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Drug Offenders in the Global Criminal Justice System

Sheryl Van Horne*
Graham Farrell**

**The European Institute for Crime Prevention and Control,
affiliated with the United Nations**
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* Doctoral candidate, School of Criminal Justice, Rutgers University

** Deputy research director, The Police Foundation, Washington D.C.

Correspondence to Graham Farrell, The Police Foundation, 1201 Connecticut Ave NW, Washington DC 20036.

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HEUNI
The European Institute for Crime Prevention and Control,
affiliated with United Nations
P.O.Box 161
FIN-00131 Helsinki
Finland
Tel: +358-9-18257880
Fax: +358-9-18257890
e-mail: heuni@om.fi
<http://www.vn.fi/om/heuni>

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Summary

The present work assesses the extent, variation and changes in drug trafficking, drug possession and all drug offences in criminal justice systems around the world between. Across the five years of study there was a strong international trend over time, showing relatively small but widespread increases in drug offenders for each stage from suspects arrested by law enforcement, through prosecutions and convictions, to prison admissions. The international mean for all drug offences as a percentage of all offences was 7% of suspects, 7% of prosecutions, 6% of convictions, and 11% of prison admissions in the most recent year for which data was available. The non-parametric sign-test is used to show that the international trends were statistically significant in terms of the number of countries increasing or decreasing the proportion of drug offenders. It seems that, in general, criminal justice systems around the world are characterised more by the similarities than differences in the proportions of drug offenders at different stages. However, several statistically deviant countries are identifiable at different criminal justice stages and at different times. Some specific issues are worthy of further examination. In particular there is the possibility that the United States is not particularly more punitive at sentencing or imprisonment than other countries when it comes to drug offenders, but rather, that it has a relatively greater tendency to prosecute drug offences cases. Further, at the stage of imprisonment, drug offenders constitute a larger proportion of all offenders imprisoned in Belgium, Italy and Germany, than they do in the United States. Although people are often quick to identify the US the world's penal sadist when it comes to drug offenders, the present data set suggests that for the early 1990's at least, there is no conclusive evidence that this is the case. The further investigation of these and other issues may provide information of relevance to drug policy or criminal justice policy at the national or international level. Variations in

sentence lengths for drug offences are also examined, although the data is more fragmented. For those countries that responded, the international median sentence length for possession offences is around one year compared to somewhere between three and five years for trafficking. The findings and their interpretation should be viewed with caution due to the limitations of the data. However, the analysis suggests that the United Nations crime survey has been under-utilised as a means of developing knowledge and information of relevance to national and international drug policy and criminal justice policy. A range of possibilities for furthering the present work is suggested.

Introduction

In the middle to late 1980's and early 1990's, the global illicit drug trade expanded significantly. Opium poppy and coca leaf cultivation approximately trebled in the 1980's, leading to huge increases in the illicit manufacture of heroin and cocaine (Stares 1995). The illicit industry relating to the amphetamine-type stimulants experienced rapid growth, with much production occurring within the large consumer markets of the western industrialised world (Pietschmann 1997). As a result, law enforcement agencies in more countries than ever before seized each of these illicit drugs and made related arrests (Keh and Farrell 1997). At the same time, and partly as a response to this change, some countries began to further gear their law enforcement machinery towards greater efforts against the illicit drug trade. The changes were reflected in the international community with the passing of the 1988 Vienna convention (United Nations 1990).

Other things equal, it would be expected that an expanded illicit drug industry at the same time as increased law enforcement would lead to an increase in the proportion of drug-related offenders at different stages of the criminal justice systems for the countries involved. Yet, despite some country-level analyses, there appears to be a relative dearth of cross-national and international analyses of this phenomenon. As James Lynch, and author well versed in cross-national analysis, recently noted:

"... [V]irtually all of the cross-national studies of prison use have compared nations on their response to serious common law crimes and specifically crimes similar to UCR index crimes. Many of the most dramatic changes in prison use, however, seem to be occurring in the area of drug offences." (Lynch 1995: 35-6)

This leaves a fairly broad and significant gap in knowledge relating to drug offenders in the global criminal justice system – an area which is potentially one of the most impor-

tant areas of global criminal justice of recent times. Or is it? What proportion of offences in criminal justice systems are related to breaches of drug laws in different countries? Has significant change really occurred in criminal justice systems worldwide due to drug-related offences? If change occurred, were different criminal justice systems similarly affected? To what extent? Which countries were unaffected or were marginally affected? Did drug offences begin to place strain upon criminal justice systems everywhere, or only in a small minority of countries? If there was change, what was the speed of change and the variation over time and place? This work begins to address some of these questions.

Data Source and Methodological Issues

Previous analyses of UNCJS

The data source used is the Fifth United Nations Survey of Crime Trends and Criminal Justice Systems (UNCJS). Since 1977, the survey has been sent every five years to all UN member states, with the data collected covering back to 1970. The content of the survey has changed considerably over time and more recent sweeps have focused upon criminal justice systems (see Burnham 1999 for a short history of the survey). In their recent overview of the survey, Graeme Newman and Greg Howard observe that

"There are many difficulties, for researchers and policy makers alike, in using and interpreting the UNCJS statistics. These statistics are, first and foremost, official statistics of member countries. They are, in fact, probably the most official statistics of international crime and justice that are published anywhere. One need only observe the ways in which countries behave internationally as entities - the ritual care with which they make statements in the international arena - to realize that a country's open announcement of the extent of its crime problem and its processing of offenders through the criminal justice system is a major political event. Countries do not reveal such information to other countries (and often to their

own citizens) unless this information has been rigorously checked, not only for its 'validity' but also for the impression that it creates." (Newman and Howard 1999; 8, emphasis in original)

The Global Report on Crime and Justice edited by Newman (1999) contained a range of chapters that analyse various aspects of the 5th UNCJS including one with elements that are a precursor to the present report (Farrell 1999). In addition, the European Institute of Crime Prevention and Control, affiliated with the United Nations (HEUNI) recently published a series of analyses of the Fifth UNCJS survey (Kangaspunta et al 1998a, 1998b). The Kangaspunta et al. work makes significant innovative steps forward by integrating the UNCJS survey with the International Crime Victim Survey (ICVS). The United Nations has produced a series of official publications based on UNCJS over the years, and there has been a range of relevant academic publications including: Nalla and Newman (1994) who compared crime in the USSR and the USA in the first half of the 1980's; Harvey et al. (1992) who examined gender differences in criminal justice; Pease (1994) who used the survey as part of his critique of per capita imprisonment rates as a cross-national measure of punitiveness, and; Pease and Tseloni (1994) who examined juvenile justice in the international arena and used the non-parametric sign test in a similar fashion to its use herein. Although this is far from, and not intended to be, a comprehensive review of cross-national comparative work, homicide statistics are commonly recognised to be the most reliable cross-national crime data and they are one of the most studied. Homicide statistics derive from a number of sources including UNCJS, Interpol, and the World Health Organisation, and have been the focus for a series of research papers by authors including Neapolitan (e.g. Neapolitan 1996) and Messner (e.g. Messner 1997).

Why so little UNCJS drug offence analysis?

Despite the range of published UNCJS analyses, it is apparent that work relating to drug offences using UNCJS is sparse. Pease and

Hukkila (1990) looked at drug crimes using the third UNCJS data for 1980-1986. They found that, amid generally increasing crime rates, drug crimes had the most precipitous increases. It is possible to speculate that the dearth of drug offence analyses using UNCJS is due to a Catch-22 situation: the drug-related offences would not be analysed until they were known to exist among drug researchers, and they would not be known to exist until they were analysed and published. The UNCJS survey is conducted by the Centre for International Crime Prevention (UNCICP), whose main focus is non-drug crimes. Drug possession and trafficking have traditionally been outside the sphere of interest of what is now UNCICP, not least because there are UN sister agencies that specialise in drugs.¹ At the same time, it is possible that the drug-related aspects of UNCJS remained largely unknown among UN agencies concentrating on international drug policy and among independent drug researchers who would not naturally turn to UNCJS as a source of information. These factors could combine with a frequent pre-occupation with the technical aspects and alleged methodological difficulties of the survey among researchers. It is possible that such a mundane explanation accounts for the lack of exploitation of a unique resource for comparative drug policy research.

A Preliminary Typology of Between-Country Differences

At the time of writing, the most recent survey sweep covers the period 1990 to 1994 inclusive. Response rates to the survey are less than 100% (see Kangaspunta 1998a; Newman and Howard 1999), and there are often incomplete responses to specific data items. The UNCJS data on drug offences relates to

¹ Prior to 1990, the Division on Narcotic Drugs (DND), the International Narcotics Control Board (INCB), and the UN Fund for Drug Abuse Control (UNFDAC) (see Bruun, Pan and Rexed 1975), and post-1990, the United Nations International Drug Control Programme (see UNDCP 1997). At the same time, other UN agencies such as the UNRISD have published on a range of drug policy issues (see e.g. Tullis 1996).

drug trafficking and possession offences and a third broad category of 'all drug offences'. Crimes that are indirectly related to drugs but not breaches of drug laws, such as acquisitive crime to fund drug use, drug-related shootings and assaults, are not classed as drug offences. This is not to minimise their significance, but is simply due to the nature of the data set, which only contains information on breaches of specific drug laws. The UNCJS questionnaire asks how many drug offence cases there were for suspects, the numbers prosecuted, convicted, and admitted to prison. Two questions ask the average sentence length in that country for possession and trafficking offences.

The questions relating to drug offences vary in their specifics for each stage of the criminal justice system. Data relating to trafficking and possession are available in relation to recorded offences and average sentence length. In relation to suspects and prosecutions, data for the number of all drug offences is also available. For convictions and prison admissions, information on possession and all drug offences is available. No formal explanation is offered here for these apparent discrepancies. It may simply reflect difficulties in maintaining consistency in a lengthy questionnaire that has been revised several times over the years (Burnham 1999). Future UNCJS sweeps might consider harmonising

these classifications for questions relating to drug offences, preferably asking for all three data points at each stage.

With respect to methodological issues, Matti Joutsen summarises the key issues as part of his more detailed analysis:

“The major problems in regards to data analysis are the imprecise definition of the terms, improper classifications, ambiguous coding structures, and differences in the units of count used.” (Joutsen, 1998; 3)

Joutsen also recognises that

“These are problems that, to a large extent, are common to all efforts in gathering international criminal justice statistics.” (Joutsen, 1998; 3)

Although the same survey questions on drug offences are asked of each country, this does not mean that UNCJS can be said to utilise standardised measures. Definitions and terms vary from country to country, as do recording and reporting procedures. Examining the UNCJS data can lead to the identification of the origins of between-country differences. The potential origins of differences are wide and varied. Table 1 attempts to list the reasons as a preliminary typology, much of it summarising the methodological issues described by Joutsen (1998: 3-6).

