# CRIME AND JUSTICE Bulletin



Contemporary Issues in Crime and Justice

Number 54

February 2001

### What Causes Crime?

#### Don Weatherburn

It is difficult to find a succinct, broad and non-technical discussion of the causes of crime. This bulletin provides a brief overview, in simple terms, of what we know about those causes. After presenting some basic facts about crime, the bulletin is divided into three main sections. The first looks at the factors which makes some individuals more likely to become involved in crime than others. The second looks at the factors which make some places (neighbourhoods, cities) more crime-prone than others. The third looks at the factors which make crime rates rise and fall over time. The conclusion of the bulletin highlights both the multiplicity of factors which influence crime and the need for a wide range of strategies in preventing it.

#### INTRODUCTION

The NSW Bureau of Crime Statistics and Research is often asked for information on the causes of crime. This is a complex topic and it is difficult to obtain a succinct, broad and non-technical discussion of it from any published source. Indeed, some criminologists claim there are no causes of crime, at least as the term 'cause' is normally understood.

Whatever the merits of this view there is little purpose to be served in exploring it at length when the task at hand is simply to provide basic information about crime to people who have only a passing acquaintance with criminological research and theory. The purpose of this bulletin is to give a brief overview in simple terms of what we know about the causes of crime. Inevitably the information presented here will tend to oversimplify the issues involved. Readers interested in a deeper understanding of crime are urged to read the material referred to throughout the discussion which follows.

The organisation of the bulletin is as follows. First we briefly explain what we mean when we say some factor or other is a 'cause' of crime. Then we present some basic facts on crime important in

understanding what causes it. In the third section we discuss factors which make certain individuals more prone to involvement in crime than others. In the fourth we discuss factors which make certain areas or neighbourhoods more crime-prone than others. In the fifth and final section we discuss some factors which influence trends in crime over time.

#### PRELIMINARY ISSUES

#### WHAT DO WE MEAN BY CAUSE?

Most people assume that, if an event or condition 'causes' some effect, then the effect invariably follows the event or condition. This picture of causation is unhelpful when dealing with crime. The factors or conditions which criminologists regard as causing criminal behaviour do not invariably result in it. Instead, to a greater or lesser extent, they increase the *risk* of criminal behaviour. The more risk factors an individual has, the greater the risk of their involvement in crime.

Criminologists sometimes express this point by saying that risk factors for crime are *cumulative* in their effect. (There are also factors which *protect* an individual

from involvement in crime. These, too, are cumulative in their effect.)

Much criminological research involves trying to determine whether a particular factor increases the risk of involvement in crime when other possible risk factors are controlled (i.e. held constant). Of course, the discovery of a statistical association between some factor and crime never provides any guarantee that the factor in question causes crime, even when attempts have been made to control for other relevant factors. Identifying the causes of crime is never easy or certain. Research can only hope to eliminate some factors from consideration and strengthen our confidence in the role played by other factors. Naturally, as research continues to be conducted, our picture of crime constantly changes. The factors identified in this bulletin as causes of crime have been identified on the basis of research evidence. Our confidence in their importance must be regarded as provisional, nonetheless.

One common problem in popular discussions of crime is a tendency to confuse the search for causes with a search for blame. To say that child neglect increases the risk of delinquency or that alcohol abuse

increases the risk of domestic violence is not to say that parents are to blame for delinquency or that alcohol abuse is to blame for domestic violence.

Judgements of blameworthiness are moral judgements. In this bulletin we are not concerned with who is to blame for crime or who should be held accountable for it. We are only concerned with what causes it.

#### PROXIMATE AND DISTAL CAUSES

Much of the debate about what causes crime (sometimes even in scholarly circles) arises because of failure to attend to the distinction between proximate and distal causes of crime. Proximate causes are those which immediately precede criminal behaviour. Distal causes are those which are more remote (though not necessarily less influential or important). One proximate cause of involvement in crime is association with delinquent peers. Some have argued that association with delinquent peers is caused by weak parent-child attachment. If this argument is accepted, association with delinquent peers can be seen as a proximate cause of involvement in crime and weak parent-child attachment a distal cause. This situation is depicted diagrammatically in Figure 1.

If the causal relationship depicted in Figure 1 exists, there is no point asking whether weak parent-child attachment or delinquent peer influence is a cause of crime. Both cause crime because both are part of a common causal chain leading to crime.

The distinction between distal and proximate causes is relative rather than absolute. What, in one context, appears to be a distal cause of involvement in crime can, in another, be thought of as a proximate cause. Some criminologists, for example, argue that parents often fail to develop strong emotional bonds to their children when they (the parents) are exposed to economic stress. This situation is depicted in Figure 2.

