

**International Symposium:
'New Questions, Methods, and Data in Sentencing Research'**

18th and 19th of October 2018

At the School of Law / University of Leeds



DESCRIPTION

Quantitative research on sentencing can be challenging; it has traditionally been hampered by official sentence data often being censored in important ways, and by methodological challenges associated with the statistical modelling of such a nuanced practice. Recent developments on both fronts have expanded the number of research questions that can be explored and the robustness of the evidence obtained. This symposium seeks to gather scholars and policy analysts to facilitate the dissemination and application of some of the latest methodological contributions, discuss some of the latest substantive findings generated, and explore some of the opportunities afforded by new sentencing datasets.

The need to explore new avenues of research is particularly relevant in the UK context, given the important processes of policy reform associated with: i) the creation of Sentencing Councils (in England and Wales, and Scotland); ii) the publication of the Lammy review government overview of discrimination in the criminal justice system; and iii) the decision to discontinue the Crown Court Sentencing Survey – arguably, the most detailed sentence dataset worldwide.

The symposium will be held at the Liberty Building, University of Leeds on Thursday 18th and Friday 19th of October. Researchers and students interested on the discipline of sentencing or more generally Social Scientists with a broad interest in quantitative methods are encouraged to attend the event. The event is free although registration in the is required: <https://essl.leeds.ac.uk/law/events/event/402/tackling-selection-bias-in-sentence-data-analysis-a-new-approach-based-on-a-scale-of-severity-and-bayesian-statistics>.

PROGRAM

Day 1

10:45 – 11:00	Introduction	Jose Pina-Sánchez
11:00 – 11:45	Research Priorities / Official Data	Ken Pease and Julian Roberts
11:45 – 12:30	Disparities (EU)	Jakub Drápal and Andreas Kapardis
12:30 – 13:30	Lunch	
13:30 – 14:45	Disparities (England and Wales)	Diana Grech and Andrew Reid
14:45 – 15:30	Disparities (England and Wales)	Ian Brunton-Smith and Guangquan Li
15:30 – 15:45	Break	
15:45 – 17:00	Research Priorities / Official Data	Amber Isaac, Andrew Bell and Catherine Bromley
17:00 – 17:30	New Directions	Roundtable (new data/disparities)

Day 2

09:30 – 10:15	Effects of Case Characteristics	Ian Belton and Carly Lightowlers
10:15 – 10:45	New Directions	Brian Johnson
10:45 – 11:00	Break	
11:00 – 11:45	Individualisation / Context	Mandeep Dhani and Anthea Hucklesby
11:45 – 12:05	Social Network Analysis	Roberto Mussoto
12:05 – 13:00	Lunch	
13:00 – 13:20	Measuring Severity: Introduction	Jose Pina-Sánchez
13:20 – 14:05	Measuring Severity	Stephanie Wallace and Dmitriy Skougarevskiy
14:05 – 14:15	Lunch	
14:15 – 15:00	Measuring Severity	Sara Geneletti and John Paul Gosling
15:00 – 16:00	New Directions	Roundtable (severity/selection bias)

LIST OF PRESENTERS

Pesenter	Affiliation	Topic
Ken Pease	University of Derby	An Overview of Sentencing Research
Julian Roberts	University of Oxford	Research Priorities in Sentencing
Jakub Drapal	University of Prague	Sentencing Disparities across Eastern Europe
Andreas Kapardis	University of Cyprus	The Multi-Method Approach in Sentencing Disparities Research
Diana Grech	University of Leeds	Using Text Mining Techniques to Explore the Role of Judge-Court Interactions on Sentencing Disparities
Andrew A. Reid	Douglas College	Extending a Geographical Perspective to the Study of Jurisdictional Consistency in Sentencing Outcomes
Ian Brunton-Smith	University of Surrey	Re-assessing the Consistency of Sentencing Decisions in Cases of Assault: Allowing for Within Court Inconsistencies
Guangquan Li	Northumbria University	Mind the Step: A More Insightful and Robust Framework for the Analysis of the Sentencing Process in England and Wales under the New Sentencing Guidelines.
Amber Isaac	Sentencing Council for E&W	Research Plans for the Sentencing Council for England and Wales
Andrew Bell	Scottish Sentencing Council	Research Plans for the Scottish Sentencing Council
Catherine Bromley	Office for Statistics Regulation	Joining-Up Data for Better Statistics
Ian Belton	University of Strathclyde	The Effect of Mitigating Factors in Sentencing
Carly Lightowlers	University of Liverpool	The Contentious Role of Alcohol Intoxication in Shaping Sentencing Outcomes
Brian Johnson	University of Maryland	New Directions in American Sentencing Research.
Mandeep Dhani	Middlesex University	Simple Statistics and the Simplicity of Sentencing
Anthea Hucklesby	University of Leeds	The influence of unmeasurable factors on sentencing and the importance of context
Roberto Musotto	University of Leeds	From Evidence to Proof: Social Network Analysis in Italian Criminal Courts of Justice
Jose Pina-Sánchez	University of Leeds	Measuring Sentence Severity Using Thurstone Pair-Comparisons
Stephanie Wallace	Manchester Metropolitan University	Measuring Sentence Severity Using Goodman Row Column Association Models
Dmitriy Skougarevskiy	European University at Saint Petersburg	Comparative Sentencing Severity with Correspondence Analysis
John Paul Gosling	University of Leeds	Modelling the Uncertainty Associated with the Estimation of Severity Scores Using Bayesian Statistics
Sara Geneletti	London School of Economics	Modelling Unidentified Severity Scores for Non-custodial Outcomes Using Constraints in a Bayesian Framework