Table 1: Types of Between-Country Variation in UNCJS Drug Data

Source of variation	Drug offence example
1. Legal definition	Country A and country B use different categories of drug weight to define possession and trafficking.
2. Legal terminology	Country A uses the term 'plea-bargain' but Country B does not.
3. Procedural difference	Country A defines prosecution of drug offences as only those cases that reach court. Country B defines prosecution as including warnings issued by the prosecutor.
4. Statistical classification	In both country A and country B, possession of drug paraphernalia is an offence. In the UNCJS report, country A includes these as possession offences but country B does not.
5. Counting rule	Country A counts drug offences. Country B counts drug offenders.
6. Comprehensiveness of statistics	Country A includes minor possession offences in its statistics but country B does not.
7. Absence of or Errors in counting	Country does not keep statistics, or does not keep or centrally collate accurate statistics.
8. Errors in reporting	Country reports its data incorrectly to UNCJS for various reasons (data does not exist; is not coordinated; is out of date; survey went to wrong respondent; clerical error).
9. Non-response	Country does not return the UNCJS questionnaire, or returns it incomplete.
10. Volume of drug offences	Differences in CJS reflect true differences in volume of drug offences
11. Criminal justice practice and procedure	Differences between stages reflect different practices at different stages, e.g. in likelihood of prosecuting a drug offence.
11. Difference in input to CJS	Country A has a greater proportional input of drug offences to its CJS than country B.
12. Legal practices	Country A prosecutes all drug offences but Country B does not.
13. Exogenous differences	Variation in CJS resources.
14. Other offences	Even if drug offences static, percentage of drug offences will increase if volume of other offences decreases.

Note: Much of this table is based on Joutsen (1998; 3-6).

Listing the origins of differences in this manner purposely does not distinguish between differences that are of methodological and those that are more 'substantive' origins. This is because in the present context it is possible that even methodological differences can be viewed as substantive in some instances. For example, it is not purely of methodological interest if two countries have different legal definitions of drug possession and trafficking. Rather than trying to 'control' for the legal difference, the implication might be that some harmonisation of legal codes is necessary. The same could be true for recording and reporting practices. Identifying countries that are poor data collectors might be a means of identifying countries that require technical assistance to organise the information from their criminal justice system. From a methodological perspective however, the

nature of UNCJS does mean that the phenomenon being compared may not be exactly similar. Whether this is viewed as a substantive or methodological issue is to some extent determined by the subjective position of the observer and the objectives of the research.

The present writers try to take the position of data optimists in relation to the methodological issues - recognising the limitations of the data but using it to an advantage if possible. Seeking out and identifying the origins of differences and discrepancies in the data is an important first step in any analytic attempt. Cross-national comparisons of drug-related offences in the criminal justice system are sufficiently scarce that this is a proper as well as a necessary point of embarkation for the present exercise. If the analysis highlights only differences and discrepancies then this alone

is arguably a substantive contribution to the field of cross-national drug research. Specific examples should make this point clearer as the findings are presented.

Types of analysis conducted and indicators used

Several types of analysis are possible using the UNCJS data. Cross-national comparison allows the identification of countries that are anomalous with respect to any or all aspects of the drug offence data. A simple statistical technique is used herein to highlight some of the between-country anomalies.

A second type of analysis that can be conducted with the drug offence data is the identification of international trends over time and across stages of the criminal justice system. This is termed international trend analysis to distinguish it from cross-national analysis. International trend analysis is possible so long as any between-country definitional differences remain fairly consistent over time. Consider the hypothetical case where forty-five countries use different legal definitions of drug trafficking but all report an increase in the proportion of drug trafficking offenders prosecuted in 1994 compared to 1990. Such a trend is almost certainly independent of definitional discrepancies. Similarly, what if, for a given year, all reporting countries retain a greater proportion of drug possession offences at the later stages of the criminal justice system? Again, this may reasonably be taken as a trend that is independent of definitional discrepancies even if the specific causes vary between countries. Such a strong pattern would certainly warrant further investigation.

Despite specific legal definitional differences between countries, the findings presented below often demonstrate that, in relation to drug trafficking and possession, the global criminal justice system is often characterised by similarities rather than differences between countries. It is sometimes possible to overlook such a basic issue in the search for anomalies, trends over time, and trends between stage of the system. The present work

merely scratches the surface of a huge and largely unexplored area of cross-national and international analysis, and a range of possibilities for further research are suggested in the penultimate section of this work.

In what follows, the main quantitative indicator used is percentages. For example, the number of drug trafficking suspects are examined as a percent of all suspects in the criminal justice system, and the number of trafficking convictions as a percentage of all convictions for that country. Like any indicator this has strengths and weaknesses. The main advantage is that percentages are a common metric. They are comparable across countries whereas absolute numbers are not since percentages are independent of the absolute number of trafficking or possession offences in the country. This strength can also be a weakness. It becomes absurd to compare and give similar weight to countries of greatly varying size and criminological context: some countries are so small that they record only a relative handful of crimes per year for instance, so that percentage shifts may be small absolute changes. Per capita rates are frequently used in cross-national comparisons of this sort since population is a readily available denominator, but they have also been criticised since 'population' is to some extent a denominator of convenience rather than of relevance to the issue in question (see for example, Pease 1996). However, if the denominators remained reasonably constant across years, any trend analysis of the sort conducted here would be identical (however sign-test trend analysis based on the raw numbers of drug offences would be equally valid). Perhaps the single main reason for selecting all offences rather than population or another numerator is that the percentage which result are in terms of a unit of analysis of relevance to the criminal justice system (offences). In short, no indicator is perfect, and the one used here is arguably at least as useful as any other immediately available. It is acknowledged that there is much scope for further investigation.

From the rates for individual countries, international mean and median rates are also presented. These are not weighted by the size of the country. This means that, as discussed above, countries of varying size and context contribute equally to the international means. Again, this is not perfect, and the 'international means' presented here are a different measure from what might be termed a 'global mean' based on the individual case or offender as the unit of interest rather than the country. The two measures are simply of different phenomena. The international mean and medians presented here give crude indicators of international average tendencies as a basis for comparison. Once again, the potential for the development of this work utilising additional, different and complementary measures does not go unrecognised.

Analysis and Findings

Findings are presented sequentially by stage of the criminal justice system, followed by average sentence lengths. Within stages, all drug offences are discussed first where that information is available, followed by possession then trafficking offences. Within each stage, individual country similarities and differences are followed by international trends over time. The set of findings by stage are followed by a section examining overall international trends.

Tables 2a to 2c present summary information that are referred to in different sections of the findings. Table 2a contains the international means and medians of the country-level data of Tables 3 to 17, purely for ease of reference. Table 2b presents the results of the non-parametric sign tests that are used to look for international trends as described below. With less than or equal to 25 observations the exact method was used with reference to the tables of the normal distribution; with more than 25 observations the normal approximation was used, giving the respective z-scores. Specific results are discussed in the relevant sections. The first column of Table 2b also details the

Table (3 to 17) to which the statistical test refers.

Table 2c shows a list of countries identified as 'statistical deviants' for each different stage of the criminal justice system. It is impossible to discuss every country in the data set for each year and each stage of the criminal justice system and in relation to the others. Instead, a cut-off criterion was used to identify extreme countries. If the percentage of cases for a country was more than two standard deviations above the international mean then it was identified as a statistical deviant. The z-scores are shown in the final column of each of Tables 3 to 17. Although the data are typically skewed towards the lower end of the range, standard deviation is still a reasonable measure to identify statistical outliers at the upper end of the range. While this means that many of the most deviant countries are touched on in the text, it is clear that there remains rich potential for further analysis to be undertaken. Closer scrutiny of Tables 3 to 17 reveal a range of interesting variations and patterns which are not fully described in the body of the text.

Tables 3 to 17, discussed in the following sections, have several common features that will benefit from prior description. Each table presents an alphabetised list of countries for each of the five years, showing all available data points provided by governments. The penultimate column shows the rank of that country's 1994 value. In the absence of 1994 data, the most recent year with data was utilised. This means that every country that provided data for any year was ranked and its z-score calculated. Ranks are in descending order. Hence Egypt is ranked 1 in Table 3 since it has the highest percentage of recorded crime attributable to recorded drug possession offences. The z-score for 1994 (or most recent available year) represents the number of standard deviations the countries lie from the international mean. Many of the analytic tables presented in Kangaspunta et al. (1998a) presented the overall standard deviation as well as the international mean and

this analysis simply takes that one step further.

Recorded Offences

In relation to volume of offences, data was only requested on drug possession and trafficking. Perhaps more so than the remainder of the data, that relating to recorded offences of trafficking and possession is likely to be misleading. Whereas data for each of the stages of the criminal justice system purport to represent the population, that relating to recorded offences is a sample of uncertain representativeness. This is because many drug trafficking and possession offences do not come to the attention of the police since, as they are victimless crimes (there is no direct victim in all normal senses of the word), there are few incentives for persons to contact the police. Consequently, trafficking and possession offences can only be expected to be officially recorded as such when they come to the attention of the police in instances where an arrest is made or there is some formal contact with the police.

As potentially the limiting worst case of UNCJS data, recorded drug offences are worthy of examination. The data can still provide a partial and indirect cross-national comparative indicator of interest. For example, if rates of under-recording of trafficking and possession crimes are either similar between countries or at least remain fairly constant over time, then some useful patterns may still be evident. Similarly, by examining the relationship between the proportion of recorded crimes compared to suspects, prosecutions and other stages, some patterns might be apparent that shed light upon different processes in different locales.

The proportion of all recorded crimes that are trafficking and possession offences is typically very low. The international mean and median never exceed 3% for possession and 2% for trafficking in any given year (Table 1). These averages largely reflect the fact that possession and trafficking offences constituted less than one percent of all recorded

crime in many countries. Some anomalies are evident. The most extreme is Egypt with z-scores greater than 4 for each of possession and trafficking. The Egyptian government reported that possession offences (Table 3) are between 16 and 26 percent of all recorded crime, and trafficking offences (Table 4) between 22 and 28 percent of all crime. If recorded possession and trafficking offences in Egypt are mutually exclusive (they may be even if the offenders are not) then the suggestion is that together they could account for close to half of all recorded offences. In Malaysia, possession offences represented between 12 and 15% of recorded offences in all years, although trafficking offences were never more than 1% annually. In Israel, Jamaica and Switzerland, drug possession often accounted for between 5% and 10% of all recorded crimes. In each of these three countries, trafficking offences always accounted for a smaller proportion of all recorded crime but in Israel and Jamaica these were still above the international mean. In Jamaica, Kyrgyzstan and Morocco, at some point between 1990 and 1994, at least 5% of all recorded offences were drug trafficking. The proportion of trafficking offences in Kyrgyzstan increased steadily over time, to double from 3% to 6% of all offences. The Syrian Arab Republic was the only country that topped Egypt in relation to trafficking offences, peaking in 1992 when drug trafficking represented 29% of all recorded crime.

What about international trends over time? For possession offences, 26 countries reported an increase in the proportion of recorded offences between 1990 and 1994, compared to only 7 with a decrease (Table 2b). This difference was highly statistically significant using the non-parametric sign test ($p=0.002$). It shows an international tendency to increase the recording of drug possession offences relative to other crimes across the five-year period. The same increasing trend was evident for recorded trafficking offences, with 29 countries increasing compared to 12 countries decreasing the proportion of trafficking offences recorded ($p=0.012$).

An increasing proportion of drug offences, and a significant international trend, do not necessarily mean that countries in general are paying more attention to drug offences. It could mean that they are recording less of other types of offence. This is an empirical question that might be addressed through further manipulation of the UNCJS data, but the present writers suspect it would prove an unfounded hypothesis. In relation to what is known about the increasing size of the illicit drug industry during this period, it is likely that the trend reflects a combination of actual increases in drug offences together with greater attention being paid to such offences by law enforcement agencies. The specifics will vary between countries.

Suspects

In general, the number of suspects for 'all drug offences' is slightly larger than the addition of trafficking and possession offences. This is consistent with the expectation that countries include other offences within an overall 'all drug offence' category. To speculate in the absence of specific information, this probably reflects the inclusion of offences such as the laundering of drug money, and drug-related corruption.

