**UCL Collaborative Social Science Domain  
   
Social Science Plus   
Pilot Project Outcomes Report**

**Project Title**

Missing links: on the social contagion of child disappearances

**Amount**

£10,100

**Academic Year**2019-20

**Social Science Principal Investigator**

Dr. Aiden Sidebottom, Senior Lecturer, Security & Crime Science, Engineering Sciences, BEAMS

**Co-Investigator(s)**

*Non-Social Scientist Co-Investigator:*

Dr. Toby Davies, Lecturer, Security & Crime Science, Engineering Sciences, BEAMS

**Additional Collaborators (include academic and non-academic partners both UK and international)**

Thames Valley Police

Missing People

**Project outline** *(about 150-200 words)*   
The project was a collaboration between UCL, Thames Valley Police and the charity Missing People. It grew out of three converging factors: (1) increases in the number of children being reported missing to the police; (2) advancements in social network analysis (SNA), and (3) the significant insights gleaned from recent research applying SNA to understand patterns of exploitation and victimisation.

Through privileged access to a large multiagency dataset containing 8,773 missing incidents involving 2,753 individuals for the period May 2014 to December 2019, this study determined the patterns and predictors of missing incidents involving children, with a focus on examining empirically whether a child’s social environment influences their likelihood of going missing (repeatedly). In particular, the project assessed whether the risk of going missing is transmissible through social networks, in such a way that missing episodes among individuals might be predictive of subsequent episodes amongst their acquaintances*.*

**Main findings** *(about 150-200 words)*

The preliminary findings of this project are:

* *Children accounted for the majority of missing incidents*: those aged under 18 made up 41% of *individuals* in the police recorded dataset analysed here (n = 1,132) but 60% of all missing *incidents* (n = 5,262)
* *Repeat missing incidents were common:* 88% of missing incidents involving children related to a child who had gone missing more than once in the study period
* *Missing incidents were highly concentrated*: 11% of missing children (n = 125) went missing ten times or more over the study period. This small proportion of persistently missing children were responsible for 59% of all missing incidents involving children, accounting for an estimated police expenditure of £7.54 million
* *The observed concentration was highly stable over time*: for all of sixty-plus months covered in our data, the top 20% of persistently missing children accounted for 60% or more missing incidents involving children
* *The risk of going missing repeatedly is time-sensitive*: 60% of repeat incidents happen within 2 weeks of the previous missing incidents; 70% within 28 days. This suggests a ‘risk escalation’ effect
* *Going missing is not random:* robust risk factors for which child will be reported missing include (1) a history of mental illness, (2) self-harm, (3) child protection, (4) previous arrest and (5) being in the care of the local authority
* *There is some evidence of a network effect in missing:* based only on police data, results show that (1) The more connections a child has in their social network, the more likely they are to go missing and (2) there is no apparent influence of being ‘close’ to other missing children

**Key achievements and impacts (academic and non-academic), media coverage, etc** *(about 150-200 words)*

* The preliminary results of this project were presented at the Thames Valley Police research conference attended by over 200 police officers and staff. This presentation helped raise awareness of this project and begin a conversation about how the results of this work might inform police practice. More specifically, the prospects for (1) a focussed intervention designed to reduce repeat disappearances and (2) the development of a risk forecasting model to predict the likelihood of repeat missing
* This project has also helped forge stronger links between UCL and TVP, which in turn has given rise to further research collaborations (see below).

**Detail your plans for external funding application(s) (funder, scheme, date of application, amount, outcome (if known) etc)**

Nov 2021

Two projects, which we recently received funding for, build on the social science plus work:

The first projects seeks to develop and validate two risk prediction model for missing persons, one focussing on risk of harm when missing and the other focussing on risk of going missing repeatedly. This is a collaboration with West Yorkshire Police and West Mercia Police. The project is funded as part of the Home Office STAR fund for £61,725.76.

The second project will replicate and extend the analysis undertaken as part of the social science plus project, but this time looking at the social contagion of violence rather than going missing. It is once again a collaboration with Thames Valley Police. The project is funded as part of the Home Office STAR fund for £90,762.58.

**Next steps**

In addition to the subsequent research bid (described above), the project team are:

* in the process of writing up the preliminary results for the purposes of publication
* Rerunning the analysis to examine the extent, patterns and predictors of missing incidents involving adults
* In discussion with other police forces about the prospects of repeating the analysis undertaken here using different missing persons datasets

**Expenditure summary. You may forward a separate spreadsheet summary if you have the details in that form**