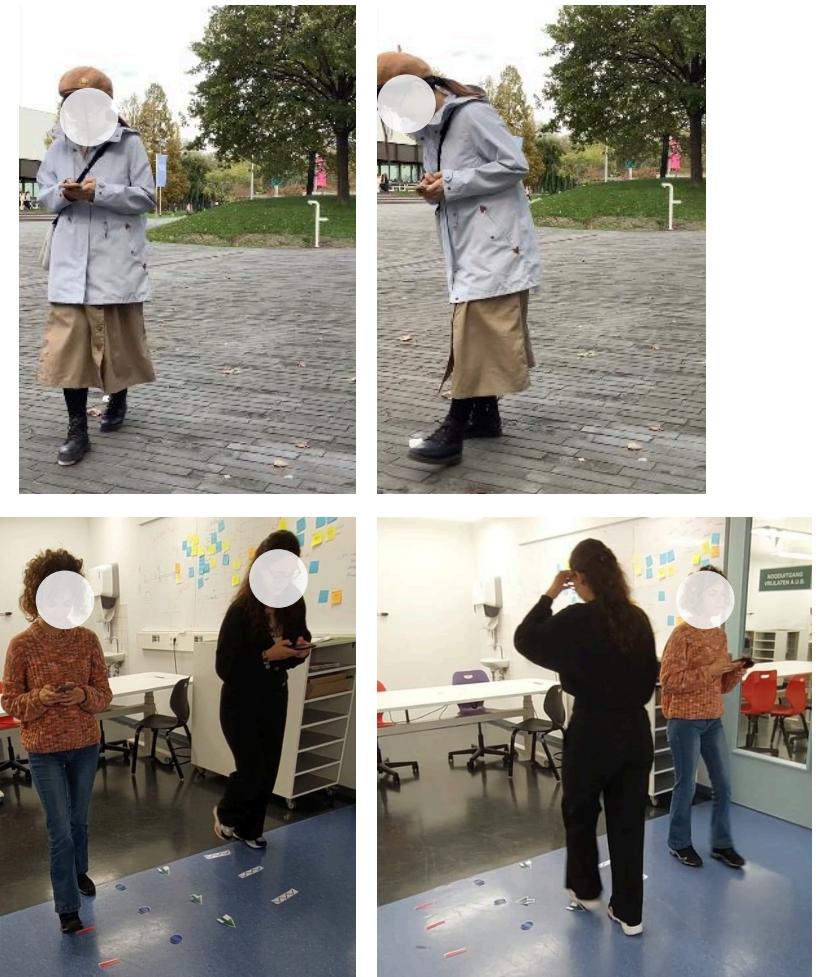
Ground signals

For this prototyping phase, I made a distinction between signals drawn on the ground and elements that created temporary physical obstacles on the user path.



Main insights

- Variations on the ground catch people's attention for a moment but then they will act again as they were doing previously
- When participants stepped on the balloons they checked the floor but not the environment around
- Drawn signals are not very noticeable



See appendix p. 91 for details about methods, procedure and sample size

Prototype4

Prototype & Direction

Bending neck limitation

The aim was to understand how much the “wrong” posture of the neck in the current situation is responsible for the lack of awareness of the surrounding. A travel pillow has been used to force the participants into a more straight posture to prevent the bending neck



Main insights

- Unnatural positions make participants more aware of the surrounding, they also have more control on their movements