The international mean for suspects of 'all drug offences' varied between 5 and 8 percent of all suspects across the five years, that for possession offences between 3 and 5 percent, and that for trafficking between 1 and 2 percent (Table 1). In relation to the number of suspects, between 1990 and 1994, there was a statistically significant international trend for countries to increase the proportion of drug-related suspects for both 'all drug offence' suspects ($p=0.002$) and possession offences ($p=0.017$) (Table 2b). The result for trafficking offences was close to statistical significance and is indicative of a general increasing trend, with 17 countries increasing compared to less than half that, 8, decreasing the percentage of trafficking suspects ($p=0.108$).

At the individual country level, Western Samoa was a statistical deviant in relation to all drug suspects and possession suspects. All

drug suspects were never less than a third, and sometimes two-thirds of all suspects per year, and possession suspects in 1994 represented around a quarter of all suspects. Denmark had unusually high percentages of possession suspects with them constituting between 20 and 25 percent of all suspects in each year. Further investigation of this anomaly might prove informative since Denmark has a reputation for fairly lenient drug policies but reported high proportions of drug suspects relative to its western European counterparts.

In 1994, Kyrgyzstan reported that trafficking suspects comprised nearly 10 percent of all suspects, a rate statistically deviant in the international context and representing a doubling of their percentage from 1990. This could reflect various changes in a country in transition, including possible changes in legal definitions, real changes in the volume of drug trafficking, increased attention given to trafficking by law enforcement, or a combination of these factors.

Prosecutions

Sao Tome and Principe and the United States of America were the two principal statistical deviants in relation to prosecutions for all drug offences. Sao Tome and Principe reported around 80 percent of all prosecutions being related to all drug offences, and the USA around 40 percent (Table 8). These compare to an international mean of 7 percent, although this was skewed by the extreme high cases since the median never rose above 3 percent of all prosecutions. For possession offences, the international mean percentage of prosecutions was around 4 to 5 percent, whereas that for drug trafficking varied between 1 and 3 percent. The principal deviant for possession offences was Hong Kong. The high percentage of prosecutions for trafficking in Andorra in 1994 could be an error in the source data (the rate is ten times that of Andorra in every other year), an instance of a relatively small absolute change producing a distorted picture as a percentage, a change in legal definition, or a change in practice.

With respect to international trends in prosecutions, there was a statistically significant increase in the likelihood that a country reported an increased percentage of prosecutions for all drug offences in 1994 compared to 1990 ($p=0.015$). Over the five years, 27 countries increased and 11 countries decreased drug offence prosecutions relative to other offences. Although the trend analysis for drug possession and trafficking offences did not achieve statistical significance, this probably only reflects the small number of countries for which information was available, since in each case more than twice as many countries reported increases in drug prosecutions than reported decreases (Table 2a).

Convictions

For convictions as with prosecutions, the United States of America was statistically deviant. The US government reported the highest percentage of convictions for 'all drug offences' at around a third of all convictions. Of all drug offence convictions in the US, more than a third were for possession. Denmark was the second ranking country for convictions, with around a quarter related to drug offences, although data was only provided for a single year and does not coincide with the prosecution data like that of the United States. It might be expected that countries with a high percentage of prosecutions for drug offences would have similarly high percentages of drug offence convictions unless there is an unusual rate of attrition or retention of drug offences between the two stages.

The international mean percentage of convictions accounted for by all drug offences was between 4 and 5 percent, and between 1 and 3 percent for possession offences. Thirty countries (75%) recorded an increased percentage of drug convictions in 1994 compared to 1990 ($p=0.003$), and of the fourteen countries for which information was available in relation to possession convictions, 11 (79%) reported an increase ($p=0.057$).

Prison Admissions

The international mean percentage of prison admissions accounted for by all drug offences increased from around 8 to 11 percent from 1990 to 1994, and possession offences from 4 to 5 percent. This meant that possession offences constituted between 40 and 45 percent of all prison admissions, in terms of an unweighted international mean rate. Between 1990 and 1994, 21 countries reported an increase in prison admissions for 'all drug offences', compared to 10 reporting a decrease ($p=0.072$), although only slightly more countries reported increasing than decreasing percentages of cases for drug possession.

Three western European countries were the most statistically deviant in relation to admissions to prison. In Belgium, Germany and Italy, drug offenders represented a third or more of all admissions. In the United States and Zambia they represented over a quarter of all admissions. With respect to prison admissions for drug possession the picture was somewhat different, with Hong Kong and Kuwait reporting 22 and 16 percent respectively. Both of these countries doubled the percentage of possession offenders in their criminal justice systems between 1990 and 1994.

These findings are almost certainly worthy of further investigation. Common perception of European criminal justice systems compared to those of the United States are that the US imprisons, relatively speaking, far more drug offenders. That Belgium, Germany and Italy have the highest rates in this respect may be of particular interest to policy makers and drug researchers around the world. It is worth re-iterating that the government of each country reports its own data, so the reporting of Belgium, Germany and Italy is independent. It is also worth reiterating that the finding could represent differences due to definitional or other discrepancies. However, any definitional or other methodological difference must be peculiar to imprisonment since the same finding was not evident at

other stages. Although people are often quick to identify the US the world's penal sadist when it comes to drug offenders, the present data set suggests that for the early 1990's at least, there is no conclusive evidence that this is the case.

Average Prison Sentence for Drug Offences

The data on average length of prison sentences for drug offences is paucal, but some patterns and anomalies are apparent. Tables 15 through 17 show the available information for each of all drug offences, possession and trafficking respectively, in terms of the number of months for the average sentence. The questions were asked for 1990, 1992 and 1994 only. For each of the three categories of drug offences, the international mean rates are so skewed by the data reported by Egypt as to be almost useless, and the median is a preferable indicator. The Egyptian government reported sentence lengths that were 28, 121 and 13 times longer than the next more severe country for all drug offences, possession and trafficking respectively. The second ranked country was Kuwait for the first two categories, a country which had sentence lengths several times greater than the international median. Egyptian average sentence lengths also increased greatly between 1990 and 1994. There is no immediately apparent explanation for the fact that average sentence length for drug possession were reported by Egypt as longer than those for trafficking. One possibility is that it is linked to drug trafficking incurring the death penalty in that country. As suggested in the following discussion, anomalies such as Egypt could prove worthy of further investigation by an interested international body. For example, in relation to sentencing, the international drug control conventions appear to encourage punitive approaches to control drugs and impose 'lower limits' (i.e. prohibition is compulsory). Yet the conventions do not appear to define or recommend upper-limits to severity beyond which a country transgresses the boundaries of appropriate punishment (although a broader examination of the relation-

ship to international sentencing law is beyond the scope of this paper).

Perhaps surprisingly, and in itself an interesting finding, the Egyptian exception seemed to prove the rule that, relatively speaking, most countries were characterised by the relative similarity of their average sentencing practice for drug offences. In relation to all drug offences, the international median varied from two to three years for all drug offences, was steady at one year for possession, and from around three to five years for trafficking offences.

Discussion and suggestions for further research

This section discusses the general international trends over time, and makes several suggestions for further research.

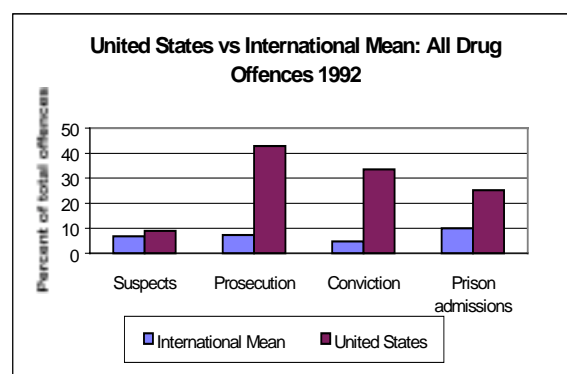
General International Trends over Time

Table 1 shows that many stages of the criminal justice system had a higher proportion of drug offenders in 1994 compared to 1990. Examining the trends over time for all stages together (Table 2a), is quite illuminating. Even where the differences were not statistically significant (Table 2b), at all stages of the criminal justice system there were more countries with an increase in the proportion of drug offenders - whether trafficking, possession or all drug crimes - than there were countries with a decrease. Hence it can reasonably be concluded that the available evidence suggests a general international trend towards greater proportions of drug-related offenders in criminal justice systems, for the period concerned. Such findings make good intuitive sense, concurring with evidence relating to what is known about changes in the international illicit drug trade, and the law enforcement and criminal justice response to those changes.

Further investigation of the statistically deviant countries

With the relevant research, it is probable that a book, or several books, could be written about drug-related offences in the criminal justice system of each country. The scope of the present analysis is necessarily modest. An efficient approach to identifying interesting and perhaps important issues might be to start by further investigation of countries that were identified as statistical deviants. Some of them would quickly be shown to be disparate primarily due to definitional differences – but further research of such is of potential utility. Some of the statistical deviants would prove to be 'artefacts' of the data for some other relatively benign reason – some small countries, for instance, may have relatively few crimes overall so that variations in drug offences cause apparently large surges when presented as percentages. However, it is possible that, based upon such step-by-step investigation, there will be grounds for the international community to begin to progress towards a state of knowledge where policy-relevant information emerges. The United States can be used as a well-known example. The US is probably the country that is the most researched in relation to drug offences. Figure 1 shows that, from the information available here (1992 was the only year where complete information was reported by the US), the percentage of drug offence suspects in the US was similar to the international mean and that the main difference occurs at the stage of prosecution. The present evidence suggests that the US does not necessarily undertake far more law enforcement relative to other crimes, and is not necessarily more punitive at sentencing (in terms of probability of incarceration) than other countries. The fact that each of Belgium, Italy and Germany all reported imprisoning greater percentages of drug offenders relative to other offenders was highlighted in the section on imprisonment. However it may be that the US is, relatively speaking, more prosecutorial. A tendency to a greater propensity to prosecute drug offences would, *ceteris paribus*, lead to greater amounts of imprisonment than elsewhere for drug of-

fences in relation to other offences. Yet if the US has a greater tendency to prosecute but not a greater tendency to imprison than these three countries then, relative to other types of crime, the US is filtering drug offenders out of the criminal justice system at later stages at a greater rate than those other countries. It is possible that the situation has changed since the time of the data available here, in which case it should be investigated when the data from the sixth UNCJS are available. Other factors of relevance are that there have been significant reductions in crime in the US in the 1990's. Several scholars, such as Nobel laureate economist Gary Becker (Becker 1998) attribute these reductions, at least in part, to increased incarceration. If the apparent in-



creases in incarceration are in fact due to an increased tendency to prosecute drug offenders, then perhaps the minutiae of this possible prosecutorial tendency have important lessons to offer in terms of crime control. A greater tendency to prosecute drug offenders would also explain the need for specialised drug courts in the US but would suggest that they may not evolve as the appropriate means of reducing strain upon criminal justice systems around the world. Although this discussion of this individual case has become extended, it is presented here as a potentially interesting avenue for further research, perhaps by an interested international body such as the United Nations.

Egypt presents another possible example for further investigation. As discussed above, the Egyptian government reported highly anomalous sentencing practices in relation to the international median. It is possible that there is an error in the reported data. If not,

and if the data is accurate and can be interpreted in this manner, it could raise the issue of whether there could or should be any sentencing length limits that the international community deem to be excessively harsh for drug offences.