LIST OF ABSTRACTS

Using Text Mining Techniques to Explore the Role of Judge-Court Interactions on Sentencing Disparities

Diana Grech, University of Leeds

Objectives: To ascertain the level at which unwarranted disparities in sentencing are generated in the Crown Court. To assess whether judges who rotate across courts sentence differently than those who work in the same court. To demonstrate the potential of text mining techniques in sentencing research.

Methods: Data scraping and text mining techniques are used to access and process a sample of 7,212 violent and sex offences uploaded on a legal website. Cross-classified Weibull models are used to account for the practice of judicial rotation and the right censoring of indeterminate custodial sentences.

Results: Most of the unwarranted disparities in the Crown Court are found to originate at the judge level. Between-court disparities are negligible in comparison. Furthermore, judges who rotate between courts sentence more consistently than judges who stay in the same location.

Conclusions: Research and practice seeking to explore and promote consistency in sentencing should direct their attention away from between-court disparities and focus on between-judge disparities instead. Promoting judicial rotation fosters consistency in sentencing without the negative side-effects associated with sentencing guidelines. Serious offences are overrepresented in the sample used in this study, which limits its external validity. We encourage government researchers and scholars to replicate our data collection approach to investigate other sentencing research questions currently under-explored.

Extending a Geographical Perspective to the Study of Jurisdictional Consistency in Sentencing Outcomes

Andrew Reid, Douglas College

Consistency in sentencing has long been regarded as a fundamental principle of justice. Yet despite its universal importance, research has been hindered by many theoretical and methodological challenges. This study identifies a new concern with strategies used to measure jurisdictional consistency: direct measures fail to account for sentencing patterns developed at the local level. The objective of this study is to assess the utility of applying a geographical perspective to analyses of sentencing outcomes—one concerned with proportionate comparisons between jurisdictions. This is achieved by proposing a variant of a common metric applied in geographical research: the location quotient. Analyses using the new strategy compare sentence outcomes across provincial/territorial jurisdictions in Canada (2014–15). The technique identifies new patterns of consistency and inconsistency that would otherwise have gone undetected.

Re-assessing the Consistency of Sentencing Decisions in Cases of Assault: Allowing for Within Court Inconsistencies

Ian Brunton-Smith, University of Surrey

Achieving consistency in sentencing practice across courts is complex, with sentencing behavior subject to a range of potential biases. Until recently, studies examining sentencing consistency have been restricted to quantifying differences in the average sentence awarded between courts. We introduce a new methodology to consider differences in within-court disparities simultaneously with these between-court disparities. Applied to a total of 4,835 offences of Actual Bodily Harm from the 2011 Crown Courts Sentencing Survey of England and Wales we show that courts differ, not just in the average sentence awarded, but also in the degree of within-court sentencing variability. Controlling for legitimate sources of variability, the average

custodial sentence length varied from 319 to 494 days, and the within-court standard deviation ranged from 240 to 469 days. Within-court disparities were also evident when considering final disposal type, with some courts considerably less likely to use the full range of sentence outcomes.

Mind the Step: A More Insightful and Robust Framework for the Analysis of the Sentencing Process in England and Wales under the New Sentencing Guidelines

Guangquan Li, Northumbria University

The 'England and Wales Sentencing Guidelines' aim to promote consistency by organising the sentencing process as a sequence of steps, with initial judicial assessments subsequently adjusted to reflect relevant case characteristics. However, existing evaluations of the guidelines have failed to incorporate this structure adequately, instead concentrating solely on sentence outcomes. We use multivariate multilevel models to offer new insights into the effectiveness of the full sentencing process. Focusing on cases of assault sentenced at the Crown Court we show that unwarranted between court disparities at each step are minimal. However, we also show that some case characteristics are being unduly considered at more than one stage of the sentencing process, meaning existing studies may be underestimating their true influence.