If this argument is accepted, economic stress can be thought of as a distal cause of involvement in crime, with weak parent-child attachment being a more proximate cause. What constitutes a distal or a proximate cause of crime depends upon which part of the chain of causes leading to crime is under discussion.

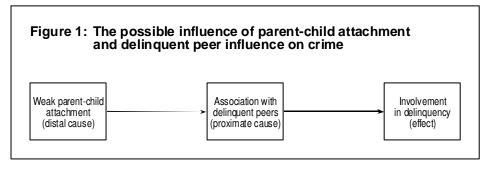
#### **CAUSES OF WHAT?**

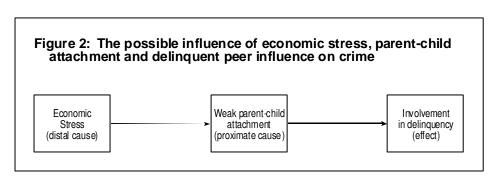
It seems straightforward to ask what causes crime. But the question is not always as simple as it appears.

Depending on the context, it might mean (1) What prompts individuals to get involved in crime? (2) Why do certain individuals offend more frequently than others? (3) Why do some individuals remain in crime longer than others? (4) Why are some offences more common than others? (5) Why are certain areas more crime-prone than others? or (6) Why is crime higher at some time periods than others?

Different sets of factors may be implicated in the answers to each of these questions. Family factors may be the main reason individuals get involved in crime but drug dependence may be the main distinguishing factor between those who offend frequently and those who offend only occasionally. Individuals may commit robbery to raise cash to purchase illicit drugs but robbery rates may be more prevalent in some areas because of the greater supply of attractive commercial targets (e.g. banks). Physical violence toward children may be a major cause of their becoming violent as adults, but the growth in particular kinds of adult violence may be attributable to the availability of dangerous weapons. In asking what causes crime we need to be clear about the precise question we are trying to answer.

The term 'crime' is, itself, potentially misleading. It encompasses everything from non-payment of parking fines to armed robbery or murder. In this bulletin we are referring, for the most part, to the more serious sorts of offences for which people are commonly brought to court. These typically include theft offences of one sort or another, violent offences, sexual offences, driving offences and drug offences. There are certain kinds of offences, sometimes called 'white collar' crime, which can only be committed by people in certain positions (e.g. insider trading, transfer pricing, illegal dumping of toxic waste). Much of what we say here probably does not apply to these kinds of offences. The same applies to minor forms of crime, such as parking illegally.





### SOME IMPORTANT FACTS ABOUT CRIME

There are a few basic facts about crime which are important to an understanding of its causes.

#### AGE AND GENDER

Males are more likely to commit crime than females, at least where serious crime is concerned.1 The ratio of male to female participation in crime varies by offence but one recent Australian study found ratios averaging around 2:1.2 Crime, however, is pre-eminently a preoccupation of the young, whether male or female. Estimates of the average age of onset of involvement in crime vary from study to study. Most estimates range between 12 and 16 years<sup>3</sup> but it is possible to predict involvement in crime at much younger ages than this.4 The prevalence of involvement in crime typically rises from late adolescence, reaches a peak in the late teenage years and then begins to decline.5

#### **CRIMINAL CAREERS**

The vast majority of young people who get involved in crime commit just a few offences and then desist.6 In NSW, for example, about 70 per cent of the juveniles who appear in the Children's Court never return.7 Surveys of school students indicate that a significant percentage of the high school population become involved in crime. In one recent study conducted in New South Wales, annual participation rates in crime ranged from 4.7 per cent for motor vehicle theft up to 29 per cent for assault. The typical frequency of offending over the course of a year, however, is just one or two offences.8

Most juveniles stop committing crime without the need for any kind of formal intervention but a small proportion of offenders remain involved in crime well into their forties. Most persistent adult offenders generally start offending as adolescents. For this reason, studies of factors which precipitate juvenile involvement in crime are helpful in

understanding adult crime. Not surprisingly, persistent offenders account for a disproportionate amount of all crime. In one classic study conducted in Philadelphia, for example, 6 per cent of a cohort of boys born in 1945 accounted for 52 per cent of the cohort arrests. Similar findings have been reported in studies of juvenile offending in Australia. Generally speaking, those who start early in crime tend to finish late. There is considerable evidence that juveniles who remain involved in crime commit more serious offences as they age.