Further International Analysis of UNCJS

The incorporation of previous sweeps of UNCJS would provide a longer-term perspective upon some of the processes at work in the global criminal justice system. The 1980's were a period of particular change in the global illicit drug industry in relation to production and trafficking. It would undoubtedly prove fascinating to track how the changes influenced criminal justice systems around the world at varying speeds and to various extents at different times. Over time, is there a clear geographical 'spread' of the influence of drug offences upon criminal justice systems?, and how does this compare to other drug-related indicators? By comparing indicators at different stages in different years, as well as sentencing practices, it may be possible to tease out changes due to the volume of drug offence cases incoming to criminal justice systems, and changes due to practices within the criminal justice systems. Similarly, when more recent sweeps of UNCJS become available, linking them to the present analysis is an interesting prospect: Has the rate of change of drug offences increased or decreased?, and where and when?

Comparison to Other Data and Source of Information

It might be possible to compare the UNCJS data to the drug seizure data collated by the United Nations International Drug Control Programme (UNDCP). It might be hypothesized that there would be a positive relationship between the two, particularly in relation to recorded offences. A second avenue of exploration of different sources of information might be to undertake case studies for particular countries where additional criminal justice system information was available. Information relating specifically to drug offences was not generally available in the ex-

cellent reference source compiled by Kangaspunta et al. (1998b). Such research might in time proceed towards the development of guidelines for countries to develop more sophisticated data collection to allow the tracking of drug-related offences through their criminal justice systems, breaking information down into specific drug types, for example. This would allow more intricate analysis that in turn might inform policy. How do cannabis, heroin, cocaine and the amphetamine possession and trafficking cases (and other drug types) fare in relation to each other and over time, by country, and internationally?

A third and perhaps natural extension of the present work might be to try to introduce factors relating to the laws and criminal justice systems of different countries, particularly in relation to the processing of drug offences. Do countries with laws or processes with particular statistical signatures process drug offenders in a different manner? How do these compare to other crime types?

Attrition and Retention Rates

With the aim of being realistic and concentrating upon comparative percentages of three types of drug offence category at different stages of the criminal justice system, internationally and in particular countries, over time, some types of analysis have necessarily been excluded from the present work. Farrell (1999) presented a preliminary analysis of an international mean attrition rate between stages of the criminal justice system. Furthering that type of analysis for different years, and as a comparison between countries, could prove fruitful. At what stage of the processing of drug offenders does the greatest attrition or retention takes place? How does this compare to other crime types?, how does it vary between countries?, over time?, and between countries with different drug laws and tendencies to pursue drug cases of different types?

In relation to attrition or retention rates, the definition of 'statistically deviant' countries

could be somewhat different. If drug offences progressed at a similar rate to the average offence in a country's justice system, then the percentage of drug offence cases would be the same at each stage. Countries with an increasing percentage of drug offences at later stages are those that retain drug offences relative to other offences, and countries with decreasing percentages of drug offenders are those that filter such offences out. To account for variations in the levels of other offences of varying severity, such an exercise might be more appropriately conducted in relation to a particular other offence or a basket of offences which have relatively well established international patterns.

Examining Extent of Change over Time

The present analysis concentrated on developing a metric that was common between countries to allow comparison. It concentrated upon the direction rather than the magnitude of change. Among countries reporting increased proportions of drug offenders at different stages, how large were the increases? Which countries experienced the largest increases and why? Do these patterns of increase reflect patterns found in other data sets such as drug seizures? How do these vary between all drug offences, possession and trafficking?

The Development and Comparison of Different Indicators

The present analysis used drug offences as a percentage of all offences as the key indicator. The analysis could also be developed in terms of per capita rates. Other indicators are available: Although almost too obvious to state, absolute numbers are important since a populous country with a harsh prosecution policy for drug offences (for example), influences the lives of more people than a smaller country. It is possible to overlook such issues when developing common metrics to facilitate comparison.

Comparison of Trends in Drug Offences to Other Offences

The present analysis has touched only on drug offences. How do patterns, trends and variations in drug offences compare to those of other crimes, and at different stages of the criminal justice system? It might be expected that they would vary greatly since the international illicit drug trade, as well as enforcement and criminal justice responses, underwent significant change during the period of time in question. It might prove informative to place drug offences in this type of comparative crime-type perspective to determine the extent of those changes and their impact upon criminal justice systems at different stages.

Conclusions

The suggestions for further research listed above are far from exhaustive. Like the apparently summit-less mountain, the next analytic ridge often becomes apparent only when the present one has been ascended. At the outset of this work the writers were primarily interested in exploring the utility of the UNCJS data relating to drug offences. The aim quickly progressed to the examination of substantive research questions, and the task became to restrain the research to realistic parameters as new avenues and possibilities rapidly emerged. The writers would claim a success if the analysis demonstrates some of the potential of the data in a largely unexplored area of comparative drug research. The primary areas are the extent and impact of drug offences in the criminal justice systems of different countries and internationally, and changes and variations in such over time, space, and the definition of offence. It is concluded that the drug-related aspects of the UNCJS data set have been under-utilized. Some formal effort should be made to ensure this does not continue. A more ambitious hope for the present work would be that it helps stimulate the development of a broader research agenda in this arena that may in-

form international drug policy and criminal justice policy.

The present analysis suggested that, with some individual variation, criminal justice systems around the world were often characterised by their similarities rather than their differences in relation to the proportion of drug offenders. Overall, in 1994, the international mean for 'all drug offences' as a percentage of all offences was 7% of suspects, 7% of prosecutions, 6% of convictions, and 11% of prison admissions. In relation to the international mean in 1994, possession offences accounted for 73% of all drug related suspects, 53% of prosecutions, 47% of convictions, and 50% of prison admissions.²

Countries with proportions of drug offenders that differed significantly from the international mean were typically the exceptions that proved the rule. However, as such, they may prove worthy of further investigation. Strong international trends over time were identified: Statistically significant numbers of countries reported increasing drug offenders as a proportion of all offences between 1990 and 1994. This was almost but not entirely irrespective of the stage of the criminal justice system or the category of the drug offence. In light of the expansion of the illicit drug industry during the later 1980's and early 1990's this might not sound surprising to some, but it is important if only to confirm what many only suspected. The research may benefit greatly from pursuit of some of the avenues of investigation outlined above, such as the addition of further UNCJS surveys to allow the examination of possible changes in these trends. As such, the present work might best be viewed as a preliminary investigation in a largely undeveloped area of cross-national comparative drug policy and criminal justice research.

² Calculated as: (International mean percentage for all drug offences / International mean for possession offences) x 100

References

- Becker, G. S. 1998. 'How the US Handcuffed the Crime Rate' *Business Weekly*, 28th December.
- Bruun, K., L. Pan and I. Rexed. 1975. *The Gentlemen's Club: International Control of Drugs and Alcohol*. Chicago: The University of Chicago Press.
- Burnham, R.W. 1999. 'A short history of the collection of UN crime and justice statistics at the international level' in G. Newman (Ed.) *Global Report on Crime and Justice*, published for the United Nations Center for International Crime Prevention. New York, Oxford: Oxford University Press.
- Farrell, Graham. 1999. 'Drugs and drug control' in G. Newman (ed) *Global Report on Crime and Justice*, published for the United Nations Center for International Crime Prevention. Oxford and New York: Oxford University Press.
- Harvey, Linda; R.W. Burnham; Kathy Kendall; Ken Pease. 1992. Gender differences in criminal justice. *British Journal of Criminology*, 32 (2), 208-217.
- Kangaspunta, Kristiina; Matti Joutsen; Natalia Ollus (eds.) 1998a. *Crime and criminal justice systems in Europe and North America 1990-1994*. Monsey, NY: European Institute for Crime Prevention and Control; Criminal Justice Press.
- Kangaspunta, Kristiina, Matti Joutsen, Natalia Ollus and Sami Nevala (eds.) 1998b. *Profiles of Criminal Justice Systems in Europe and North America 1990-1994*. Monsey, NY: European Institute for Crime Prevention and Control; Criminal Justice Press.
- Keh, Douglas and Graham Farrell. 1997. 'Trafficking drugs in the global village' *Transnational Organized Crime*, 3, 2.
- Lynch, James. 1995. 'Crime in international perspective' in J.Q. Wilson and J. Petersilia (Eds.), *Crime*, San Francisco, ICS Press.
- Messner, Steven E. and Richard Rosenfeld. 1997. 'Political restraint of the market and levels of criminal homicide: a cross-national application of institutional-anomie theory' *Social Forces*, 74, 4, 1393-1416.
- Nalla, Mahesh K. and Graeme R. Newman. 1994. Crime in the U.S and the Former U.S.S.R.: a comparison of crime trends from the third United Nations Survey. *International Journal of Comparative and Applied Criminal Justice* 18 (1), pp. 85-94.
- Neapolitan, Jerome L. 1996. 'Cross-national crime data: some unaddressed problems' *Journal of Crime and Justice*, XIX, 1, 95-112.
- Newman, Graeme (ed.). 1999. *Global Report on Crime and Justice*. Published for the United Nations Center for International Crime Prevention. Oxford and New York: Oxford University Press.
- Newman, Graeme, and Greg Howard. 1999. 'Introduction: data sources and their use' in G. Newman (ed) *Global Report on Crime and Justice*, published for the United Nations Center for International Crime Prevention. Oxford and New York: Oxford University Press.
- Pease, Ken and Kristiina Hukkila. 1990. *Criminal justice systems in Europe and North America*. Helsinki Institute for Crime Prevention & Control publication no. 17. Helsinki, Finland.
- Pease, Ken and Andromachi Tseloni. 1994. 'Juvenile-adult differences in criminal justice: evidence from the United Nations Crime Survey' *Howard Journal of Criminal Justice*, 35, (1): pp. 40-60.

- Pease, Ken. 1994. 'Cross-national imprisonment rates: limitations of method and possible conclusions' *British Journal of Criminology*, 34, 116-130.
- Pietschmann, Thomas. 1997. 'Economic forces driving manufacture, trafficking and consumption of amphetamine-type stimulants' in H. Klee (Ed.) *Amphetamine Misuses: International Perspectives on Current Trends*. Switzerland: Harwood Press.
- Stares, Paul B. 1995. 'The Global Drug Phenomenon: Implications for Policy' in Georges Estievenart (Ed.) *Policies and Strategies to Combat Drugs in Europe*. Netherlands: Martinus Nijhoff. pp. 7-14.
- Tullis, LaMond. 1996. *Unintended Consequences: Illegal Drugs and Drug Policy in nine Countries*. UNRISD Studies of the Illegal Drug Trade. UNRISD.
- United Nations Asia and Far East Institute for the Prevention of Crime and Treatment of Offenders; Australian Institute of Criminology. 1995. *Crime Trends in Asia and the Pacific*. Tokyo, Japan.
- United Nations. 1991. *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1998*. New York: United Nations.
- United Nations International Drug Control Programme. 1997. *World Drug Report*. Oxford, UK: Oxford University Press.
- White House. 1999. *The National Drug Control Strategy 1999*. Washington DC.

Annex

Table 1: Types of Between-Country Variation in UNCJS Drug Data

Source of variation	Drug offence example
1. Legal definition	Country A and country B use different categories of drug weight to define possession and trafficking.
2. Legal terminology	Country A uses the term 'plea-bargain' but Country B does not.
3. Procedural difference	Country A defines prosecution of drug offences as only those cases that reach court. Country B defines prosecution as including warnings issued by the prosecutor.
4. Statistical classification	In both country A and country B, possession of drug paraphernalia is an offence. In the UNCJS report, country A includes these as possession offences but country B does not.
5. Counting rule	Country A counts drug offences. Country B counts drug offenders.
6. Comprehensiveness of statistics	Country A includes minor possession offences in its statistics but country B does not.
7. Absence of or Errors in counting	Country does not keep statistics, or does not keep or centrally collate accurate statistics.
8. Errors in reporting	Country reports its data incorrectly to UNCJS for various reasons (data does not exist; is not coordinated; is out of date; survey went to wrong respondent; clerical error).
9. Non-response	Country does not return the UNCJS questionnaire, or returns it incomplete.
10. Volume of drug offences	Differences in CJS reflect true differences in volume of drug offences
11. Criminal justice practice and procedure	Differences between stages reflect different practices at different stages, e.g. in likelihood of prosecuting a drug offence.
11. Difference in input to CJS	Country A has a greater proportional input of drug offences to its CJS than country B.
12. Legal practices	Country A prosecutes all drug offences but Country B does not.
13. Exogenous differences	Variation in CJS resources.
14. Other offences	Even if drug offences static, percentage of drug offences will increase if volume of other offences decreases.

