

The Greek Review of Social Research

Vol 129 (2009)

129 B'



Measuring crime: Methodological considerations on recording and interpreting crime statistics in local - national, European and international levels

Joanna Tsiganou, Chrysoula Dendrinou, Catherine Iliou, Eleni Roinioti

doi: [10.12681/grsr.92](https://doi.org/10.12681/grsr.92)

Copyright © 2014, Joanna Tsiganou, Chrysoula Dendrinou, Catherine Iliou, Eleni Roinioti



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0](https://creativecommons.org/licenses/by-nc/4.0/).

To cite this article:

Tsiganou, J., Dendrinou, C., Iliou, C., & Roinioti, E. (2014). Measuring crime: Methodological considerations on recording and interpreting crime statistics in local - national, European and international levels. *The Greek Review of Social Research*, 129, 157–169. <https://doi.org/10.12681/grsr.92>

*Joanna Tsiganou, Chrysoula Dendrinou, Catherine Iliou,
Eleni Roinioti**

MEASURING CRIME: METHODOLOGICAL
CONSIDERATIONS ON RECORDING
AND INTERPRETING CRIME STATISTICS
IN LOCAL – NATIONAL, EUROPEAN
AND INTERNATIONAL LEVELS

POSTSCRIPTUM

The basic questions of our undertaking deal with the nature and extend of crime, that is, with the state of our knowledge about «*crime levels*», «*crime patterns*» and «*crime trends*». Considering the issue of recording and interpreting crime statistics, one should bear in mind that, and, I quote, «*at heart the extent of crime is a political as well as a behavioral matter...The figures for crime...are not 'hard facts' in the sense that this is true of the height and weight of physical bodies. They are moral not physical statistics*». ¹

The above issues were confronted in the attempt of constructing at the Greek National Centre for Social Research a comparative crime statistics data set, within the realization of a broader project titled as «Node Development for Secondary Data Analysis and Administration». It was soon realized that the whole exercise was not a matter of *painting*² in different colors the picture of crime as recorded by official and research

* Paper presented at the 7th annual conference of the European Society of Criminology, Bologna, 26-29 September 2007.

1. Young J., 1988, «Radical criminology in Britain: The emergence of a competing paradigm», *British Journal of Criminology*, vol. 28/2, σ. 289-313, cit. pg. 175.

2. To use the expression of Maguire M., 1994, *ibid.* pp. 236.

crime statistics, neither of compiling *numbers* as the police and criminal justice agencies routinely aggregate them over the years. It was a matter of: a) selecting a design of a comparative research strategy suitable for collecting and analyzing crime statistics secondarily, and b) of building the necessary research support infrastructure and make it work.

One of the most important problems of our attempt was the integration and harmonization of given crime data sets in uniform entities facilitating comparisons over time and place. This was made more difficult since a) seldom infrastructures exist to support existing data sets and b) the ways surveillance is organized by state but also by private agencies and agents to support and monitor the surveillance business differs markedly in scope and purpose and varies also markedly through places and over the times. In the end, however, and after a lot of theoretical work on research methodology and on the influence of research infrastructures on methodology, the task of building an infrastructure for the support not only of crime data archiving and dissemination, but dataset integration and secondary data production, as well as supplementary documentation, was made possible.

The whole system (NSP) meets the following functional requirements:

- Support of data accumulation
- Support secondary dataset production and documentation
- Support supplementary documentation of all the existing in the system datasets
- Support data standardisation, comparability and integration
- Support the improvement of access to large data collection
- Support enhanced data discovery
- Support education in the system's rational and operation
- Support services to third parties
- Support new data production
- Support the improvement of data quality
- Support new study design
- Support the development of a subject matter ontology for specific subject matter fields

The work on the crime data set was a collective job which lasted for more than 4 years. Participants, in terms of their expertise covered a broad area of social science, including sociologists, criminologists, statisticians, experts in information technology and computerized data. The main issues around which the theoretical and methodological considerations were built may be summarized to the following:

