

Institution: Nottingham Trent University
Unit of Assessment: C22 Social Work and Social Policy
Title of case study: Crime drop, security and victimisation
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Research in this Unit at NTU has:</p> <ul style="list-style-type: none"> (a) Changed the way victimisation is conceptualised, measured, and reported within official crime surveys; (b) Transformed the methodological evaluation of the impact of security devices upon crime and repeat victimisation through the introduction of multi-level statistical modelling as opposed to bivariate cross-tabulations which constituted the state of the art prior to her work. <p>Professor Tseloni's research has directly informed the methodological training of crime survey analysts (including those working on the Home Office British Crime Survey), and contributed through the dissemination of Home Office guidelines to the day-to-day crime reduction practices and responses to crime of police forces in England and Wales.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>Criminal victimisation inequalities (see research references 1-3 and 6) (On-going since 1990, initially as part of the Quantitative Criminology Group at the University of Manchester and since 1995 as member of a collaborative research team)</p> <p>Prior to Professor Tseloni's research, victimisation risk factors were by and large based on bivariate cross-tabulations between the dichotomy of victim/non-victim and each socio-economic attribute of interest. The problem with this approach is that it cannot guarantee that the associations between victimisation and any risk factor is not spurious, i.e. brought about by other uncontrolled for mediating causes. Statistical models including all possible related factors are required to gauge the true causes of victimisation. In addition, the frequency of crimes suffered had been ignored prior to the Quantitative Criminology Group work. Indeed focussing on the dichotomy between victims and non-victims overlooks repeat victimisation which makes up the bulk of national crime rates – and over-estimates victimisation risk, and underestimates repeat victimisation while crime is best prevented when focussing on repeat victims. Therefore victimisation research that truly informs theory and crime prevention warrants examining the entire distribution of crime incidents (rather than the dichotomy of victim/non-victim) over both contextual and individual risk factors. Finally, Professor Tseloni's work examines these issues both intra-nationally (England & Wales) and cross-nationally (US and Greece). This research, which is another variant on the crime incidence theme, also distinguishes between the mediated and direct associations of crime experience and related outcomes, such as fear of crime or punitiveness. This research is on-going, and current research plans seek to bring together repeat victimisation modelling and repeat victim profiling to assist police operations.</p> <p>International crime drop and security (see research references 4-6) (On-going since 2006).</p> <p>Crime has fallen massively in recent times across the world, but until Professor Tseloni's collaborative work on this theme existing research focussed on the US and Canada and explanations centred around the potential beneficial effect of criminal justice policies and other legal changes that occurred in these countries. Her collaborative work, which expanded on a methodology she had previously developed for examining the effect of political systems on crime rates showed that the crime falls were international in nature. This research then tested international rather than criminal justice explanations, in particular the hypothesis that generalised and improved security was the main driver of crime falls. The analysis confirmed that the security hypothesis holds with regards to the vehicle crime drops cross-nationally and to some extent for</p>

Impact case study (REF3b)

the fall in burglary across England and Wales. More recently she employed Wang counts modelling to show that deterrence is effective only for individuals with ‘rational’ crime propensities. This on-going research will be expanded upon through a current ESRC-SDAI funded research project that examines which burglary security devices work for whom, and in what context. This body of research is reflected within a recent publication (Van Dijk, J. Tseloni, A. and Farrell, G. [2012]. *The International Crime Drop: New Directions in Research*. Hampshire: Palgrave Macmillan). A full research agenda that aims to examine the falls of other crime types and the security hypothesis including currently on-going work on theft from person drops by the project’s Research Fellow and PhD candidate (Thompson) will materialise in future research projects.