Note: Much of this table is based on Joutsen (1998; 3-6).

Table 2a: International Medians and Means

		1990	1991	1992	1993	1994
Offences						
Table 3: Drug Possession Offences as Percent of Total Recorded Offences by Country	Mean	2.28	2.39	2.31	2.46	2.71
	Median	1.06	0.93	1.05	1.16	1.69
Table 4: Recorded Trafficking Offences as Percent of Total Recorded Offences by Country	Mean	1.66	1.97	2.11	2.04	1.93
	Median	0.34	0.31	0.38	0.47	0.49
Suspects						
Table 5: 'All Drug Offence' Suspects as Percent of Total Suspects by Country	Mean	5.45	7.46	6.83	7.64	6.90
	Median	1.92	3.68	3.79	4.85	5.55
Table 6: Drug Possession Suspects as Percent of Total Suspects by Country	Mean	3.66	4.66	3.75	4.32	5.02
	Median	1.45	2.53	2.55	3.22	3.99
Table 7: Drug Trafficking Suspects as Percent of Total Suspects by Country	Mean	1.58	1.97	1.91	1.77	2.01
	Median	0.57	0.60	0.91	1.18	1.13
Prosecutions						
Table 8: 'All Drug Offence' Prosecutions as Percent of Total Prosecutions by Country	Mean	7.32	6.09	7.36	7.86	7.31
	Median	1.32	1.48	1.75	2.60	2.62
Table 9: Drug Possession Prosecutions as Percent of Total Prosecutions by Country	Mean	4.17	4.32	3.77	4.98	3.90
	Median	1.19	1.52	1.23	1.58	3.10
Table 10: Drug Trafficking Prosecutions as Percent of Total Criminal Prosecutions by Country	Mean	1.43	1.47	1.46	1.49	3.07
	Median	0.38	0.56	0.96	1.01	1.33
Convictions						
Table 11: 'All Drug Offence' Convictions as Percent of Total Convictions 1990,1992 and 1994, Ranked for 1994	Mean	4.78	4.02	4.74	4.70	5.96
	Median	2.79	1.64	2.36	2.67	4.71
Table 12: Drug Possession Convictions as Percent of Total Convictions by Country	Mean	1.15	1.26	1.57	2.19	2.82
	Median	1.15	1.26	1.57	2.19	2.82
Prison Admissions						
Table 13: 'All Drug Offence' Prison Admissions as Percent of Total Prison Admissions by Country	Mean	8.85	10.32	10.07	11.10	10.98
	Median	5.87	7.11	6.12	7.03	10.37
Table 14: Drug Possession Prison Admissions as Percent of Total Prison Admissions by Country	Mean	4.83	5.01	4.86	5.55	5.51
	Median	3.18	4.06	3.55	4.75	3.60
Sentencing						
Table 16: 'All Drug Offence' Average Prison Sentenced Served (months) by Country	Mean	318		540		586
	Median	21		30		34
Table 17: Average Sentence Length (in months) for Drug Possession by Country 1990, 1992 and 1994	Mean	12		12		12
	Median	198		418		499
Table 18: Average Sentence Length (in Months) for Drug Trafficking by Country, 1990, 1992 and 1994	Mean	221		205		215
	Median	64		40		42

Table 2b: Sign-Test Results

	-ve	+ve	Ties	N	Prob (p=)
Offences: change 1990-1994					
Possession (Table 3)	7	26	3	36	.002** (z=-3.133)
Trafficking (Table 4)	12	29	1	42	.012* (z=-2.499)
Suspects: change in proportion 1990-1994					
All Drug Offences (Table 5)	11	33	0	44	.002** (z=-3.166)
Drug Possession (Table 6)	5	17	1	23	.017* (binomial)
Drug Trafficking (Table 7)	8	17	1	26	.108 (binomial)
Prosecutions: change in proportion 1990-1994					
All Drug Offences (Table 8)	11	27	0	38	.015* (z=-2.433)
Possession (Table 9)	5	10	2	17	.302
Trafficking (Table 10)	6	13	2	21	.167 (binomial)
Convictions: change 1990-1994					
All Drug Offences (Table 11)	10	30	0	40	.003** (z=-3.004)
Possession (Table 12)	3	11	0	14	.057 (binomial)
Prisons Admissions: change in proportion 1990-1994					
All Drug Offences (Table 13)	10	21	1	32	.072 (z=-1.796)
Possession (Table 14)	8	8	1	17	1.00 (binomial)
Between Stages, 1994					
Suspects to Prosecutions 1994: All drug	16	5	2	23	.027*
Suspects to Prosecutions 1994: Possession	6	1	0	7	.125
Suspects to Prosecutions 1994: Trafficking	5	4	1	10	1.00
Suspects to Convictions 1994: All drug	15	12	0	27	.70 (z=-.385)
Suspects to Convictions 1994: Possession	5	2	0	7	.453
Suspects to Admissions 1994: All drug	7	11	0	18	.481
Suspects to Admissions 1994: Possession	6	2	0	8	.289
Prosecutions to Convictions 1994: All drug	11	19	1	31	.201 (z=-1.278)
Prosecutions to Convictions 1994: Possession	3	8	0	11	.227
Prosecutions to Admissions 1994: All drug	8	11	0	19	.648
Prosecutions to Admissions 1994: Possession	2	6	0	8	.289
Convictions to Admissions 1994: All drug	9	10	0	19	1.00
Convictions to Admissions 1994: Possession	2	3	0	5	1.00

Notes to Table:

The '+ve', '-ve' and 'no difference' counts may differ marginally from the actual tables since six decimal places were used in the sign test analysis but only 2 decimal places are shown in the tables.

* significant at 0.05 level

** significant at 0.01 level

Table 2c: Statistical Deviants: Countries with Percent Values +/- 2 or more Standard Deviations from the International Mean.

Stage	Countries (s.d. value)
Possession Offences (Table 3)	Egypt (4.65); Malaysia (2.61)
Trafficking Offences (Table 4):	Egypt (4.11); Syria (4.94)
All Drug Offence Suspects (Table 5)	Western Samoa (3.60)
Possession Suspects (Table 6)	Denmark (2.62); Western Samoa (3.11)
Trafficking Suspects (Table 7)	Kyrgyzstan (3.16)
All Drug Offence Prosecutions (Table 8)	Sao Tome & Principe (5.26); United States of America (2.17)
Drug Possession Prosecutions (Table 9)	Hong Kong (3.64)
Drug Trafficking Prosecutions (Table 10)	Andorra (4.49)
All Drug Offence Convictions (Table 11)	Denmark (2.19); United States of America
Drug Possession Convictions (Table 12)	Denmark (2.22); Hong Kong (2.98)
All Drug Offence Admissions (Table 13)	Belgium (2.80); Germany (2.14); Italy (2.29)

Table 3: Recorded Drug Possession Offences as Percent of Total Recorded Offences by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Austria	0.69	0.77	1.04	1.49	1.90	18	-0.20
Belgium	.	.	.	.	1.12	27	-0.40
Bolivia	.	.	0.11	0.03	0.18	34	-0.65
Canada	1.30	1.00	1.07	1.12	1.29	23	-0.36
Chile	0.31	0.58	0.59	0.41	0.40	31	-0.59
Costa Rica	0.40	0.46	0.34	0.36	0.44	30	-0.58
Denmark	2.43	3.13	3.14	3.33	2.70	14	0.01
Ecuador	1.38	1.49	1.49	1.41	1.72	21	-0.24
Egypt	16.03	21.30	26.30	25.61	20.31	1	4.65
France	1.06	1.09	1.11	1.02	1.15	26	-0.39
Georgia	.	.	.	3.46	5.23	6	0.68
Hong Kong	3.98	3.19	1.64	3.43	4.19	8	0.41
Israel	9.02	9.76	6.42	5.38	5.39	5	0.72
Jamaica	7.33	7.91	6.60	7.25	7.32	4	1.23
Japan	0.35	0.37	0.39	0.41	0.38	32	-0.60
Kazakhstan	2.35	2.44	2.43	2.78	3.40	11	0.20
Kuwait	.	.	0.09	0.03	0.02	40	-0.69
Kyrgyzstan	0.03	0.05	0.06	0.04	0.10	37	-0.67
Macau	.	0.33	0.68	0.77	3.25	12	0.16
Madagascar	0.10	0.17	0.62	0.05	0.53	29	-0.56
Malaysia	14.86	13.83	12.51	11.86	12.58	2	2.61
Malta	1.23	0.85	0.67	0.78	2.56	15	-0.02
Marshall Islands	0.00	0.36	0.14	0.26	0.17	35	-0.65
Mauritius	2.31	1.79	2.91	3.20	3.78	9	0.30
Morocco	.	.	1.50	1.41	1.22	25	-0.38
Nicaragua	0.77	1.32	1.17	2.07	1.83	19	-0.22
Northern Ireland	0.36	0.42	0.80	1.09	1.66	22	-0.26
Qatar	0.20	0.09	.	0.13	.	36	-0.66
Rep Of Korea	0.00	0.00	0.00	0.00	0.00	41	-0.70
Rep Of Macedonia	0.05	0.03	0.05	0.07	0.10	38	-0.67
Rep Of Moldova	0.21	0.31	0.24	0.58	0.64	28	-0.53
Romania	0.00	0.00	0.00	0.00	0.00	42	-0.70
Scotland	1.22	1.42	1.56	2.29	2.49	16	-0.04
Singapore	1.54	1.64	2.50	3.01	3.12	13	0.12
Slovakia	0.00	0.00	0.02	0.02	0.05	39	-0.68
Slovenia	0.38	0.25	0.16	0.19	0.33	33	-0.61
Sweden	1.36	1.55	1.53	1.92	2.00	17	-0.17
Switzerland	3.65	4.37	6.16	7.74	8.95	3	1.66
Ukraine	1.74	2.51	2.93	4.48	4.68	7	0.53
Uruguay	0.81	0.85	0.80	1.37	1.81	20	-0.22
Western Samoa	5.76	4.00	1.50	1.19	3.54	10	0.23
Zambia	0.00	0.00	0.00	0.00	0.00	43	-0.70
Zimbabwe	1.27	1.29	1.17	1.27	1.23	24	-0.37
N	37	38	40	42	42	43	43
Mean	2.28	2.39	2.31	2.46	2.71		
Median	1.06	0.93	1.05	1.16	1.69		
Std. Deviation	3.79	4.27	4.59	4.41	3.82		3.80