Our material consists from *numbers* or *aggregations of numbers* as descriptive entities, tidily placed under descriptive categories with labels, which do not however remain the same from time to time neither from the one source of statistical information to the other. These points, however, have not burdened almost all modern forms of discourse about crime to place emphasis upon terms associated with its quantification and measurement such as «extend», «growth», «volume», «scales», «rates», etc., as it is the case not only in Greece but also, elsewhere, internationally.³

Thus, the re-structuring of a criminal records data set was undertaken with a view to strengthening our knowledge of the exact nature of the official quantitative basis of crime occurrence locally and internationally over the years. The whole exercise involves in fact the re-examination of the epistemic relationship between people (in this case offenders) and their representation as “data” or criminal populations, managed and controlled. In practical level, the end product is the creation of a more flexible, easily accessible, uniform criminal statistics record based on the official classificatory schemes adopted over time. In theoretical terms the end purpose lies in drawing the basic lines revealing the new relational fabric of society, or the changes it suffers over time. This is why the particular crime data set belongs organically in a broader Data Base under the title «The Quality of Democracy».

A wide-ranging review of aggregate crime statistics, properly read, makes possible to unearth the nature of the governmental logics for the management of bads or even the changing nature of penalty over the years. The results of this experience underline also the problems in the design and conduct of statistical enquiries and classification schemes, in order to be able to comprehend basic issues of crime statistics substantive meaning and interpretation. Thus, the whole exercise was soon transformed our rationale towards what may be termed as «calculating risk and the risk of calculating».

One major parameter to understanding the magnitude of crime in our society it is the comparison of current levels of crime with those of the past. To gain the best perspective, crime trends should be examined over the longest possible period. Additionally, it is essential to standardize for population growth, over time, by using crime rates. The analysis of crime trends should also use crime rates from several different sources. Important is the question of the proportion of crime occurring in urban, suburban and rural areas as well as the seasonality of crime. Given the high

3. See Maguire M., 1994, *ibid.*, pp. 236.

«dark figure» of crime, victimization trends are valuable in the completion of the data set. The question of the «typical offender» should also be addressed. The role of *youth* in crime as well as the *female criminality* and that of the *career criminals* and the *criminality of minority or foreign offenders* should be co-examined. Knowing about offenders' background in terms of *profession, education, home life, the existence or lack of family life*, tells us about their prospects in life, but not necessarily why they have committed crime. The *income* variable should be handled, but with care. Not all poor people commit crimes, neither all offenders, apprehended or not, belong to the lower or lowest socio-economic strata. This assertion is important since the parameter of social values has a significant import to the exhibited behaviours.

Another element is the *social reaction*, the response to crime, as declared by the official Criminal Justice administration records and those cited by prisons. The volume of data available offers an overview of Criminal Justice at all levels of government. They not only provide a basis for the examination of the Criminal Justice process and the operation of its institutions, but also for the philosophical base and legal mandates of the Justice System. Although not all relevant questions could be possibly answered, official records provide data that quantify crucial actions at five key stages of the Criminal Justice process: Entry into the system, Prosecution and pretrial trends, Adjudication, Sentencing and Corrections.

Although certain aspects of the administration of Justice are informed through official crime statistics - such as the numbers of defendants eligible for release pending trial - several others are not served like:

- analogies between cases submitted and cases rejected or dismissed by Courts,
- the ratio of cases involving juveniles and how are they handled (differently and in what respects) than cases involving adults,
- the circumstances of juveniles tried in criminal courts,
- the ratio of prosecutions to convictions etc.

Yet, through sentencing, society expresses its objectives for the correctional process being rehabilitation, deterrence, incapacitation, and retribution. Attitudes about sentencing as recorded by official statistics reflect multiple objectives, not easily isolated and separated for analytical purposes. Visiting the site of prisons, one can clearly receive information in aggregate numbers of the total number of the convicted persons annually.