For most offenders, versatility, rather than specialisation, is the norm. That is, most offenders commit a wide range of offences rather than concentrating on one particular type of crime. This is not the same thing as saying that someone who commits a theft is just as likely to commit a murder. Rather, those who are arrested for a specific offence or asked whether they have committed it, have generally also been arrested for or readily admit to committing a wide range of other offences.<sup>13</sup> This means that factors influencing onset of involvement in a particular form of crime often have considerable relevance to the onset of involvement in other forms of crime.

### CRIME-PRONE INDIVIDUALS

#### **BIOLOGICAL FACTORS**

Cesare Lombroso first popularised the idea that criminal tendencies are inherited. His views on the topic lacked any credible empirical support at the time he advanced them and the idea that criminal propensities were inherited fell into disfavour for the better part of the 20th century. 14

It was revived in the 1970s with the discovery of the XYY chromosome. In the wake of this discovery there were suggestions that men with the extra Y chromosome are especially violent. Scholarly reviews of the evidence at the time failed to support this conjecture. <sup>15</sup> A later study provided some evidence that

those with the XYY chromosome are more likely to have an arrest record than those without such a chromosome. However no difference between the two groups was found in relation to arrests for violent crime. More importantly, the vast majority of males involved in crime do not have an extra Y chromosome. This factor, therefore, is at best only of marginal relevance to our understanding of crime.

Further evidence of a genetic propensity toward involvement in crime comes from studies examining twins or non-twin siblings who have been adopted out into different families at or soon after birth. Twin studies generally find that both members of a monozygotic (i.e. identical) twin pair are more likely to be involved in crime than both members of a diszogotic (i.e. fraternal) twin pair. The results of several adoption studies have also shown that there is greater similarity in the criminal histories of sons and their natural fathers than between sons and their adoptive fathers.<sup>17</sup>

Such evidence is consistent with the idea that genetic factors make a contribution to the risk of involvement in crime. However there are two reasons why it cannot be taken as definitive. One is that the method of selecting twins for separated twin studies has sometimes inflated the chance that both will be found to have an arrest record.18 Another is that the interaction between children and their adopted parents may itself increase the risk of later involvement in crime. Thus, while there is some statistical evidence consistent with the possibility that there may be inherited factors in crime, that evidence is also open to interpretation in ways which do not implicate genetic factors.19

#### **FAMILY FACTORS**

Factors associated with or indicative of inadequate parenting are among the strongest predictors of juvenile involvement in crime. Our confidence that certain kinds of parenting behaviour or family environment increase the risk of juvenile involvement in crime is strengthened by crime prevention

research. If poor parenting truly increases the risk of involvement in crime, it should be possible to reduce that risk by improving the quality of parenting. Experiments designed to do just this have proved uniformly successful.<sup>20</sup>

The parenting factors known to be related to delinquency can be usefully grouped into four categories.21 In the first category are factors associated with parental neglect (eg. large family size, poor parental supervision, inadequate parent-child interaction). In the second category are factors associated with parental conflict and discipline (eg. abuse or nagging, harsh, erratic or inconsistent discipline). In the third are factors associated with deviant (parental) behaviours and attitudes (eg. parental criminality, parental violence or tolerance of violence). In the fourth are those associated with family disruption (eg. chronic spousal conflict or marriage break-up).

Strong independent relationships have been found between factors in all four of these categories and juvenile involvement in crime. As a general rule, factors associated with neglect are among the strongest predictors, factors associated with deviant parental attitudes and values and family conflict are of intermediate strength and factors associated with family disruption are the weakest predictors.<sup>22</sup> As might be expected, the children of families with several risk factors, whether from the same or different categories, are more likely to become involved in crime than the children of families with just one or two risk factors.23

### SCHOOL PERFORMANCE AND INTELLIGENCE

Whether crime is measured through self-reported or officially recorded offending, offenders are nearly always found to be less intelligent, on average, than non-offenders.<sup>24</sup> The interpretation of this evidence has been the subject of vigorous dispute.

Some maintain that having a low intelligence quotient (IQ) directly increases the risk of involvement in crime because it limits a person's ability to appreciate the consequences of their actions.25 Others argue that the association between low IQ and involvement in crime stems from the fact that those with a low IQ generally do more poorly at school.26 Poor school performance is known to be a strong predictor of involvement in crime. Children with lower academic performance are more likely to offend, more likely to offend frequently, more likely to commit more serious offences and more likely to persist in crime.27 These relationships can be found even when socioeconomic status (SES) and prior conduct problems have been controlled.28

Studies examining the joint effect of IQ and school performance on crime, however, usually find that it is school performance which ceases to be significant.29 This could mean that poor school performance is only associated with delinquency because those who do poorly at school are generally less intelligent. However interventions which succeed in improving school performance have been shown to reduce the level of involvement in crime.30 Since interventions which improve school performance are unlikely to exert much influence on intelligence, this suggests that school performance does exert a causal influence on delinquency. At this stage the separate contributions of IQ and school performance to delinquency are not well understood.