Table 4: Recorded Trafficking Offences as Percent of Total Recorded Offences by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Austria	0.47	0.47	0.64	1.24	0.47	26	-0.30
Belgium	.	.	.	.	0.49	24	-0.30
Bolivia	.	.	0.49	0.24	0.03	43	-0.40
Canada	0.76	0.77	0.79	0.75	0.79	19	-0.24
Chile	0.15	0.20	0.18	0.13	0.15	38	-0.37
Costa Rica	0.48	0.58	0.38	0.51	0.49	25	-0.30
Denmark	0.21	0.20	0.19	0.18	0.16	37	-0.37
Ecuador	2.45	2.10	1.86	1.61	1.48	12	-0.09
Egypt	27.88	26.26	24.46	23.10	21.69	2	4.11
England & Wales	0.22	0.22	0.25	0.27	0.35	31	-0.33
France	0.21	0.21	0.22	0.23	0.22	36	-0.36
Georgia	.	.	.	0.48	1.08	16	-0.18
Hong Kong	0.11	0.19	0.50	0.82	1.10	15	-0.17
Israel	3.26	3.36	4.98	2.71	2.41	7	0.10
Italy	1.23	1.53	1.76	1.47	1.76	10	-0.04
Jamaica	3.51	5.69	6.17	5.73	3.85	5	0.40
Japan	0.02	0.01	0.01	0.01	0.01	44	-0.40
Kazakhstan	0.22	0.23	0.22	0.31	0.43	28	-0.31
Kuwait	.	.	1.98	2.32	1.82	9	-0.02
Kyrgyzstan	3.04	3.53	4.21	5.01	6.08	3	0.86
Macau	.	0.70	1.04	0.83	1.06	17	-0.18
Madagascar	0.26	1.01	0.42	0.82	2.46	6	0.11
Malaysia	1.14	1.13	1.05	1.03	1.04	18	-0.19
Malta	0.54	0.38	0.31	0.26	0.64	21	-0.27
Marshall Islands	0.41	0.00	0.00	1.54	0.00	46	-0.40
Mauritius	0.93	1.23	0.93	1.01	1.13	14	-0.17
Morocco	3.87	3.89	4.58	4.35	4.03	4	0.44
Nicaragua	0.11	0.25	0.22	0.21	0.26	34	-0.35
Northern Ireland	0.02	0.03	0.11	0.14	0.23	35	-0.35
Qatar	0.71	0.28	0.95	0.38	0.37	30	-0.32
Rep Of Korea	0.19	0.12	0.12	0.36	0.13	39	-0.37
Rep Of Macedonia	0.13	0.15	0.14	0.25	0.39	29	-0.32
Rep Of Moldova	0.04	0.04	0.05	0.12	0.11	41	-0.38
Romania	0.01	0.06	0.07	0.10	0.11	42	-0.38
Scotland	0.57	0.60	0.74	1.02	1.16	13	-0.16
Singapore	0.66	0.44	0.31	0.22	0.51	23	-0.30
Slovakia	0.00	0.00	0.02	0.01	0.01	45	-0.40
Slovenia	0.22	0.22	0.33	0.45	0.60	22	-0.28
Spain	1.56	1.85	2.02	1.86	1.72	11	-0.04
Sweden	0.80	1.01	0.91	1.48	0.76	20	-0.24
Switzerland	1.61	1.71	1.91	2.35	2.27	8	0.07
Syrian Arab Rep	10.92	23.24	28.60	26.88	25.72	1	4.94
Ukraine	0.18	0.31	0.13	0.21	0.29	32	-0.34
Uruguay	0.08	0.05	0.04	0.03	0.13	40	-0.37
Western Samoa	0.00	0.00	0.00	0.00	0.00	47	-0.40
Zambia	0.13	0.22	0.19	0.30	0.47	27	-0.30
Zimbabwe	0.24	0.25	0.31	0.35	0.28	33	-0.34
N	42	43	45	46	47	47	47
Mean	1.66	1.97	2.11	2.04	1.93		
Median	0.34	0.31	0.38	0.47	0.49		
Std. Deviation	4.55	5.24	5.53	5.13	4.81		4.81

Table 5: 'All Drug Offence' Suspects as Percent of Total Suspects by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Austria	2.11	2.48	3.37	4.85	5.53	25	-0.22
Azerbaijan	3.40	4.71	5.30	10.91	13.43	9	0.80
Bahamas	28.84	30.32	26.85	29.36	20.54	5	1.72
Belarus	0.61	0.82	1.01	1.33	1.44	32	-0.75
Canada	5.91	5.39	5.67	5.72	6.22	21	-0.13
Chile	0.91	1.43	1.34	1.18	1.25	35	-0.77
Columbia	16.36	19.68	21.97	27.74	22.27	2	1.94
Costa Rica	.	.	.	.	7.62	16	0.05
Croatia	0.29	0.52	0.60	0.81	1.05	37	-0.80
Cyprus	11.51	11.47	11.53	14.44	14.48	8	0.94
Denmark	.	25.17	24.29	25.64	21.64	4	1.86
Ecuador	19.13	18.97	18.20	15.48	18.83	6	1.50
Estonia	0.17	0.29	0.22	0.19	0.12	47	-0.92
Finland	0.88	1.48	1.11	1.98	2.76	29	-0.57
France	5.95	6.36	7.15	6.84	7.15	19	-0.01
Georgia	3.36	4.98	3.79	8.23	9.35	13	0.28
Greece	1.09	1.07	0.91	0.89	1.36	34	-0.76
Hong Kong	10.06	8.44	5.25	11.24	10.49	11	0.42
Hungary	0.04	0.04	0.09	0.20	0.22	42	-0.90
India	0.30	0.33	0.36	0.33	0.38	41	-0.88
Italy	6.94	7.94	8.44	6.25	6.75	20	-0.06
Jamaica	19.68	21.04	20.93	20.14	16.71	7	1.23
Japan	4.45	6.02	5.96	5.92	5.58	24	-0.21
Kazakhstan	4.18	4.50	4.89	5.53	6.17	22	-0.13
Kyrgyzstan	5.56	5.78	6.22	6.09	9.97	12	0.36
Latvia	0.40	0.35	0.45	0.48	0.89	38	-0.82
Lithuania	0.34	0.34	0.90	0.76	1.15	36	-0.78
Madagascar	1.24	3.38	2.77	1.75	7.40	18	0.02
Marshall Islands	0.41	0.36	0.14	1.80	0.17	46	-0.91
Mauritius	4.25	4.00	5.73	6.67	5.91	23	-0.17
Nicaragua	1.59	3.27	3.79	5.44	4.98	26	-0.29
Panama	.	21.72	.	.	.	3	1.87
Qatar	1.63	0.51	1.23	0.75	0.61	40	-0.85
Rep Of Korea	0.21	0.15	0.14	0.33	0.17	45	-0.91
Rep Of Macedonia	0.33	0.38	0.38	0.54	0.75	39	-0.83
Rep Of Moldova	1.03	0.59	0.79	1.15	1.42	33	-0.75
Romania	0.01	0.07	0.09	0.13	0.18	44	-0.91
Russian Federation	1.29	1.42	1.64	2.36	3.31	28	-0.50
Slovakia	0.03	0.04	0.00	0.00	0.19	43	-0.91
Slovenia	0.75	0.73	0.86	1.02	1.49	31	-0.74
Spain	8.93	9.73	10.99	9.67	8.74	14	0.20
Sweden	6.61	6.51	6.55	6.05	7.84	15	0.08
Syrian Arab Rep	9.63	9.10	9.72	4.36	4.92	27	-0.30
Turkey	1.73	1.41	1.18	1.09	1.75	30	-0.71
Ukraine	2.68	3.98	4.83	7.12	7.60	17	0.05
United States Of America	9.68	9.40	8.97	9.57	11.38	10	0.54
Western Samoa	35.19	76.53	60.91	71.43	35.11	1	3.60
N	44	46	45	45	46	47	47
Mean	5.45	7.46	6.83	7.64	6.90		
Median	1.92	3.68	3.79	4.85	5.55		
Std. Deviation	7.75	12.79	10.73	12.22	7.52		7.75

Table 6: Drug Possession Suspects as Percent of Total Suspects by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Austria	1.61	1.88	2.59	3.72	4.43	13	-0.13
Canada	3.77	3.10	3.24	3.22	3.69	15	-0.25
Chile	0.45	0.84	0.85	0.73	0.70	20	-0.76
Costa Rica	.	.	.	.	4.76	12	-0.07
Denmark	.	23.77	23.02	24.46	20.49	2	2.62
Ecuador	2.31	2.53	2.51	2.47	3.08	16	-0.36
France	4.61	5.06	5.57	5.30	5.58	10	0.07
Georgia	.	.	.	7.30	8.33	6	0.54
Hong Kong	9.77	7.93	3.96	9.22	8.03	7	0.49
Hungary	0.02	0.02	0.04	0.14	0.09	25	-0.87
Jamaica	13.30	12.24	10.82	11.25	11.02	3	1.00
Japan	1.45	1.94	2.07	2.15	2.02	18	-0.54
Kazakhstan	3.50	3.90	4.24	4.44	4.95	11	-0.04
Kyrgyzstan	0.02	0.01	0.00	0.00	0.10	24	-0.87
Madagascar	0.40	0.42	1.79	0.40	2.08	17	-0.53
Marshall Islands	0.00	0.36	0.14	0.26	0.17	22	-0.85
Nicaragua	1.38	2.79	3.21	4.81	4.30	14	-0.15
Panama	.	9.13	.	.	.	4	0.68
Qatar	0.24	0.07	0.00	0.15	0.00	27	-0.88
Rep Of Macedonia	0.07	0.06	0.08	0.09	0.11	23	-0.86
Rep Of Moldova	0.69	0.49	0.63	0.91	1.14	19	-0.69
Romania	0.00	0.00	0.00	0.00	0.00	26	-0.88
Slovenia	0.42	0.38	0.24	0.26	0.48	21	-0.80
Sweden	5.63	5.66	5.69	5.23	6.94	8	0.30
Ukraine	2.04	3.24	3.99	5.89	6.29	9	0.19
United States Of America	6.62	6.26	6.12	6.73	8.34	5	0.54
Western Samoa	25.93	24.49	9.09	8.79	23.40	1	3.11
N	23	25	24	25	26	27	27
Mean	3.66	4.66	3.75	4.32	5.02		
Median	1.45	2.53	2.55	3.22	3.99		
Std. Deviation	5.94	6.68	5.05	5.36	5.92		5.85

Table 7: Drug Trafficking Suspects as Percent of Total Suspects by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Austria	0.51	0.60	0.78	1.13	1.10	16	-0.43
Canada	2.14	2.29	2.44	2.50	2.53	9	0.15
Chile	0.20	0.29	0.25	0.23	0.26	23	-0.78
Costa Rica	.	.	.	.	2.86	7	0.29
Denmark	1.54	1.40	1.27	1.18	1.16	15	-0.41
Ecuador	4.12	3.58	3.13	2.83	2.66	8	0.21
France	1.34	1.31	1.58	1.55	1.57	13	-0.24
Georgia	.	.	.	0.93	1.01	17	-0.47
Hong Kong	0.29	0.52	1.29	2.02	2.46	11	0.12
Hungary	0.02	0.03	0.05	0.07	0.13	26	-0.83
Italy	6.94	7.94	8.44	6.25	6.75	2	1.88
Jamaica	6.38	8.80	10.11	8.89	5.79	4	1.49
Japan	0.08	0.09	0.08	0.07	0.08	27	-0.85
Kazakhstan	0.42	0.37	0.41	0.53	0.62	21	-0.63
Kyrgyzstan	5.54	5.77	6.22	6.09	9.88	1	3.16
Madagascar	0.84	2.96	0.98	1.35	5.32	5	1.29
Marshall Islands	0.41	0.00	0.00	1.54	0.00	28	-0.88
Nicaragua	0.21	0.48	0.58	0.63	0.67	19	-0.61
Panama	.	6.34	.	.	.	3	1.71
Qatar	1.38	0.44	1.23	0.59	0.61	22	-0.63
Rep Of Macedonia	0.26	0.33	0.31	0.44	0.64	20	-0.62
Rep Of Moldova	0.13	0.06	0.10	0.19	0.24	24	-0.78
Romania	0.01	0.07	0.09	0.13	0.18	25	-0.81
Slovenia	0.33	0.35	0.62	0.76	1.01	18	-0.47
Sweden	1.85	1.75	1.72	1.52	1.83	12	-0.13
Syrian Arab Rep	2.42	3.69	4.44	2.33	2.47	10	0.13
Ukraine	0.64	0.74	0.84	1.22	1.31	14	-0.35
United States Of America	3.06	3.14	2.84	2.84	3.04	6	0.36
Western Samoa	0.00	0.00	0.00	0.00	0.00	29	-0.88
N	26	27	26	27	28	29	29
Mean	1.58	1.97	1.91	1.77	2.01		
Median	0.57	0.60	0.91	1.18	1.13		
Std. Deviation	2.03	2.54	2.64	2.13	2.35		2.45