Tables usually do not easily tell the ratio of prison sentences to the time the convicted actually serve. Post correctional performance is also difficult to assess. Thus, in the attempt to build a new archive completed by a number of local-national (that is Greek) crime related data sets of comparable nature in both national and international levels for a given time period (in our case from 1830s onwards), the researcher is facing certain difficulties some of them of descriptive and others of substantial-analytical nature:

The descriptive aspects include the following: The official crime-related statistical series from state agencies, although complementary measures of crime, are built in order to serve different purposes and, therefore, they use different methodologies leading to biased, confusing and misleading descriptions. These differences seem to account for an apparent divergence between trends of the suspects and the prosecuted, of those prosecuted and those convicted/dismissed, between the incidence of crime and the trace of it, save that the counts refer only to crimes coming to the attention of the police. Further, it is almost impossible to obtain information on both reported and unreported crime. On the other hand, prison series compute rates using different population bases. Additionally, differences in crime trends are suspected to result, in part, from increases in citizen reporting related to various efforts, increased police presence and surveillance and improvements in reporting systems by police agencies.

A second aspect involves the information numbers offer: It is usually lacking or lies scattered in many sources, classified under distinct and non compatible classificatory schemes, full with discontinuities and alterations. This of course is not a characteristic of the Greek case alone, but it is also met in the relevant statistics of other countries, creating further difficulties in the field of analysis and evaluation of crime data comparisons, even trends.⁴

A third aspect involves the importance of analyzing the classificatory schemes adopted over time, *per se*, as they posse an important value of their own, for drawing significant conclusions on the nature of the *societal* (that is mainly governmental) reaction to crime and offending behavior, especially through the examination of legal definitions and taxonomies. Yet, the examination of the underline conceptual and cognitive aspects of the official classificatory schemes adopted over time unquestionably designates the under-cover ideological veins.

4. See comments also in Kuhn A., 2003, «Prison Population Trends in Western Europe», in the *ESC Newsletter*, vol. 2, no 1, pp.12-16.

The major consequence rests to the fact that it is almost impossible to compare data collected and processed on different underline ideological bases. Yet, as we move to the present day the risk factor emerges dynamically in classifying and calculating behavior. The *New Penology* rejects *ascertaining responsibility* or *making the guilty pay* but seeks to regulate groups as part of a strategy of *managing danger*.⁵ These are reflected in modern crime statistics classificatory schemes, whose scope relies on the mathematics of aggregate totals to classify order and *know* populations. Moreover, while institutions collect individual information on offenders, types of offending, prisoners etc., they nonetheless use aggregations to classify those that come into contact with their predetermined categorical schema. In this way, abstract crime-related knowledge of risk and other entities is widely disseminated to various institutions so as to control securities, careers and identities.⁶

In the next step of counting the numbers, certain issues of recording, classification and numbering arise: These involve: To construct time-series of crime data available for a long period (several decades) is met with impediments of formality and substance. In certain cases, changes in law affect greatly the statistics, while others have not a significant import. The same holds true for the legal procedure regulating Criminal Courts competency and administration. As a consequence, the treatment of offences as well as the conviction of offenders in a uniform way over the years on a quantitative basis alone is almost impossible. In the case of an incident with several criminal elements, the problem arises as to how many offences have been counted and classified. Classification practices have changed over the years, a relevant uniformity established only during the last decades. Considering for example the Criminal Justice administration, there are a series of processes, by which a suspect may become an offender, or alternatively may be released from the Criminal Justice system. The data available, however, do not always - if ever - give cross-sections of the numbers of offenders at the different stages of the criminal justice process. They cannot identify the persons involved in the whole process leading up to the final outcome.

5. Rigakos G., Hadden R., 2001, «Crime, capitalism and the 'risk society'», *Theoretical Criminology*, vol 5, no 1, pp. 61-84, cit. pp. 75.