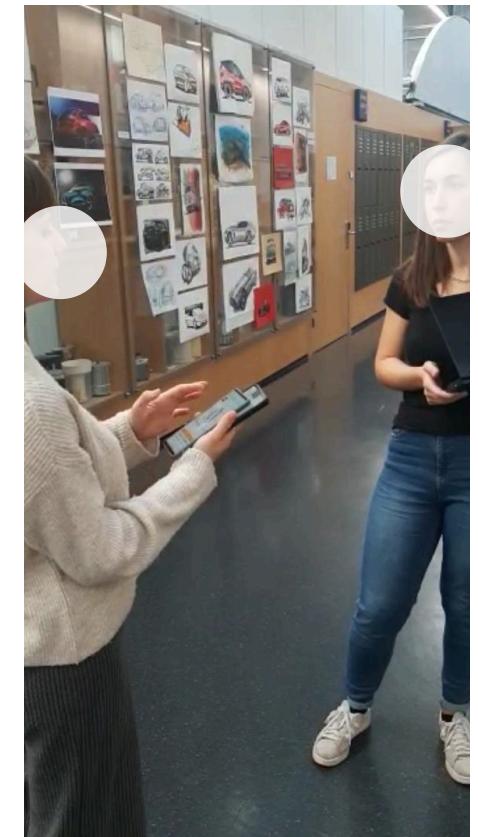
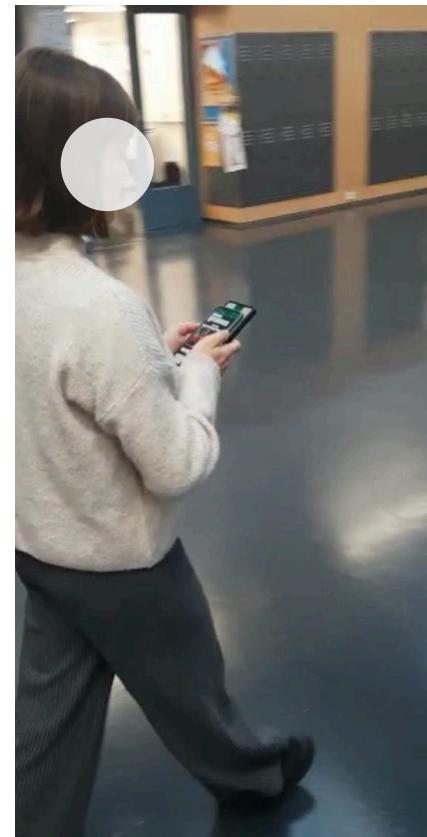
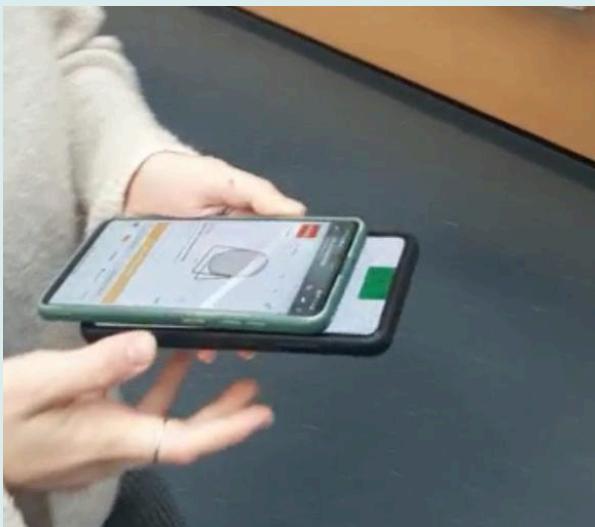
See appendix p. 92 for details about methods, procedure and sample size

Prototype5

Prototype & Direction

Smartphone app & Vocal prompts

By prototyping the app on the phone and the vocal prompts, the aim was to test whether the users would have felt more conscious about the environment. The prototypes used live vocal/visual feedback to alert them whether they were walking straight or they were zigzagging.



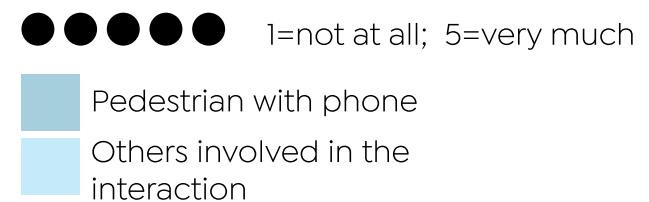
Main insights

- Instruction through visuals on an app makes people rely on the phone and they don't look around anymore
- The visuals on the app weren't really clear to the participants

See appendix p. 93 for details about methods, procedure and sample size

Evaluation & Conclusion

Prototype & Direction



	Predictable	Engaging	Create consciousness	Communicative	Playful
Lights	●●	●●	●	●	●●
	●●●●●	●●●●●●	●●●	●●●●	●●●
Sounds	●●	●●●	●●●●●●	●●	●●●●●
	●	●	●	●	●
Ground signals	●	●●	●●●	●	●●●●●
	●	●●	●	●	●●●●●
Bending neck limitation	●●●●●●	●	●●●●●●	●●●●●	●●●●●
	●●●●●	●	●●●●●●	●●●●●	●●●●●
Smartphone app & Vocal prompts	●●●	●●●●●●	●●●	●●	●●●●●
	●	●	●	●	●

Unexpected findings/conclusion

- If pedestrians are asked to use their phone while completing another task at the same time or to walk in unusual positions, they will be more focused on the surrounding as well
- The design shouldn't make them even more dependent and reliable on the phone
- Pedestrians that are not using their phone normally feel very annoyed by seeing other pedestrians using their phone because they perceive them as not respectful
- Pedestrians with the phone sometimes are more aware of the surrounding than they look