Table 8: 'All Drug Offence' Prosecutions as Percent of Total Prosecutions by County 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Andorra	31.65	27.22	16.50	31.07	35.83	3	1.88
Bahamas	28.84	30.32	26.85	29.36	20.54	4	0.85
Belarus	0.09	0.00	0.16	0.09	0.28	38	-0.51
Bermuda	22.00	18.32	17.58	14.39	15.76	6	0.53
Bulgaria	0.06	0.05	0.00	0.06	0.09	43	-0.53
Canada	.	.	.	.	5.17	17	-0.19
Columbia	0.92	1.16	1.65	1.35	0.92	31	-0.47
Croatia	0.27	0.43	0.35	0.44	0.64	32	-0.49
Cyprus	8.81	7.28	4.37	8.44	7.73	14	-0.01
Czech Rep	0.23	0.18	0.26	0.24	0.43	35	-0.50
Egypt	7.09	3.94	1.08	1.19	1.57	26	-0.43
El Salvador	.	.	9.40	9.40	9.41	11	0.10
England & Wales	1.43	1.40	1.36	1.29	1.64	25	-0.42
Estonia	0.17	0.29	0.22	0.19	0.12	42	-0.52
Finland	0.79	0.97	1.51	1.71	2.01	24	-0.40
Germany	5.03	5.81	5.86	5.54	5.60	15	-0.16
Hong Kong	10.61	7.13	3.16	5.70	13.48	7	0.37
Hungary	0.02	0.03	0.08	0.19	0.17	40	-0.52
India	0.23	0.28	0.32	0.34	0.40	37	-0.51
Indonesia	.	.	1.15	3.11	2.30	23	-0.38
Israel	13.99	13.12	12.91	12.91	12.79	8	0.33
Italy	5.62	7.01	6.67	4.56	4.61	19	-0.22
Japan	1.33	1.52	1.45	1.53	1.52	27	-0.43
Kazakhstan	1.32	2.44	1.93	1.30	1.35	29	-0.44
Latvia	0.44	0.44	0.43	0.53	1.07	30	-0.46
Mauritius	1.17	1.22	1.43	.	.	28	-0.44
Netherlands	4.42	.	.	4.77	4.28	20	-0.24
Northern Ireland	1.10	1.48	2.84	4.22	5.26	16	-0.18
Peru	.	.	3.72	2.82	2.94	22	-0.34
Portugal	2.26	2.97	2.61	3.89	4.90	18	-0.20
Rep Of Korea	0.35	0.25	0.21	0.30	0.45	34	-0.50
Rep Of Macedonia	0.33	0.40	0.29	0.35	0.55	33	-0.50
Russian Federation	1.30	1.56	1.85	2.38	3.08	21	-0.33
Sao Tome&Principe	38.89	0.00	80.49	78.69	86.00	1	5.26
Scotland	5.37	6.77	7.08	8.16	9.79	9	0.13
Singapore	5.65	5.34	6.73	6.60	8.33	13	0.03
Slovakia	0.02	0.02	0.07	0.11	0.09	44	-0.53
Slovenia	0.47	0.54	0.37	0.27	0.26	39	-0.52
South Africa	9.96	10.07	10.99	10.88	9.67	10	0.12
Sweden	7.66	7.46	7.81	9.30	9.25	12	0.09
Turkey	0.36	0.32	0.30	0.32	0.42	36	-0.50
United States Of America	41.46	41.32	42.82	40.18	.	2	2.17
Western Samoa	31.05	28.55	24.21	21.80	15.96	5	0.54
Yugoslavia	0.09	0.07	0.07	0.12	0.16	41	-0.52
N	40	39	42	42	42	44	44
Mean	7.32	6.09	7.36	7.86	7.31		
Median	1.32	1.48	1.75	2.60	2.62		
Std. Deviation	11.46	9.87	14.50	14.43	14.31		14.85

Table 9: Drug Possession Prosecutions as Percent of Total Prosecutions by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Andorra	25.29	21.36	14.01	28.02	5.64	8	0.43
Bulgaria	0.03	0.04	0.00	0.03	0.01	19	-0.75
Canada	.	.	.	.	3.38	10	-0.05
Denmark	6.66	10.70	9.34	9.77	7.33	2	0.78
England & Wales	1.04	0.96	0.86	0.83	1.10	13	-0.53
Germany	.	.	.	.	0.75	14	-0.60
Hong Kong	9.97	14.72	18.60	24.60	20.94	1	3.64
Italy	0.00	0.00	0.00	0.00	0.00	22	-0.76
Mauritius	0.96	1.00	1.23	.	.	12	-0.50
Northern Ireland	0.74	0.73	1.46	2.92	3.87	9	0.06
Peru	.	.	0.08	0.17	0.34	15	-0.68
Portugal	1.35	2.05	1.18	2.01	2.81	11	-0.17
Rep Of Macedonia	0.04	0.04	0.01	0.04	0.08	17	-0.74
Sao Tome&Principe	0.00	0.00	0.00	0.00	0.00	21	-0.76
Scotland	3.86	4.89	5.28	5.79	7.01	3	0.72
Singapore	3.00	3.45	5.20	5.54	6.43	4	0.59
Slovenia	0.26	0.31	0.17	0.14	0.05	18	-0.75
South Africa	7.64	7.66	8.32	7.98	6.33	5	0.57
Sudan	.	.	.	0.00	.	20	-0.76
Sweden	4.16	3.71	4.02	5.01	5.81	7	0.46
Turkey	0.11	0.09	0.11	0.12	0.17	16	-0.72
Western Samoa	9.96	5.96	1.80	1.58	5.91	6	0.49
N	18	18	19	19	20	22	22
Mean	4.17	4.32	3.77	4.98	3.90		
Median	1.19	1.52	1.23	1.58	3.10		
Std. Deviation	6.29	5.96	5.32	8.11	4.90		4.76

Table 10: Drug Trafficking Prosecutions as Percent of Total Criminal Prosecutions by County 1990-1994*

Country	1990	1991	1992	1993	1994	Rank	z1994
Andorra	6.36	5.86	2.48	3.05	30.20	1	4.49
Bulgaria	0.02	0.01	0.00	0.03	0.08	22	-0.47
Canada	.	.	.	.	1.55	11	-0.23
Chile	2.52	1.32	1.48	1.18	1.13	14	-0.30
Croatia	0.19	0.33	0.26	0.33	0.48	16	-0.41
England & Wales	0.40	0.44	0.50	0.46	0.54	15	-0.40
Georgia	0.47	1.58	0.96	0.96	3.25	6	0.05
Germany	.	.	.	.	4.85	3	0.31
Hong Kong	0.47	0.70	1.16	2.40	3.25	7	0.05
Italy	5.62	7.01	6.67	4.56	4.61	4	0.27
Kyrgyzstan	5.46	5.00	6.22	6.09	9.21	2	1.03
Mauritius	0.07	0.09	0.08	.	.	23	-0.47
Northern Ireland	0.36	0.75	1.38	1.29	1.39	12	-0.26
Peru	.	.	3.32	2.42	2.36	9	-0.10
Portugal	0.90	0.69	1.03	1.35	1.28	13	-0.28
Rep Of Macedonia	0.29	0.35	0.28	0.31	0.48	17	-0.41
Russian Federation	0.09	0.12	0.14	0.18	0.29	18	-0.44
Sao Tome&Principe	0.00	0.00	0.00	0.00	0.00	24	-0.49
Scotland	1.51	1.88	1.81	2.36	2.78	8	-0.03
Singapore	2.65	1.89	1.54	1.06	1.90	10	-0.17
Slovenia	0.21	0.22	0.20	0.14	0.20	20	-0.45
Sweden	3.49	3.75	3.78	4.22	3.42	5	0.08
Turkey	0.25	0.23	0.19	0.19	0.25	19	-0.45
Western Samoa	0.00	0.00	0.00	0.00	0.00	25	-0.49
Yugoslavia	0.09	0.07	0.07	0.12	0.16	21	-0.46
N	22	22	23	22	24	25	25
Mean	1.43	1.47	1.46	1.49	3.07		
Median	0.38	0.56	0.96	1.01	1.33		
Std. Deviation	2.03	2.05	1.90	1.70	6.16		6.06

*Data for Andorra in 1994 appears somewhat suspect and skews the international mean.

Table 11: 'All Drug Offence' Convictions as Percent of Total Convictions 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Andorra	9.16	9.40	9.92	14.86	20.24	3	1.84
Austria	1.58	1.95	2.31	3.49	4.71	23	-0.24
Azerbaijan	5.02	7.44	6.50	11.75	13.58	7	0.95
Belarus	0.73	0.81	1.12	1.27	1.51	29	-0.66
Bulgaria	0.06	0.03	0.00	0.06	0.09	44	-0.85
Canada	.	.	.	.	4.84	22	-0.22
Columbia	6.92	7.56	10.64	5.33	5.19	20	-0.17
Costa Rica	2.91	2.75	3.65	3.47	5.70	19	-0.10
Croatia	0.34	0.58	0.43	0.56	0.74	34	-0.77
Cyprus	10.08	7.79	5.42	9.60	9.27	13	0.37
Czech Rep	.	0.10	0.15	0.21	0.26	41	-0.83
Denmark	.	.	.	.	22.84	2	2.19
Egypt	0.43	0.27	0.30	0.41	0.38	39	-0.81
England & Wales	6.73	6.49	6.57	6.51	8.01	14	0.21
Estonia	0.23	0.10	0.46	0.11	0.14	42	-0.85
Finland	0.79	0.97	1.52	1.73	2.03	26	-0.59
Georgia	4.29	7.03	6.01	9.11	9.68	12	0.43
Germany	5.60	6.42	6.32	5.83	5.88	18	-0.08
Greece	0.79	0.84	0.99	1.14	1.22	32	-0.70
Hong Kong	3.77	3.43	2.36	6.08	15.96	6	1.27
Hungary	0.03	0.02	0.04	0.10	0.12	43	-0.85
Indonesia	0.08	0.04	0.06	0.12	0.68	36	-0.77
Israel	12.91	12.04	11.96	11.75	11.91	8	0.73
Italy	7.01	9.58	10.64	9.15	7.47	15	0.13
Japan	18.65	21.54	20.96	21.26	19.94	4	1.80
Latvia	0.52	0.46	0.42	0.41	0.56	37	-0.79
Lithuania	0.37	1.23	0.22	1.20	1.76	27	-0.63
Mauritius	.	1.14	1.30	.	.	31	-0.69
Myanmar	1.28	1.49	1.36	1.00	0.96	33	-0.74
Netherlands	3.61	3.80	3.76	4.86	5.07	21	-0.19
Northern Ireland	1.22	1.73	3.21	4.76	5.92	17	-0.07
Portugal	4.64	4.71	5.20	6.43	6.49	16	0.00
Qatar	3.19	1.35	3.34	1.64	1.75	28	-0.63
Rep Of Korea	1.39	0.68	0.48	0.71	0.74	35	-0.77
Rep Of Macedonia	0.38	0.49	0.52	0.48	0.48	38	-0.80
Rep Of Moldova	0.42	0.68	0.78	1.08	1.47	30	-0.67
Russian Federation	1.30	1.56	1.57	2.38	3.08	25	-0.45
Scotland	5.65	7.01	7.46	8.84	10.37	11	0.52
Slovakia	0.02	0.03	0.08	0.09	0.09	45	-0.85
Slovenia	0.35	0.52	0.39	0.24	0.27	40	-0.83
South Africa	11.20	11.40	12.44	12.25	10.98	10	0.60
Sudan	15.82	10.79	6.74	9.12	19.40	5	1.73
Sweden	2.79	2.87	2.93	2.67	3.62	24	-0.38
Switzerland	8.67	9.92	10.03	10.50	11.03	9	0.61
United States Of America	35.08	.	33.47	.	.	1	3.61
N	41	42	43	41	43	45	45
Mean	4.78	4.02	4.74	4.70	5.96		
Median	2.79	1.64	2.36	2.67	4.71		
Std. Deviation	6.67	4.67	6.39	5.01	6.35		7.47