6. Ericson R. V., Haggerty K.D., 1977, *Policing the Risk Society*, Toronto, University of Toronto Press, cit. pp. 4.

Visiting data on prison populations the main question is on what counts as the prison population. The answer is not quite as straightforward as it might appear and, since comparisons are increasingly made between the size and character of prison populations internationally, commentators need to be aware of the precise basis on which calculations are made in each jurisdiction. They are not everywhere the same. On the other hand, it is not sensible to aggregate and compare all prison receptions, because the same person may be received into prison several times during a particular court sentence, first as an unconvinced remand, second as a convicted but unsentenced prisoner and third as a sentenced prisoner. It follows also that it has never been possible to say from the Greek published statistics at least, exactly how many different persons are imprisoned annually. Quite apart from the above complication, the same person may be imprisoned more than once in a year for different offences.⁷ We use these examples to say that in order qualitative crime data to be of value they should be used carefully and properly.

One way of overcoming the above difficulties associated with offences is to be able to *decompose* and *recompose* categories of crime which are officially attached under the various types of the specifically pre-determined and legally described general categories of offences to sub-categories ready to adapt to multiple classificatory schemes. The venture into these statistical aggregates should be complemented with a venture to the corresponding legal definitions and determinations of the behaviors involved. In this way, a new volume of crime trends may be created that may better serve purposes of increasing our knowledge and understanding. In Diagram 1 «*Total volume of crimes against morals*», for example, over a period of time, one may understand how different crime trends emerge by composing or decomposing several legal categories and sub-categories under the general label of crimes against morals and related offences.

Despite the proper or improper handling of official crime-related statistics, valuable information may also be deduced by their usage over time. For example, let us consider carefully the figures below based on aggregate statistics about male and female criminality (total numbers of committed offences), as they are described by the Greek Law. In Diagram 2 «*Male and female violations of person's sense of honor, status and social*

7. Zimring F., Hawkins G., 1991, *The scale of imprisonment*, Chicago, Chicago University Press; Morgan R., 1995, «Prison», in *Interpreting crime statistics*, ibid, pp. 91-110.

DIAGRAM 1
Total volume of crimes against morals

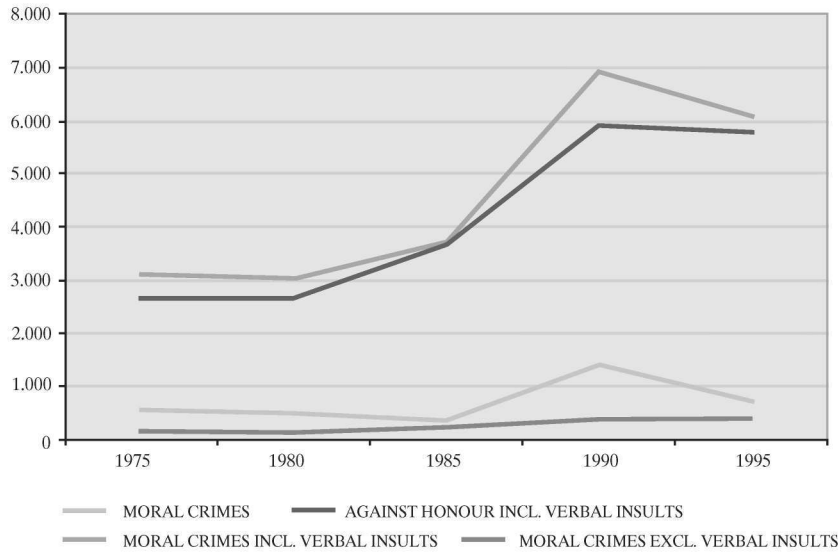


DIAGRAM 2
Male and female violations of person's sense of honour, status and social prestige

