Impact case study (REF3b)

Institution: Lancaster University
Unit of Assessment: 20 (Law)
Title of case study: Case study 4: **How quantitative criminology research has changed policy on offender management**

1. Summary of the impact (indicative maximum 100 words)

Policy on offender management has been changed in several areas through statistical research on criminal careers. The research has:

    a) crucially influenced an Information Tribunal appeal case on the retention of police records, where five Police Authorities were appealing against a decision of the Information Commissioners.

    b) influenced the research methodology and policy of the Home Office towards the retention of DNA profiles for those arrested but not found guilty, and contributed to a new Act of Parliament.

    c) through the development of a reconviction predictor tool for offenders (OGRS3), improved court pre-sentence reports, and provided a mechanism for new policy on payment by results.

2. Underpinning research (indicative maximum 500 words)

The research was funded by the ESRC and the Home Office over the period 2000-2012. Brian Francis (Senior Lecturer, then Professor of Social Statistics) and Keith Soothill (Professor of Social Research) were the key researchers in this work.

a) Data from the Home Office's Offenders Index was analysed, which contains a one in thirteen sample of all convictions in England and Wales organised by offender. The yearly risk of reconviction after age 21 given a single non-violent conviction before age 21 was examined. Two birth cohorts of offenders were used - 1953 and 1958. This risk of a reconviction in the offending groups was compared with the risk of first conviction for a non-offending group from the same birth cohort, obtained by combining the non-offenders from the Offenders Index data augmented with population data and using a discrete time hazard rate analysis. We found that the risk of reconviction for the offending group declined rapidly and had nearly converged to the risk of a first conviction for the non-offending group by age 35 in both cohorts. This provided evidence that the retention of criminal convictions long in the past was of no operational value for future offending. [1]

b) The research described in a) was extended to deal with the topic of the retention of DNA profiles for arrestees rather than the retention of criminal records. This additional research was motivated by the publication of a consultation document by the Home Office on DNA retention methodology which contained a flawed methodology. [2] [3]

c) Ordinal split –sample regression models were investigated under research funded by the Home Office for a new reconviction assessment tool which can be used to estimate both one-year and two year reconviction probabilities. The model can be used reliably on Police National Computer conviction records. A new non-linear offending rate variable was developed as part of the model which offers substantial improvement in predictive ability over the old methodology. [4] [5] [6]

3. References to the research (indicative maximum of six references)

[1] Soothill, K. and Francis, B. (2009). When do ex-offenders become like non-offenders? *Howard Journal of Criminal Justice*, 48, 4, 373 – 387.

[2] Soothill, K. & Francis, B. (2009), Keeping the DNA link. *New Law Journal*, 159, 7378.

[3] Soothill, K. and Francis, B. (2010). The debate rumbles on: The measurement tail is now

wagging the dog, *New Law Journal,* 22 January, 94-95.

[4] Francis, B., Soothill, K., & Humphreys, L. (2007). *Development of a reoffending measure using the Police National Computer database.* Working paper. Online at http://eprints.lancs.ac.uk/50057/1/reoffendingreport2007.pdf

[5] Howard, P., Francis, B., Soothill, K., & Humphreys, L. (2009). *OGRS 3: the revised Offender Group Reconviction Scale*. (Research Summary 7/09). London: Ministry of Justice. Online at http://webarchive.nationalarchives.gov.uk/20110201125714/http://www.justice.gov.uk/publications/docs/oasys-research-summary-07-09-ii.pdf

[6] Francis, B. (2011). Conceptualising recidivism for prediction and risk. In: *Recidivism and. Reoffending in South Africa.* (pp. 16-21). Cape Town, South Africa: Open Society Foundation.. Online at http://osf.org.za/wp/wp-content/uploads/2012/09/Meeting-Report_-Recidivism-conference_20101.pdf

The key research grants over this period were:

- 2000-2002 ESRC Criminal Careers: Understanding Temporal Changes in Offending Behaviour £42,500

- 2005-2008 ESRC The Lancaster-Warwick- node Developing Statistical Modelling in the Social Sciences Phase 1 £865,725

- 2004-2006 Home Office. *OGRS3- A new measure of reoffending based on PNC data.* £15,000.

- 2008-2012 ESRC The Lancaster-Warwick-Stirling node: Developing statistical modelling in the social sciences Phase 2 £1,144,818

4. Details of the impact (indicative maximum 750 words)

a) The first piece of research concerned the retention of Police National Computer records for those found guilty as teenagers but with a subsequent long conviction-free period, and was carried out in the early part of 2008, Our team members were called as expert witnesses in a Information Tribunal case held in April 2008 between the Information Commissioners (IC) and five police authorities, following a police appeal against an earlier judgement by the IC that the police authorities should delete early convictions from the Police National Computer. Our research on the comparison of the risk of reconviction for those with an early conviction before the age of 21 compared to the risk of a first conviction for those conviction free before the age of 21 was developed under an ESRC research methods grant, and relates to the concept of hazard rate convergence. The research was used to form a report to the court. The report was quoted extensively by the tribunal chair. For example, page 30 of the judgment states that:
> "*we did find the expert evidence helpful in making our own judgment about the practical significance of the conviction information that is at issue in this case and that it could be informed by the statistical work in the Francis/Soothill report…*"