#### **TRUANCY**

Truancy is another very strong predictor of involvement in crime although, here too, there is room for debate over how to explain the association.

Juveniles who truant generally do poorly at school. It is possible that truancy is associated with delinquency only because of its association with poor school performance. There is some

evidence, however, that truancy remains associated with juvenile involvement in crime, even when controlling for school performance.<sup>31</sup> Whether it remains significant after controlling for other relevant developmental factors is less clear. One reason for thinking that truancy may an important proximate cause of juvenile involvement in crime is that juveniles who truant are exposed to a range of criminal opportunities they would not encounter (or be able to take advantage of) while under the supervision and surveillance of school authorities.

# THE INFLUENCE OF DELINQUENT PEERS

It has been known for a long time that young people who associate with delinquent peers are much more likely to get involved in crime.<sup>32</sup> When the importance of family factors first came to be appreciated, some criminologists argued that delinquent peer influence exerted little or no influence on participation in crime.<sup>33</sup> The strong association between having delinquent peers and being involved in crime was dismissed as a case of 'birds of a feather flocking together'.

More recent research suggests that family factors and delinquent peer influence interact in their effects on delinguency. Most studies examining the joint effect of family factors and delinguent peer influence find that family factors appear to exert little or no influence on the risk of involvement in crime in the presence of controls for delinquent peer influence.34 It would appear, however, that juveniles are most likely to form strong attachments to delinquent peers when parental controls or parental attachments are weak.35 This suggests that parental factors may be a distal cause of involvement in crime. association with delinquent peers being a proximate cause.

It used to be thought that juveniles who mix with delinquent peers are more at risk of involvement in crime simply because delinquents communicate deviant attitudes and values. Recent

research indicates that contact with offenders is important for another reason. The successful commission of many kinds of crime requires a certain measure of knowledge and skill. Delinquents are a valuable source of information about various techniques and opportunities for committing and/or profiting from crime.<sup>36</sup> Gang membership, in particular, often provides a valuable source of information about how to reduce the risk and increase the income associated with crime.<sup>37</sup>

#### POVERTY AND UNEMPLOYMENT

Most studies examining the relationship between poverty, unemployment and crime have examined crime rates in areas marked by poverty and unemployment rather than rates of participation in crime by individuals who are poor and/or unemployed. The trouble with this kind of research is that, on its own, it cannot tell us whether it is the poor and unemployed who are committing crime. The tendency to draw unwarranted inferences about who is involved in crime from information about the characteristics of crime-prone places is sometimes referred to as the ecological fallacy.

Studies which have examined the experiences of particular individuals generally find that individuals at the lower end of the socioeconomic status scale are more likely to participate in crime.<sup>38</sup> There are some notable exceptions to this rule<sup>39</sup> but, generally speaking, they involve crime which is relatively minor in nature.<sup>40</sup>

Since crime frequently leads to arrest and imprisonment and this, in turn, reduces an individual's employment prospects,<sup>41</sup> it is possible to argue that crime leads to poverty and unemployment rather than vice versa. The only reliable way to determine the causal direction of the relationship is to conduct a longitudinal study to see whether crime follows or precedes exposure to poverty and unemployment. Generally speaking, longitudinal studies tend to find that low socioeconomic status individuals are more likely to

become involved in crime.<sup>42</sup> A similar pattern of findings has been obtained in relation to longitudinal studies of unemployment.<sup>43</sup> At least one major longitudinal study has also found evidence that individuals who are already prone to involvement in crime offend more frequently during periods of unemployment.<sup>44</sup>

Poverty and unemployment are usually thought to cause crime because they motivate people to offend as a means of overcoming their disadvantage. More recent research has highlighted other possibilities. Parents exposed to economic or social stress have been found to be more at risk of inadequate parenting practices, such as neglect, poor supervision and inconsistent, erratic discipline. As we saw earlier, these parental behaviours increase the risk of juvenile involvement in crime.45 lt is possible, then, that social and economic stress act as important distal influences on crime, their effects being mediated by family factors. This possibility is supported by empirical evidence.46

