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UCL Collaborative Social Science Domain:
Social Science Plus Pilot
Project Outcome Report

Project Title:
The Implications of the Internet of Things (IoT) on Victims of Gender-Based Domestic Violence and Abuse (G-IoT)

**Amount £11,500
Academic Year 2017–18**

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Project Outline

An increasing number of household devices are now "smart" in that they contain sensors, record activity, and share and store data – from teddy bears, door locks to smart TVs.
However, little research exists on the gender-based implications such devices have in the context of the domestic household and, specifically, intimate controlling behaviour like gender-based violence and abuse. We therefore addressed the following research question: How will IoT impact on gender-based domestic violence and abuse and what socio-technical measures will need to be implemented in order to mitigate against those risks? In the course of the project we aimed to understand: (1) the role and impact "Internet of Things" (IoT) technologies have on victims of domestic violence and abuse; (2) the potential risk trajectories that may arise from those devices and services; and (3) the awareness victims and corresponding services (such as women's' shelters, police) exhibit, and strategies they apply to mitigate those risks.

Main findings

- Tech-abuse is currently not a factor in the risk assessment of victims, but should be

- Similarly, tech-abuse is currently not a core factor in the safety planning of victims

- The current focus on tech-abuse in both research and practice does not account for emerging technologies such as the Internet of Things. Our research highlighted why and how IoT could be

- Tech-abuse guidance and expertise have to be created within the charitable and statutory support context, with our information material (i.e., **a guide**, **resource list**, **policy leaflet**) providing a first intervention and our work having impacted the efforts of charities, police forces, the National Cyber Crime Centre (NCSC) and the Department for Digital, Culture, Media and Sport (DCMS)The prevalence of spyware (i.e., software that aims to gather information about a person without their knowledge) has to be reduced and addressed

Key achievements and impacts

- **User partner engagement:** We co-developed our research based on the needs and concerns of our user partners (London VAWG Consortium, Privacy International, PETRAS IoT Hub). We were invited to participate in panel discussions, presentations, and roundtables on this topic, including initiatives by Comic Relief/SafeLives and held two tech abuse trainings for Respect and Equation. Additionally, we had exchanges with NCSC and the College of Policing

- **Workshops and interviews:** We run two workshops with our user partners and external stakeholders (n=45) and nine interviews, including domestic violence and abuse frontline support workers, statutory support services such as police representatives, and academics

- **CryptoParty and panel discussion:** We organised a **CryptoParty** (a digital security training session) followed by a **panel discussion** with policymakers and technologists in November. The panel was chaired by Shari Vahl (Reporter and Presenter for BBC Radio 4) and included Andrew Laughlin (Which?), Vivienne Hayes (Women's Resource Centre) and Martin Sadler (DMCS Secure by Design Expert Advisory Group). The event coincided with the International Day for the Elimination of Violence against Women, taking place annually on the 25th of November

- **G-IoT Newsletter:** We released a monthly **newsletter** that kept stakeholders informed about our research progress and ongoing developments in this emerging research field. We will maintain the newsletter beyond the end of the funding period

- **Academic articles:** We are working on submitting two articles in peer-reviewed journal outlets based on our technical analysis as well as the workshop and interview data we collected

- **Report:** We released a **report** summarising some of research findings and recommendations aimed at statutory and voluntary support services, tech vendors, and policy officials

- **Information material/online presence:** We developed a **flyer**, information resources, and a guide on the topic of IoT-supported tech-abuse for frontline support services. All documents are featured on the **STEaPP website**

- **Collaborations:** We engaged with colleagues from the UCL Crime Sciences, UCL Knowledge Lab, UCL Institute for Digital Innovation in the Built Environment, King's College London, Lancaster University, University of Kent, and the Queensland University of Technology (QUT). We also worked the Big Brother Awards and members of the CryptoParty London

- **Further funding:** We were successful in securing the **ESRC Cross-Disciplinary Mental Health Network Funding** (£1,250,000) as co-applicant along with King's College London (lead), Lancaster University and Warwick University and a **UCL Public Policy Grant** (£3,500) for a dedicated policy dissemination strategy

- **Media Impact:** We were featured in various news outlets, amongst others, the **E&T** Magazine, the **BBC**, the BBC podcast *Tech Tent*, **BBC World Service**, **The Verve**, **WIRED UK**, the **Evening Standard**, **Reuters**, the **Independent**, the **PETRAS newsletter**, **WikiTribune**, **Anschläge**, **Gizmodo**, **Radio Corax**, and **mumsnet**

- **Policy Engagement:** We actively engaged with the UK policy community and **responded** to the UK Government **Consultation** as well as the Home Affairs Committee inquiry on domestic abuse. We also developed a policy-focused **information leaflet**, attended a Ministerial Roundtable at DCMS, and engaged with various MPs, and are now in close contact with the NCSC, DCMS, and Home Office. We will co-develop future research and policy responses with all these stakeholders

Plans for funding applications

- The research team has successfully received: £28,000 as part of the £1m **ESRC Mental Health Network award** with King's College London, £3,500 from UCL's Public Policy Small Grants award scheme, and is currently working on applying (in spring 2019) for an ESRC New Investigator grant (£300.000) to expand the project's scope and continue the research in this domain. Next steps

- Publication of academic outputs (one technical and one social science research paper

- Continuous engagement with user partners through further interviews, the newsletter, and the co-development of a future funding bid

- Funding submission to ESRC by autumn 2020

- Further policy and media engagement

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