The Contentious Role of Alcohol Intoxication in Shaping Sentencing Outcomes

Carly Lightowlers, University of Liverpool

Intoxication has been identified as one of the most contentious factors in sentencing. Despite being listed within the sentencing guidelines as an aggravating factor, earlier studies have shown many sentences refer to intoxication as a mitigating circumstance. Despite recent studies pointing to intoxication impacting sentence outcomes for violent offences based on Crown Court Sentencing Survey data, no previous studies have been able to further distinguish between different forms of drinking (e.g. dependent vs. recreational drinking), the context of the offence (e.g. whether the drinking and/or offence occurred at home or in a public setting) or the gender of the victim. This project has for the first time explored how alcohol intoxication impacts upon sentence outcomes and whether this factor is employed differently by judges. Findings contribute insights into how punishment is shaped by the presence of alcohol intoxication in offending, in which instances and for whom.

Simple Statistics and the Simplicity of Sentencing

Mandeep Dhani, Middlesex University

Criminal sentencing is often predicated on the idea that sentences are finely tailored to fit the individual offence and offender. However, sentencing is a complex cognitive activity that is often performed by the unaided mind under suboptimal conditions. As such, sentencers may not behave according to policy, guidelines and training. By analyzing the distribution of sentences meted out in one year in England and Wales, and New South Wales, Australia, we find that individualized justice is a myth and sentencing appears to actually reflect limitations of the sentencing mind. Specifically, we show that sentencers, like most people, prefer certain numbers when meting out sentence lengths (in custody and community service) and amounts (for fines/compensation). These 'common doses' accounted for just over 90% of sentences in each jurisdiction. In addition, the size of these doses increased as sentences became more severe. Finally, the doses followed a logarithmic pattern. These phenomena are reminiscent of Weber's and Fechner's laws. The present findings not only undermine the notion of individualized justice, they run contrary to arguments against efforts to reduce discretion, and raise questions about the (cost) effectiveness of sentencing, as well as the basis for developing sentencing guidelines.

From Evidence to Proof: Social Network Analysis in Italian Criminal Courts of Justice

Roberto Musotto, University of Leeds

Social Network Analysis has changed the ways that Scholars and Analysts look at relationships and it has also helped in understanding why, when and how specific choices have been made. Legal documents such as laws, policies and court cases are increasingly used as the starting point for such analysis, yet, its practical application in the judicial procedure is somewhat non-existent. Which raises the questions: is it possible to use social network analysis as an investigative and judicial tool to implement the production of evidence in court? More importantly, how would it account in helping public prosecutors, judges, juries and defenders in presenting evidence? In which ways could the analysis of a network contribute to the creation of a legal proof? In this paper, arguments are presented for understanding how this implementation would be possible and answering the above questions. This paper explores the opportunities and also potential pitfalls of introducing network analysis as a mean into the creation of proof. It will draw from the context of Italian Criminal Courts of Justice and its criminal procedure laws in order to understand how Social Network Analysis would fit and behave, especially in the pursuit of Serious Crimes.

Measuring Sentence Severity Using Thurstone Pair-Comparisons

Jose Pina-Sánchez, University of Leeds

In this talk I will: i) introduce the problem of selection bias affecting studies focused on custodial sentence length, ii) review the limitation of methods used in the literature to address this problem (namely Heckman and Tobit models), and iii) suggest an alternative approach based on a scale of sentence severity. This is followed by a brief review of the literature of the methods that have been used to measure sentence severity and by a detailed explanation of the steps involved in the strategy that we have undertaken to estimate sentence severity based on Thurstone's pair comparisons method.

Comparative Sentencing Severity with Correspondence Analysis

Dmitriy Skougarevskiy, European University at St. Petersburg

Ever since Francis et al. (2005) scholars have been studying sentencing with the aid of correspondence analysis. Factorisation of charge-punishment type contingency table of convictions offers a measure of charge severity that incorporates the information on non-carceral outcomes. Most studies, however, perform correspondence analysis of severity within jurisdictions; between-jurisdiction variation in sentence severity remains understudied. This paper builds charge-punishment type contingency tables of convictions for three civil law jurisdictions — France, Germany, and Russia — from official data for 2013 and engages in comparative analysis of charge severity derived with correspondence analysis. I find that (i) sentence severity belongs to a family of Extreme value distributions, (ii) considerable differences in sentence severity between charges within and between jurisdictions emerge. These results highlight the need for inter-jurisdictional quantitative analysis of severity.

Modelling the Uncertainty Associated with the Estimation of Severity Scores Using Bayesian Statistics

John Paul Gosling, University of Leeds

Severity scores for all sentence outcomes are used to assess the prevalence of selection bias in regression models focused on custodial sentence length. In a second stage the sampling error associated with the

estimation of the severity scores using Thurstone model, and the Berkson errors associated with the unobserved heterogeneity of non-custodial outcomes, are modelled so the uncertainty stemming from these processes can be properly transposed into the final model of interest. This allows us to create a new modelling framework capable of correcting for selection bias while making use of all the information on the sentence outcome available.