The appeal case led to a Government review of the retention of police records and to the appointment of a new post of Independent Advisor on Criminality Information Management.

b) The second part of the research concerned the retention of DNA profiles for those arrested but not found guilty and was carried out in 2009 and 2010. A Home Office consultation on DNA profile retention was released in April 2009 which proposed controversial measures to the retention of DNA sample profiles for those arrested but not found guilty (these were six years for adult arrestees, with twelve years for adults arrested for violent and sexual crimes). We made a

submission to the Home Office consultation document which criticised the methodology of the research carried out by the Jill Dando institute, and suggested that a differential retention period for those arrested for serious offences lacked evidence.

Following subsequent press coverage of this issue in *The Guardian* and online blogs, we were contacted by the Chief Economic Advisor to the Home Office, John Elliott, to provide advice to improve their research, and subsequently to critique their new research supporting the revised policy. Our recommendation that there be no distinction between retention periods for arrests for serious offences and arrests for less serious offences was accepted, as was an improved methodology. This has now led to a revised policy which has been implemented in a new Act - the Protection of Freedoms Act 2010-12, which now contains a reduced five year retention period for DNA profiles for those arrested but not found guilty.

This impact was chosen to be an ESRC Impact case study.

c) The third part of the research has resulted in the OGRS3 tool that has been adopted by the National Probation Agency for the assessment of recidivism risk in pre-sentence reports presented to the courts, and is thus being used to assess and prioritise offenders. For example, the Ministry of Justice's 2011 National Offender Management Service guidance "Determining pre sentence reports" states that "*A RoSH screening and OGRS calculation must be completed for all report formats*" It is also used in the Prison Service as a way of determining enrolment of offenders into the Enhanced Thinking Skills (ETS) programme.

The OGRS3 tool is additionally increasingly being used as a measure for "payment by results" contracts for reducing reoffending. Contractors are assessed against the expected level of reoffending produced from OGRS from an available prison sample, and their chosen intervention is expected to reduce offending below that level, otherwise a reduced payment is made.

5. Sources to corroborate the impact (indicative maximum of 10 references)

Impact A

The judicial decision of the tribunal case which accepts the Francis-Soothill report can be found at: http://www.informationtribunal.gov.uk/DBFiles/Decision/i200/ Chief_Constables_v_IC_final_decision_2007081_web_entry[1].pdf (page 30)

Former Information Commissioners Head of Enforcement, now Consultant at Field Fisher Waterhouse Legal Practice, UK (can testify as to the research's crucially influence on an Information Tribunal appeal case on the retention of police records).

Impact B

The website for the consultation document and its revision can be found at: http://webarchive.nationalarchives.gov.uk/+/http://www.homeoffice.gov.uk/documents/cons-2009-dna-database/

The Information Commissioners response to the Home Office consultation quoting the Francis- Soothill work can be found at: http://www.ico.gov.uk/upload/documents/library/data_protection/notices/response_to_ho_consultation_may09.pdf

A major law firm's (Kingsley Napley) response to the consultation quoting the Francis -Soothill work can be found at: http://www.publications.parliament.uk/pa/ld200910/ldselect/ldconst/107/10704.htm

The work was commented on in the Guardian: "DNA database plans based on 'flawed science', warn experts" The Guardian http://www.guardian.co.uk/politics/2009/jul/19/dna-database-crime-privacy-discrimination

The ESRC impact case study can be found at: http://www.esrc.ac.uk/impacts-and-findings/features-casestudies/case-studies/7724/reviewing-the-dna-database.aspx

Director for Social Science and Chief Economist, Home Office, UK (can testify as to how the research influenced the research methodology and policy of the Home Office towards the retention of DNA profiles for those arrested but not found guilty, and contributed to a new Act of Parliament).

Impact C

Examples of the use by England and Wales Probation Services can be found at, eg, http://www.leicsprobation.co.uk/supervision-risk-assessment.html and documented in the House of Commons Justice Committee The Role of the Probation Service Eighth report of Session 2010-12: http://www.publications.parliament.uk/pa/cm201012/cmselect/cmjust/519/519vw.pdf

Use in pre-sentence reports is evidenced in numerous sources. An example is the Ministry of Justice National Offender Management Service document PI 05/2011: http://www.justice.gov.uk/downloads/offenders/psipso/psi-2011/pi_5-2011_determining_pre-sentence_reports.doc

The use of OGRS in a "payment by results" reoffending intervention can be found at the Ministry of Justice's document *NOMS Commissioning Intentions for 2013/2014*: http://www.justice.gov.uk/downloads/about/noms/commissioning-intentions-2013-14.pdf

Senior Research Officer, National Offender Management Service, Ministry of Justice, UK (can testify how, through the development of a reconviction predictor tool for offenders (OGRS3), the research improved court pre-sentence reports and provided a mechanism for new policy on payment by results).