#### SUBSTANCE ABUSE

There are several convergent lines of evidence suggesting that alcohol consumption, at least in certain circumstances, directly increases the risk of criminal violence. Firstly, alcohol has been shown in behavioural experiments to increase aggression.<sup>47</sup> Secondly, heavy drinkers are more likely to report committing alcohol-related violent offences than light drinkers or non-drinkers.<sup>48</sup> Thirdly, criminal assaults tend to cluster around licensed premises.<sup>49</sup> Fourthly, areas with high rates of alcohol consumption tend to have high rates of violence.<sup>50</sup>

The influence of illicit drugs on crime attracts more media attention than the influence of alcohol but it is actually more complex. Many people who commit crime also consume illicit drugs. Unlike alcohol, however, there is little evidence that drugs such as heroin, cocaine and marijuana exert any direct

pharmacological effect on an individual's propensity to engage in crime. In any event, the onset of involvement in crime usually *precedes* illicit drug consumption.<sup>51</sup> This has led some to argue that illicit drug taking and crime are just different manifestations of deviant behaviour rather than being causally related. The fact that many early family precursors to involvement in crime are identical with those which precede illicit drug use lends credence to this view.

In fact illicit drug consumption almost certainly does cause crime but not by driving large numbers of otherwise lawabiding people into crime. The influence of illicit drug consumption stems from two sources. Firstly, many individuals already involved in crime commit far more offences once they become drugdependent. This is because offenders addicted to expensive illicit drugs usually commit higher rates of property crime to fund their addiction.52 Secondly, there is some evidence that competition among drug suppliers for control of illicit drug markets occasionally prompts them to engage in violence toward each other.53

#### PUBLIC TOLERANCE OF CRIME

Juveniles involved in crime generally evince attitudes and values favourable to law-breaking.<sup>54</sup> This, perhaps, is hardly surprising. The role of attitudes and values as distal factors in the commission of crime, however, is not always so obvious. Though there appears to have been little direct research conducted on the issue, certain stereotypic attitudes in relation to race or gender may indirectly facilitate the commission of crime.

Domestic violence is a good illustration of this point. In 1999 nearly 15,000 apprehended violence orders were taken out by women in New South Wales. Women killed by their male spouses in New South Wales make up approximately 16 per cent of all the State's homicides.<sup>55</sup> No doubt many factors account for the high level of

violence against women by men. One contributing factor, however, is probably the high level of public tolerance toward violence against women. Despite the fact that domestic violence is a criminal offence, nearly twenty per cent of the Australian population, in one survey, reported that they could see circumstances when such violence would be acceptable.<sup>56</sup>

It would not be surprising if tolerance of violence by an individual lowers the threshold for their involvement in violent behaviour. Public tolerance of law breaking, however, is almost certainly not confined to domestic violence. There is evidence that it is a contributing factor to insurance fraud<sup>57</sup> and the receipt of stolen goods.<sup>58</sup> Tax evasion and drink-driving are two other areas where it may figure as a distal influence on crime.

#### **CRIME-PRONE PLACES**

#### A PRELIMINARY ISSUE

It is much harder to measure and monitor the factors which lead to crime-prone communities than it is to monitor the factors which lead to crime-prone individuals. As a result, the causes of crime-prone neighbourhoods or communities are nowhere near as well understood as those concerning individual involvement in crime.

It is natural to assume that crime-prone places are simply those where large numbers of crime-prone individuals reside. Even if this were true it would beg the question of why large numbers of crime-prone individuals reside in particular neighbourhoods. In fact the suggestion that areas are rendered crime-prone because crime-prone individuals reside there is only partly true. As we shall see shortly, sometimes neighbourhoods are rendered crimeprone simply because they contain attractive commercial or residential targets or criminal opportunities which attract both resident and non-resident offenders.

### INEQUALITY, POVERTY AND UNEMPLOYMENT

Poverty, 59 unemployment 60 and income inequality<sup>61</sup> have all consistently been found to render areas crime-prone. The effects of poverty and unemployment are not surprising. As we saw earlier, poverty and unemployment increase the risk of individuals becoming involved in crime. The effect of income inequality on crime requires further comment since it is a characteristic of areas rather than of people. High levels of income inequality exist in an area when there are large differences in household income among residents of the area. Income inequality can exist at a neighbourhood level or at a State or national level.