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

1. Tseloni, A. (2006) ‘Multilevel modelling of the number of property crimes: Household and area effects’. *Journal of the Royal Statistical Society Series A-Statistics in Society*, 169, Part 2, pp. 205-233.
2. Tseloni, A. and Zarafonitou, C. (2008) ‘Fear of crime and victimisation: A multivariate multilevel analysis of competing measurements’. *European Journal of Criminology*, 5(4), pp. 387-409.
3. Tseloni, A., Ntzoufras, I., Nicolaou, A. and Pease, K (2010) ‘Concentration of personal and household crimes in England and Wales’. *European Journal of Applied Mathematics, Special Issue on Mathematical Models for Criminality*, 21, pp. 325-348.
4. Tseloni, A., Mailley, J., Farrell, G. and Tilley, N. (2010) ‘Exploring the international decline in crime rates’. *European Journal of Criminology*, 7(5), pp. 375-394.
5. Farrell, G., Tseloni, A., Tilley, N. and Mailley, J. (2011) ‘The Crime Drop and the Security Hypothesis’. *Journal of Research in Crime and Delinquency*, 48(2), pp. 147-175.
6. Tilley, N., Tseloni, A. and Farrell, G. (2011) ‘Income disparities of burglary risk. Security availability during the crime drop’. *British Journal of Criminology*, 51(2), pp. 296-313.

Reference 1 was the product of funded research from the *Research and Statistics Directorate, Home Office, UK* on postcode sector predictions of crime rates, fear and disorder based on the 2000 British Crime Survey and Census area characteristics and hierarchical modelling of crime rates drawn from the 2000 British Crime Survey (£10K). Reference 3 was funded via the University of Macedonia, Greece, Research Committee, Small Grants Programme to explore bivariate zero-inflated Poisson modelling of personal and property crimes in England and Wales. (€2K). References 4 and 5 were funded through an ESRC research grant (RES-000-22-2386) Sustaining the Crime Drop in Industrialised Nations: A Crime-Specific Problem-Solving Approach (£80K). Reference 6 was the result of further research that resulted from the above ESRC grant.

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

Professor Tseloni’s research has informed national and international crime prevention agencies in terms of both their understanding of the nature and causes of the crime drop and victimisation inequalities, and how they have approached tackling these issues. For example, in **relation to the measurement of crime and the acquisition and dissemination of crime statistics** she has advised social researchers responsible for the Scottish Crime and Justice Survey on questionnaire design, hard to reach populations and the use of sampling (Scottish Government Social Research on the 2008-09 Scottish Crime and Justice Survey questionnaire (2007-2010)). She has also worked with the Home Office in relation to both training staff on the use of hierarchical modelling of crime data, and her research has also informed approaches to evaluating the effectiveness of the Crime Survey in England and Wales (formerly the British Crime Survey) in terms of comparing actual and predicted crime rates for broad crime categories (2001 - Kershaw, C. and Tseloni, A. (2001) *British Crime Survey Developments*. Paper presented at a joint meeting of the Official Statistics and Social statistics Section of the Royal Statistical Society, the British Society of Criminology and the Home Office Research Development and Statistics Directorate.). In her capacity as Chair (2013 to date; Vice-Chair: 2010-2013) of the Crime and Justice Statistics Network she has worked on various consultations with regards to official crime data, including the consultation that paved the way for the transfer of the British Crime Survey from the Home Office to the ONS (UK Statistics Authority, Re ‘Cross-national comparison of UK crime statistics’,

Overcoming barriers to trust in crime statistics: England and Wales, UKSA Monitoring Report 5: 63).

Her research has also **informed internal practices within police forces**. For example, her work with Humberside police reassured the force that their crime rates were not higher and in cases lower than for the rest of England and Wales, and the public had similar levels of satisfaction with Humberside police and similar reporting rates as the rest of England and Wales. This enabled the force to identify that the relatively higher level of crime in their locality was in part down to the quality of their crime recording systems (1997). Professor Tseloni's work provided a different form of reassurance to the Metropolitan Police Force in relation to the policing of ethnic minority communities. Her research concluded that external disproportionality was actually by ethnic minority citizens with complaints against ethnic minority officers (but not necessarily the same group) in areas with high ethnic minority populations. Furthermore problems with internal practices were identified in relation to dealing with ethnic minority police officers and staff problems formally while there was a tendency to do so informally for White officers (2006).