Table 12: Drug Possession Convictions as Percent of Total Convictions by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Austria	1.04	1.26	1.44	2.21	2.89	10	-0.33
Canada	.	.	.	.	3.51	9	-0.25
Costa Rica	0.13	0.21	0.69	0.58	1.34	13	-0.54
Denmark	.	.	.	.	21.35	2	2.22
England & Wales	5.10	4.80	4.54	4.52	5.89	6	0.08
Germany	.	.	.	.	0.74	16	-0.63
Greece	0.60	0.65	0.70	0.77	0.76	15	-0.62
Hong Kong	18.97	24.54	26.70	32.63	26.88	1	2.98
Latvia	.	.	.	.	0.12	17	-0.71
Mauritius	.	0.96	1.21	.	.	14	-0.56
Northern Ireland	0.82	0.85	1.70	3.44	4.49	7	-0.11
Portugal	2.82	2.35	2.12	1.10	2.01	12	-0.45
Rep Of Macedonia	0.02	0.02	0.00	0.08	0.06	20	-0.72
Russian Federation	1.15	1.40	1.42	2.16	2.75	11	-0.35
Scotland	4.26	5.33	5.79	6.52	7.83	4	0.35
Slovakia	0.02	0.01	0.07	0.09	0.09	18	-0.72
Slovenia	0.16	0.31	0.16	0.08	0.07	19	-0.72
South Africa	8.87	8.98	9.76	9.32	7.46	5	0.30
Switzerland	3.31	4.04	3.44	3.49	3.87	8	-0.20
United States Of America	12.97	.	12.37	.	.	3	0.98
N	15	15	16	14	18	20	20
Median	1.15	1.26	1.57	2.19	2.82		
Grouped Median	1.15	1.26	1.57	2.19	2.82		
Std. Deviation	5.55	6.30	6.91	8.46	7.39		7.24

Table 13: 'All Drug Offence' Prison Admissions as Percent of Total Prison Admissions by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Belgium	31.26	29.11	32.72	36.59	41.41	1	2.80
Bermuda	14.52	15.65	13.08	17.62	13.53	11	0.18
Brunei Darussalam	8.92	8.42	10.00	15.73	11.17	16	-0.04
Canada	0.58	0.85	0.89	.	.	36	-1.00
Cyprus	7.85	7.78	4.92	4.64	4.34	28	-0.68
Denmark	5.23	5.53	5.52	6.25	6.25	22	-0.50
Egypt	0.74	0.58	0.44	0.23	0.52	38	-1.03
El Salvador	4.46	4.06	3.76	5.23	5.44	25	-0.57
England & Wales	1.96	1.77	2.19	2.22	2.23	32	-0.87
Georgia	.	.	17.79	11.97	10.85	18	-0.07
Germany	.	34.42	.	.	.	3	2.14
Greece	7.38	12.36	11.52	18.73	12.88	13	0.12
Guyana	3.21	2.58	3.37	2.65	2.94	31	-0.81
Hong Kong	18.17	18.22	19.23	24.05	27.22	4	1.47
Indonesia	0.29	0.28	0.23	0.34	0.64	37	-1.02
Italy	33.82	36.80	27.26	35.15	36.03	2	2.29
Jamaica	19.87	23.16	19.50	17.82	21.28	7	0.91
Japan	13.12	13.87	13.33	12.63	11.09	17	-0.04
Liechtenstein	.	.	.	5.93	.	23	-0.53
Macau	.	.	.	.	11.67	15	0.01
Madagascar	22.93	22.93	21.93	22.51	20.96	8	0.88
Malta	3.32	3.28	3.01	7.03	10.76	19	-0.08
Marshall Islands	0.00	0.00	0.00	0.00	0.00	39	-1.08
Mauritius	8.03	8.27	7.84	10.22	12.87	14	0.12
Northern Ireland	0.38	0.53	0.76	3.03	4.80	26	-0.63
Panama	12.37	18.69	6.71	17.84	18.29	9	0.63
Rep Of Korea	1.91	2.43	2.74	4.14	4.47	27	-0.66
Rep Of Macedonia	3.04	2.66	4.36	3.59	3.63	30	-0.74
Rep Of Moldova	0.58	0.96	0.99	0.98	1.29	33	-0.96
Scotland	2.71	3.14	3.26	3.53	4.24	29	-0.69
Singapore	7.64	7.12	8.84	8.96	10.37	20	-0.11
Slovenia	0.49	0.50	0.76	0.85	1.08	35	-0.98
South Africa	14.10	14.26	15.20	14.70	13.10	12	0.14
Sudan	5.87	7.10	4.21	6.05	5.67	24	-0.55
Sweden	.	8.66	8.39	7.84	8.73	21	-0.27
Turkey	2.40	1.51	0.84	1.07	1.28	34	-0.96
United States Of America	.	.	25.28	.	.	6	1.29
Western Samoa	26.72	33.33	31.95	30.42	16.27	10	0.44
Zambia	8.21	.	29.87	27.90	27.09	5	1.46
N	33	34	36	35	35	39	39
Mean	8.85	10.32	10.07	11.10	10.98		
Median	5.87	7.11	6.12	7.03	10.37		
Std. Deviation	9.28	10.85	9.97	10.34	10.08		10.67

Table 14: Drug Possession Prison Admissions as Percent of Total Prison Admissions by Country 1990-1994

Country	1990	1991	1992	1993	1994	Rank	z1994
Bermuda	7.90	4.52	4.60	6.20	3.60	12	-0.37
Egypt	3.58	3.40	2.85	5.77	3.54	13	-0.38
El Salvador	4.24	3.86	3.57	4.97	4.90	9	-0.12
Georgia	.	.	7.18	4.97	4.54	10	-0.19
Greece	2.67	4.95	3.53	3.78	2.56	17	-0.56
Hong Kong	12.43	13.21	15.26	19.47	22.04	1	3.11
Kuwait	.	8.49	11.70	16.47	16.94	2	2.15
Madagascar	3.08	2.44	2.94	3.17	3.31	15	-0.42
Malta	1.42	0.96	0.14	1.49	1.74	19	-0.72
Marshall Islands	0.00	0.00	0.00	0.00	0.00	22	-1.05
Nicaragua	.	.	2.92	4.27	3.54	14	-0.38
Panama	5.66	6.54	2.21	7.14	3.06	16	-0.47
Scotland	1.64	2.26	2.70	3.35	3.76	11	-0.34
Singapore	3.18	4.06	5.36	4.75	6.17	8	0.12
Slovenia	0.08	0.20	0.47	0.53	0.43	21	-0.97
South Africa	11.17	11.23	11.93	11.19	8.90	4	0.63
Sudan	2.09	2.04	1.57	0.24	2.07	18	-0.66
Sweden	.	6.88	6.32	6.20	6.72	5	0.22
Turkey	1.09	0.46	0.25	0.40	0.49	20	-0.95
United States Of America	.	.	6.40	.	.	7	0.16
Western Samoa	11.34	8.08	4.15	3.33	6.51	6	0.18
Zambia	10.52	11.66	10.90	8.81	10.91	3	1.01
N	17	19	22	21	21	22	22
Mean	4.83	5.01	4.86	5.55	5.51		
Median	3.18	4.06	3.55	4.75	3.60		
Std. Deviation	4.22	4.02	4.23	5.04	5.43		5.30

Table 15: 'All Drug Offences' Average Prison Sentenced Served (months) by Country 1990-1994

	1990	1992	1994	Rank	z1994
Australia	.	.	33	8	-0.28
Columbia	66	66	78	3	-0.25
Egypt	3196	5981	7564	1	3.47
Hong Kong	19	12	14	11	-0.28
Jamaica	12	.	11	12	-0.29
Kuwait	.	192	264	2	-0.16
Marshall Islands	0	0	0	14	-0.29
Netherlands	35	37	43	6	-0.27
Sudan	15	21	21	9	-0.28
Sweden	.	17	16	10	-0.28
Switzerland	10	10	10	13	-0.29
Turkey	60	60	60	4	-0.26
U.S.	21	23	35	7	-0.27
Zambia	60	60	60	5	-0.26
N	11	12	14	14	14
Mean	318	540	586		
Median	21	30	34		
Std. Deviation	954.92	1714.26	2009.38		2009.38

Table 16: Average Sentence Length (in months) for Drug Possession by Country 1990, 1992 and 1994

	1990	1992	1994	Rank	z1994
Australia	.	.	30	4	-0.27
Columbia	36	36	36	3	-0.27
Egypt	1860	4426	5793	1	3.33
Hong Kong	4	4	5	12	-0.28
Jamaica	8	.	.	9	-0.28
Kuwait	.	48	48	2	-0.26
Mauritius	6	4	3	13	-0.29
Sudan	12	12	12	6	-0.28
Switzerland	8	8	8	10	-0.28
Turkey	12	12	12	7	-0.28
U.S.	11	11	8	11	-0.28
Western Samoa	24	24	24	5	-0.27
Zambia	.	12	12	8	-0.28
N	10	11	12	13	13
Mean	198	418	499		
Median	12	12	12		
Std. Deviation	584.02	1329.40	1667.16		1601.96

Table 17: Average Sentence Length (in Months) for Drug Trafficking by Country, 1990, 1992 and 1994

	1990	1992	1994	Rank	z1994
Australia	.	.	38	7	-0.34
Columbia	96	96	96	4	-0.23
Egypt	1336	1555	1771	1	3.00
Hong Kong	32	31	42	6	-0.33
Kuwait	.	48	84	5	-0.25
Mauritius	120	120	120	3	-0.18
Sudan	3	9	9	10	-0.40
Switzerland	12	13	14	9	-0.39
Turkey	144	144	144	2	-0.14
U.S.	22	25	37	8	-0.34
Zambia	.	10	6	11	-0.40
N	8	10	11	11	11
Mean	221	205	215		
Median	64	40	42		
Std. Deviation	453.79	476.79	519.26		518.26