Three different but not mutually inconsistent explanations for the effect of income inequality on crime have been put forward. On one account, income inequality motivates individuals to offend because it creates a sense of relative deprivation amongst those who are poor. 62 According to a second, inequality causes crime in an area because it brings those motivated to offend in close spatial contact with attractive targets for crime.63 According to a third, the effect of inequality on crime stems from the fact that high levels of inequality result in poverty becoming concentrated in certain areas. Since children from poor households are at higher risk of involvement in crime, the spatial concentration of poverty brings actual and potential offenders into more frequent contact with each other. This further increases the rate of involvement in crime.64 The explanation of the effect of inequality on crime may vary according to whether the inequality exists at a neighbourhood level or at a regional or national level.

#### **CRIMINAL OPPORTUNITY**

Economic and social disadvantage are not the only factors which make areas crime-prone. Offenders commit more crime when there are more opportunities and incentives for committing it. The tendency of certain places or locations to stimulate crime can be gauged from the fact that, in one study of 326,000

calls to the police, 50 per cent of the calls were found to come from just 3 per cent of the city's addresses.<sup>65</sup>

A host of factors can create opportunities or incentives for crime. These include lax physical security, <sup>66</sup> lax personal security, <sup>67</sup> lax law enforcement or a low perceived risk of apprehension, <sup>68</sup> high levels of alcohol consumption, <sup>69</sup> open illicit drug markets, <sup>70</sup> attractive commercial or residential targets <sup>71</sup> and easy opportunities for selling or disposing of stolen goods. <sup>72</sup>

### WEAK INFORMAL SOCIAL CONTROLS

Closely related to the issue of criminal opportunity is what some have called 'informal social control'. Loosely speaking, this term refers to the capacity of a community or neighbourhood to police itself. Informal social control occurs, for example, when residents of a neighbourhood are willing to confront juveniles engaging in vandalism, report truancy to school authorities or play an active role in supervising teenage social activity.

Areas with reduced levels of informal social control have been found to have higher rates of crime and violence.73 Precisely why this is so is unclear. Some argue that factors such as high levels of population mobility (i.e. population turnover), the spatial concentration of disadvantage and the exclusion of particular races or social groups from civic life render an area crime-prone by eroding informal social controls in the area.74 It is possible, however, that crime and lack of informal social control are simply two sides of the one coin produced by population mobility, spatial concentration of disadvantage and racial or social exclusion.

#### GANGS AND ORGANISED CRIME

Neighbourhoods (at least in Australia) are normally made crime-prone by the fact that large numbers of residents (or visitors) independently engage in crime. Sometimes, however, the crime problems of an area are magnified by

the emergence of gangs or other kinds of criminal groupings and/or organisations. This problem tends to be exaggerated by the Australian media, sections of which seem to depict every gathering of young people as a threat to law and order. Though there has been no formal study of the problem, it is doubtful that criminal gangs are anywhere near as common in Australia as they are in the United States. This said, there is no doubt that some gangs in Australia are deeply involved in criminal activity.

The underlying causes of this problem are not well understood, although the existence of a strong local market for drugs often plays a part. The existence of strong illegal markets for sex and stolen goods probably also plays a role. The factors which influence the creation of gangs may, nevertheless, not be entirely monetary. It has been suggested by some that economic and social marginalisation tempts young people to form gangs as a means of conferring the social status on themselves unobtainable from conventional society.

Whatever the origins of gangs and other forms of organised crime, the crime problems they generate are often qualitatively distinct from those generated by neighbourhoods which simply have a large number of individuals more or less independently involved in crime. Competition for control of illicit drug markets, for example, can result in violence. intimidation, extortion, money laundering and official corruption.77 Organised gangs may come to completely dominate drug production or distribution78 and sometimes involve themselves in other large scale criminal enterprises, such as fraud.79

#### LAX/INSUFFICIENT LAW ENFORCEMENT

Politicians and journalists sometimes attribute crime problems in particular locations to lax or insufficient law enforcement. Surprisingly, there is a paucity of good research on the effect

which regional variations in arrest rates have on crime. The problem in conducting good research is that it is difficult to sort out whether higher levels of police activity produce low crime rates or vice versa. The second possibility would occur if, for example, high levels of crime strained the capacity of police services to arrest offenders. This would create a situation where arrest rates were low relative to crime rates even if they exerted no effect on them.