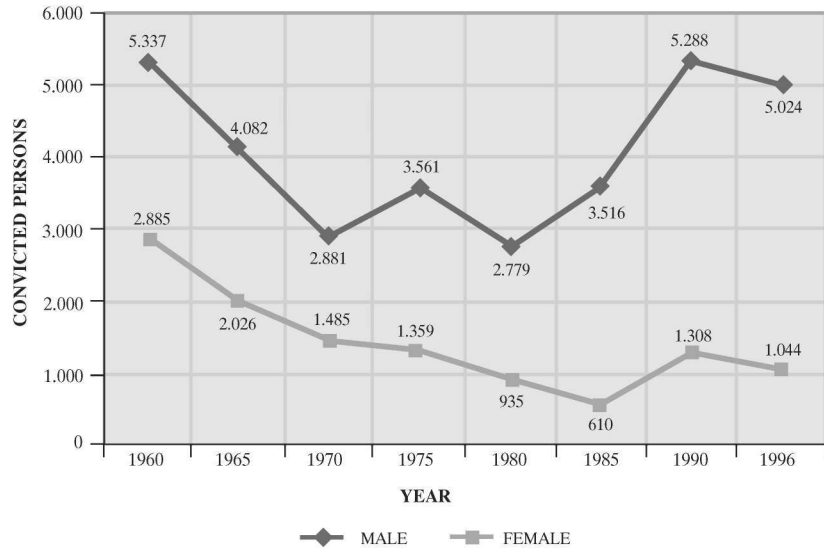
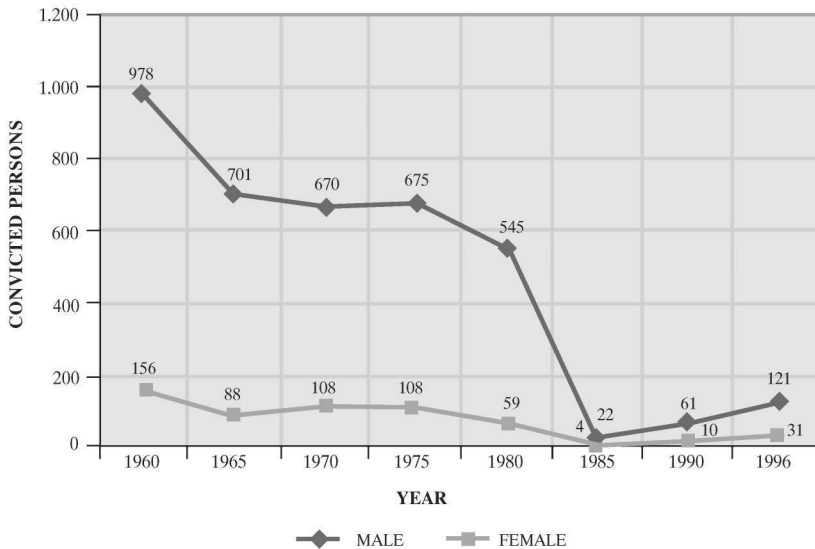
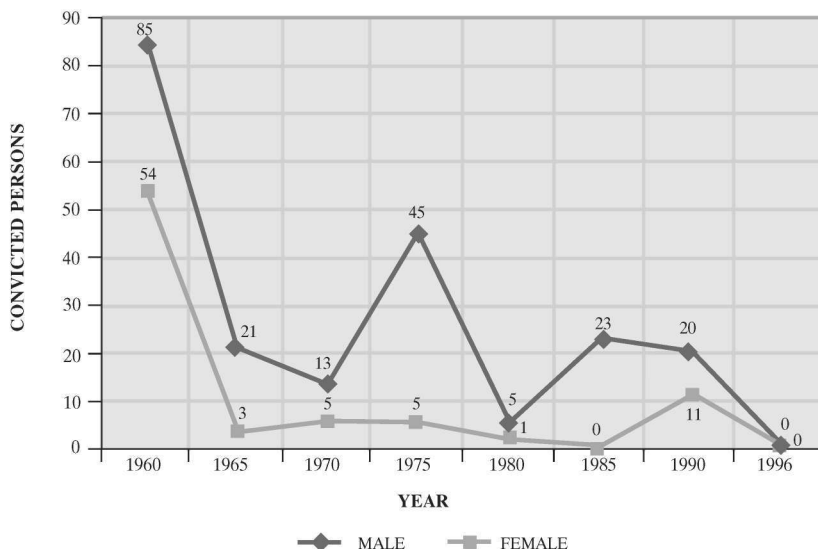


