







#### V) CONSENT FROM THIRD PARTIES

While researchers are obliged to obtain written consent from all people entering private settings where recording takes place, and are subject to disciplinary action should they fail to do so, it is very difficult to ensure that participants actually do this. This, in turn raises real issues of auditing data derived from wearable cameras gathered by participants and tracking informed consent.

#### VI) PRIVACY AND CONFIDENTIALITY

Despite the precautions taken to protect the privacy and confidentiality of the participants, and the people who are implicated in the data they capture, the risks of breaching confidentiality always exist. For instance, unauthorized parties might seize the camera, the images it contains be shared or publicized on social media, participant data stores might be hacked. Furthermore, researchers may be legally obliged to hand over the data to third parties (e.g., the police if illegal activity was suspected). Privacy and confidentiality cannot be guaranteed, and it is an ethical requirement that researchers and participants are aware of this when they turn to wearable cameras as a resource in research if there is to be any meaning to 'informed consent'.

#### Conclusions

We have outlined ethical issues associated with using wearable cameras in experience sampling research. Wearable cameras create a new role for the participant, transforming them into researchers who must make decisions normally taken by trained researchers. This occasions a number of risks, tractable and intractable, and obliges researchers to weigh these against the benefits of using wearable cameras in research.

Furthermore, just as trained researchers require ethical sensibilities, then so do participants-as-researchers. Our experience of using wearables in research suggests that these sensibilities need to be built into the process of informed consent.

#### Acknowledgements

The research was supported by EPSRC grants EP/G065802/1 and EP/M001636/1.

#### References

1. Doherty, A. et al. 2013. Wearable Cameras: Identifying Healthy Transportation Choices. *IEEE Pervasive Computing*. 12, 44-47.
2. Doherty, A.R. et al. 2011. Automatically assisting human memory: A SenseCam browser. *Memory*. 19, 7, 785-795.
3. Gouveia, R. and Karapanos, E. 2013. Footprint Tracker : Supporting Diary Studies with Lifelogging. *Proc. of CHI '13*, 2921-2930.
4. Hoyle, R. et al. 2014. Privacy Behaviors of Lifeloggers using Wearable Cameras. *Proc. of UbiComp*, 571-582.
5. Kefalidou, G. et al. 2014. Enhancing Self-Reflection with Wearable Sensors. *Proc. of MobileHCI*, 577-580.
6. Kelly, P. et al. 2013. An ethical framework for automated, wearable cameras in health behavior research. *American journal of preventive medicine*. 44, 3, 314-9.
7. Kwok, S.Y. et al. 2013. Proposing a New Eco-feedback Device Based on Augmented Reality Technology. *Proc. of Sustainable Innovation '13 Conference*, 118-130.
8. Shipp, V. et al. 2014. The ethics of wearable cameras in the wild. *Proc. of Ethics in Science, Technology and Engineering '14 IEEE Int'l Symposium*, 1-5.
9. Skatova, A. et al. 2015. Datawear: Self-reflection on the Go or How to Ethically Use Wearable Cameras for Research. *Proc. of CHI (Extended Abstracts)*, 323-326.
10. Wiles, R. et al. 2008. Visual ethics: ethical issues in visual research.