The few studies which have attempted to determine the direction of the causal relationship between arrest rates and crime generally find that the higher level of police activity, the lower the crime rate.80 The scale of the effect, however, appears to vary depending upon a range of factors. Pro-active policing (e.g. targeting repeat offenders) appears to be more likely to reduce crime than reactive policing.81 High rates of arrest appear to be more effective in small to medium sized cities than in large cities.82 High arrest rates also appear to be more effective where there is a plentiful supply of legitimate work than where there is not.83 Finally, for some groups of offenders and offences (e.g. unemployed males who commit domestic violence), increasing the arrest rate can increase crime.84

#### **CRIME-PRONE TIMES**

So far we have examined the causes and correlates of crime-prone individuals and crime-prone places. But what produces changes in crime levels over time? Any and all of the factors we have just reviewed are potential candidates. Unfortunately research which seeks to explain trends in crime over time has produced even fewer clear-cut answers than research on crime-prone places. Our treatment of the problem will therefore be rather more brief than our treatment of crime-prone individuals and places.

#### **SHORT-TERM INFLUENCES**

When seeking an explanation for crime trends it is useful to distinguish between

factors which produce variations in crime levels over the short term (e.g. just a few months) and factors which produce variations in crime levels over the long term (e.g. several years).

The factors which produce short-run changes in crime are less well understood than those which affect crime over the long run. There are also many factors which probably produce short-run changes in crime levels but which have, unfortunately, received little or no research attention. For example, police often highlight the impact which the release of a crime-prone offender from prison or a change in the willingness of courts to refuse bail have on local area crime rates. Despite their importance we know little about these things.

Research has uncovered pronounced variations in rates of assault85 and homicide<sup>86</sup> by time of day, day of week and month of year. These variations probably arise as a result of changes in the opportunities for crime or changes in the patterns of interaction between potential victims and offenders. Furthermore, while the relationship between unemployment and crime trends is far from settled, there is evidence to suggest that increases in unemployment temporarily elevate rates of property crime.87 Decreases in personal consumption (e.g. expenditure on consumer goods) have also been found to temporarily elevate rates of property crime.88 In each of these last two cases the effects have been attributed to a tendency on the part of individuals to turn to crime (or spend more time committing it) in response to difficult economic circumstances.

A range of factors also exert short-term effects on violent crime. Unemployment appears to increase homicide rates, <sup>89</sup> perhaps because of the frustration it engenders. Overall levels of violent crime, at least in some countries, are closely related to levels of beer consumption. <sup>90</sup> This is probably because alcohol, in some circumstances at least, appears to stimulate aggressive behaviour. Finally, while most research

examining the relationship between the weather and crime is far from definitive, there is consistent evidence of a link between daily temperature and assault rates. 91 This may be because hot weather reduces a person's tolerance to frustration or because hot weather simply brings motivated offenders and potential victims into more frequent contact with one another (e.g. at outdoor social events).

#### LONG-TERM INFLUENCES

Since most crime involves the theft of material goods, one would expect crime trends over the long-term to be closely related to factors which measure the demand for or supply of those goods. The available evidence strongly supports this conjecture.<sup>92</sup>

Drug use trends provide another frequently cited source of influence on crime trends. Australia has experienced a rapid growth in the number of dependent heroin users over the last twenty years.93 The growth has been accompanied by increased levels of crime, particularly robbery.94 These observations, while suggestive, do not provide conclusive evidence that drug use plays an important role in shaping long-term trends in crime. The conclusion that it does, however, is supported by strong evidence that drug dependence significantly increases individual rates of offending.95

One frequently overlooked influence on long-term crime trends is the age structure of the population. Because crime is overwhelmingly committed by people in the age range 15-24, we would expect crime to increase with the number of people in this population age range. There is evidence that it does, although the effects are less pronounced than many criminologists first thought.<sup>96</sup>

A wide range of other factors have been implicated as influences on long-term crime trends. These include the increased availability of firearms, <sup>97</sup> increased rates of family breakdown, <sup>98</sup> a growth in the ratio of children to adults, <sup>99</sup>

higher levels of geographic mobility<sup>100</sup> and higher rates of female participation in the labour force.<sup>101</sup> At this stage, the interpretation of evidence linking these factors to long-term crime trends remains, like so much else, the subject of considerable debate.

# SUMMARY AND CONCLUSION

We know a good deal more about patterns and causes of individual involvement in crime than about the factors which create crime-prone places. However we also know a good deal more about the factors which create crime-prone places than about the factors which influence trends in crime over time.

There is no single factor or set of factors which causes an individual to become involved in crime. Being criminal is not like having a disease. Most people at some stage in their lives commit crime of some sort, even if it involves nothing more serious than driving above the speed limit. A significant proportion of teenagers will commit relatively serious offences (e.g. break and enter) yet most of them will desist from crime without the need for any formal intervention.