DIAGRAM 3
Male and female violations against marriage



prestige», one may learn much more than a simple arithmetic of numbers could possibly say, besides the obvious assertion that men commit to a larger extent these violations than women over time.⁸ We may also validly deduce a number of considerations on women's social performance coupled with their social emancipation. In Diagram 3 «*Male and female violations against marriage*» the influence of law making in determining offending behavior is outstanding. Criminal law changes are immediately reflected to the relevant crime statistics. This figure examining offences within and about marriage is an indicative example, as it immediately reflects the de-criminalisation of adultery by mid-eighties. However, it is only by the above-mentioned de-composition of crime statistics that we learn that women are mainly considered responsible of committing it, while bigamy is a privileged space of male offending. These results are liable to intensive scientific scrutiny improving thus our understanding of offending behavior. In Diagram 4 «*Male and female offending behavior during elections*» a similar trend in attitude is possibly indicative of the profile of

8. See for the assertion of the male feature of crime in general, Hood-Williams J., 2001, Gender, masculinities and crime, *Theoretical Criminology*, vol. 5, no 1, pp. 37-60.

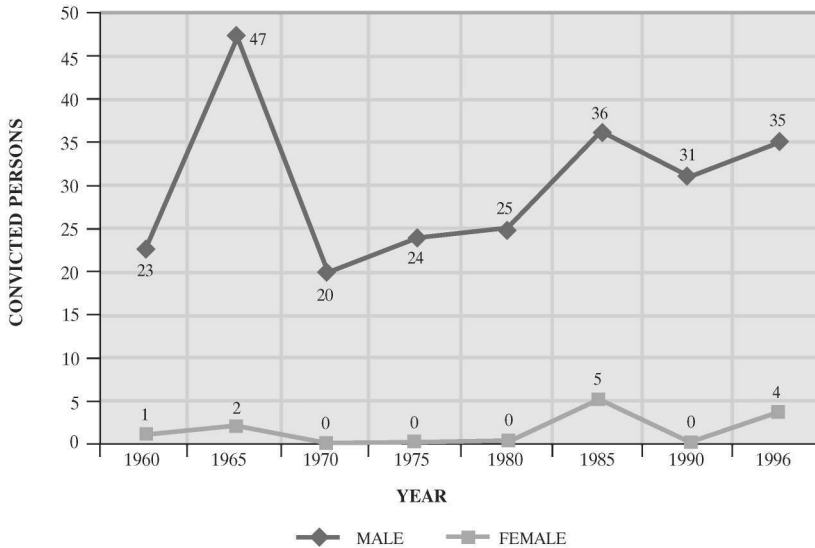
DIAGRAM 4*Male and female offending behaviour during elections*

the male patronage exercised in this country, or in view of theories on safety and women's risk assessment etc.⁹ The same holds true for the Diagram 5 «*Male and female offending behavior against public order*».

To use a crime-related statistics database, as the one already described, one should bear in mind the pre-requisites of its construction and structuring: Those studying crime and deviance cannot assume that they are dealing with a homogeneous category of individuals - as aggregations of numbers suggest - but distinct human beings. In order to construct glowing illustrations of time series in crime statistics, one should not forget the *fabrication* element in established taxonomies and numbers' classification schemes. Labels, values, totals, contribute to the compartmentalization of an otherwise *authentic self* of a suspect, an offender, and a convicted person.

It seems that inherent in crime statistics, there always exists a historical process of *becoming*, a process of demanding and constituting the *spatialization* element, the distribution of social being in various *locations* (under specific labels of a schema) as they are deposited by the historical process.