In terms of **informing crime reduction strategies and addressing the problem of victimisation inequalities**, Professor Tseloni has since 2012 been a Board Member on the Nottingham Crime and Drugs Partnership. In this capacity she has advised on crime rates and patterns in Nottinghamshire, and informed local crime reduction initiatives concerning 'problem families'; and tackling the link between crime and alcohol through the sensible alcohol consumption project in Nottingham. Her work with the Nottingham Crime and Drugs Partnership has also resulted in the development of student profiles that have informed the introduction of adverts promoting crime awareness in student areas of the city, and landlord accreditation schemes in relation to aspects of burglary security within their properties. As a current member of Nottingham Crime and Drugs Partnership Burglary Task and Finish Group member her research has informed the prioritising of vulnerable population groups and interventions in relation to the effectiveness of security measures and the reduction of burglary. This latter research impact has also informed national advice and guidance on incorporating crime safety in housing and urban design through the funding and dissemination of research findings by the Commission for Architecture and the Built Environment (2009-2010).

As well as influencing approaches to the measurement of crime and tackling victimisation inequalities within the United Kingdom, Professor Tseloni's research has **achieved an international reach** in terms of informing the activities of crime reduction agencies. Examples include:

- the Australian Government, Attorney-General's Department, Crime Prevention; Australian Institute of Criminology; Select Committee on Crime Prevention, Perth (Australia);
- Sector of Welfare and Social Indicators, Central Bureau of Statistics, (Israel);
- Citizen Surveys Centre for Justice and Crime Prevention, Provincial Government of the Western Cape (New Zealand);
- Stalking report by the Ministerie van Justice, Wetenschappelijk Onderzoek- en Documentatiecentrum (The Netherlands);
- as a member of the Committee on Law and Justice Statistics, American Statistical Association, the Bureau of Justice Statistics and the National Institute of Justice (USA, 2000-2001);
- the US National Highway Traffic Safety Administration with regards to car crime security (2009);
- as board member of the Hellenic Statistical Authority, Division of Social Statistics Working Group on the Safety from Crime European Statistics (Greece, 2012 to date).

Impact case study (REF3b)

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

Reports in the public domain that draw upon Professor Tseloni's research:

Victimisation inequalities:

- Centre for Social Justice (2009) *Order in the Courts: Restoring Trust Through Local Justice*. London: CSJ (<http://www.centreforsocialjustice.org.uk/UserStorage/pdf/Pdf%20reports/Order%20in%20the%20Courts.pdf>) (Corroborates impact in relation to area distribution of crime rates and repeat victimisation);
- New Zealand Ministry of Justice (2009) *Understanding Victimisation and Risk: Findings from the New Zealand Crime and Safety Survey 2006 in an International Context*. Wellington: NZMoJ (<http://www.justice.govt.nz/publications/global-publications/n/understanding-victim-risk/publication#full-report>) (Corroborates impact in relation to distribution of repeat victimisation between different socio-economic groups);
- TNS BRMB (2010) *2008-2009 Scottish Crime Survey: Technical Report* (<http://www.scotland.gov.uk/Resource/Doc/301759/0094099.pdf>) (Corroborates impact in relation to impact on design of questions and levels of analysis within Scottish Crime Survey);
- UK Statistics Authority (2010) *Overcoming barriers to trust in crime statistics: England and Wales* London: UK Statistics Authority Monitoring Report 5 (<http://www.statisticsauthority.gov.uk/national-statistician/ns-reports--reviews-and-guidance/national-statistician-s-reviews/national-statistician-s-review-of-crime-statistics.html>) (Corroborates impact in relation to impact on design of questions and levels of analysis within British Crime Survey);
- Provincial Government of the Western Cape (2011) *Community Safety Barometer* (http://www.westerncape.gov.za/Text/2011/6/cs_barometer_study_summative_report.pdf) (Corroborates impact in relation to the measurement of perception of risk and repeat victimisation between different socio-economic groups);
- The Swedish National Council for Crime Prevention (BRA: Brottsförebyggande rådet) (2012) *Preventing repeat victimization: A systematic review*. Stockholm: BRA (http://www.bra.se/download/18.1ff479c3135e8540b29800015728/2012_Preventing_repeat_victimization2.pdf) (Corroborates impact in relation to distribution of repeat victimisation between different socio-economic groups).

Crime Drop:

- Office for National Statistics (2013) *Statistical Bulletin: Focus on Violent Crime and Sexual Offences, 2011/12*. London: ONS (http://www.ons.gov.uk/ons/dcp171778_298904.pdf) (Corroborates impact in relation to confidence surrounding international crime drop).