9. See for example, Stanko E., 1997, «Safety talk: Conceptualizing women's risk assessment as a 'technology of the soul'», *Theoretical Criminology*, Vol. 1, no 4, pp. 479-499.

DIAGRAM 5*Male and female offending behaviour against public order*

Disvaluation of the individual qualities, immediately follows, which should be taken into account with a view of *re-constructing* the identity of the offender. Another point involves to avoiding the unquestionable *free transfer*, the escalating *trafficking* of numbers, percentages, ratios, values and totals, by means of various, old and new data-bases around the world without entering to a discussion of the divergent *cultural - scientific formalizations* adopted in each case.

If one broad conclusion can be drawn from the preceding discussion it is that although statistics help us to know a lot more about crime we are less sure about the implications of our knowledge. In the post-modern uncertainty we live, crime should not be treated, by means of figures alone, as an unquestionable certainty. The phenomenon of crime and the explanations of it have become, as many other aspects of social life, fractured, its patterns appearing transient and illusory¹⁰. Therefore, a demanding criminological enterprise should make proper use of the sophisticated tools for data processing available in order to built new theoretical frameworks to make sense of the law breaking and other offending behavior.

10. As asserted by Maguire M., 1994, *ibid. cit.*, pp. 283.

REFERENCES

- Bottomley A. K., Pease L., 1986, *Crime and punishment: Interpreting the data*, Open University Press, Milton Keynes.
- Coleman C., Moynihan J., 2004, *Understanding crime data*, UK, Open University Press.
- Cooper D. E., 1995, «Science, society and rationality», *History of the Human Sciences*, no 8/2, pp. 109-115.
- Coyle A., 2007, «Imprisonment in Eastern and Western Europe», *ESC Newsletter*, vol. 6, no 1, pp. 1-12.
- Downes D., Rock P., 2003, «Sources of knowledge about deviance», in *Understanding Deviance*, Oxford University Press, pp. 24-52.
- Fielding J., Gilbert N., 2002, *Understanding social statistics*, London, Sage.
- Kallas J.(ed.), 2005, *The node for secondary processing. A comparative research infrastructure*, Athens, National Centre for Social Research.
- Kuhn A., 2003, «Prison population trends in Western Europe», *ESC Newsletter*, vol. 2, no 1, pp. 1-12.
- Κάλλας Ι., 2001, «Σχεδιασμός ενός περιβάλλοντος διαχείρισης κοινωνικών δεδομένων», *Κείμενα Εργασίας*, 2001/15, ΕΚΚΕ.
- Κάλλας Ι., 2002, *Ζητήματα σχεδιασμού εμπειρικών ερευνών*, Αθήνα, ΕΚΚΕ, Νεφέλη.
- Lambropoulou E., 2005, «Crime, criminal justice and criminology in Greece», *European Journal of Criminology*, vol. 2, no 2, pp. 211-247.
- Maguire M., 1994, «Crime statistics, patterns and trends: Changing perceptions and their implications», in Maguire M., Morgan R., Reiner R., *The Oxford Handbook of Criminology*, pp. 233-291.
- Πανούσης Ι., 2007, «Στατιστική ή εκ-στατική εγκληματικότητα;», *Ποινική Δικαιοσύνη*, 8-9/2007, σ. 1010-1018.
- Spinnelis C., 1997, *Crime in Greece in perspective*, Athens, N. Sakkoulas Publishers.
- Tonry M., 2005, «Why are Europe's crime rates falling?», *ESC Newsletter*, vol. 4, no 2, pp. 1- 8.
- Tsiganou J., 2005, «Recording and interpreting crime statistics: the Greek case», in Kallas J.(ed.), *The node for secondary processing. A comparative research infrastructure*, Athens, National Centre for Social Research.
- Walker M. (ed.), 1995, *Interpreting crime statistics*, Oxford, Clarendon Press.
- Young J., 1988, «Radical criminology in Britain: The emergence of a competing paradigm», *The British Journal of Criminology*, vol. 28, no 2, pp. 289-313.