The risk and depth of involvement in crime is strongly influenced by the quality of parenting to which children are subjected. Poor parent-child attachment, poor parental supervision and inconsistent, erratic discipline all increase the risk of involvement in crime. So too, do parents who model deviant attitudes and values. The impact of family break-up and family conflict, while still significant, appears to be less important than the factors just mentioned. So far as young people themselves are concerned, poor school performance, association with delinquent peers and alcohol consumption increase the risk of involvement in crime. Illicit drug consumption appears to significantly increase the amount of crime committed by those who do become criminally active.

As with individuals, places can be rendered crime-prone by a variety of factors. The most common characteristics of crime-prone neighbourhoods are poverty, unemployment and income inequality. In areas characterised by these problems one frequently finds a breakdown in the level of informal social control exercised by local residents against people who threaten to commit crime. Crime also tends to become concentrated at particular locations where there are increased opportunities or incentives for committing crime. Sometimes these opportunities give rise to gangs and/or other criminal organisations which further exacerbate crime, both locally and elsewhere.

Crime rises or falls over time in response to a wide variety of factors. Economic factors (e.g. unemployment) appear to play an important role in shaping trends in property crime. Alcohol consumption and unemployment appear to influence levels of violent crime. Other potential influences on overall levels of crime include the availability of firearms, rates of family breakdown, the percentage of sole parent families living in poverty, levels of geographic mobility and the percentage of females in the labour force. The interpretation of these findings is the subject of much dispute.

Because crime is not the result of any single factor or combination of factors, it makes no sense to seek to control crime by any single strategy or set of strategies. A mix of strategies will always be appropriate. The emphasis on particular strategies should vary according to the nature of the crime problem at hand, the available options for influencing the problem and the urgency with which change is required. Governments anxious to maximise their control over crime are better off trying to influence as many factors as possible, rather than concentrating all their efforts on one or two factors.

#### NOTES

- 1 Blumstein, A., Cohen, J., Roth, J.A. & Visher, C.A. 1986, 'Criminal Careers and Career Criminals,' vol. 1, National Academy Press, p. 40.
- 2 Baker, J. 1998, Juveniles in Crime Part 1: Participation Rates and Risk Factors, NSW Bureau of Crime Statistics and Research, Sydney.
- 3 Le Blanc, M. & Loeber, R. 1998, 'Developmental Criminology Updated', in Crime and Justice: An Annual Review of Research, vol. 23, ed. M. Tonry, University of Chicago Press, Chicago, pp. 115-198.
- 4 White, J.L., Moffit, T.E., Earls, F., Robins, L. & Silva, P.A. 1990, 'How early can we tell?: Predictors of childhood conduct disorder and adolescent delinquency', *Criminology*, vol. 28, no. 4, pp. 507-528.
- 5 Farrington, D. 1986, 'Age and Crime', in Crime and Justice: An Annual Review of Research, eds M. Tonry & N. Morris, vol. 7, University of Chicago Press, Chicago, pp. 189-250.
- 6 Coumarelos, C. 1994, Juvenile Offending: Predicting Persistence and Determining the Cost-effectiveness of Intervention, NSW Bureau of Crime Statistics and Research, Sydney.
- 7 ibid, p. 7.
- 8 Baker, op. cit., p. 25.
- 9 Wolfgang, M.E., Figlio, R.M. & Sellin, T. 1972, *Delinquency in a Birth Cohort*, The University of Chicago Press, Chicago.
- 10 Coumarelos, op. cit., p. 7.
- 11 Blumstein, A., Farrington, D.P. & Moitra, S. 1985, 'Delinquency careers: Innocents, Desisters and Persisters', in *Crime and Justice: An Annual Review of Research*, vol. 6, eds M. Tonry & N. Morris, The University of Chicago Press, Chicago, pp. 187-219.
- 12 Blumstein, Cohen, Roth & Visher, op. cit., p. 84.
- 13 Gottfredson, M.R., & Hirschi, T. 1990, A General Theory of Crime, Stanford University Press, Stanford, p. 91.
- 14 Vold, G.B. & Bernard, T.J. 1986, Theoretical Criminology, Oxford University Press, Oxford, p. 37.
- 15 Brennan, P.A. Mednick, S.A. & Volavka, J. 1995, 'Biomedical Factors in Crime', in Crime, eds J.Q. Wilson and J. Petersilia, ICS Press, San Francisco, pp. 65-90.
- 16 ibid., p. 89.
- 17 ibid., p. 68.
- 18 ibid., p. 74.
- 19 Gottfredson & Hirschi, op. cit., pp. 53-61.

- 20 Yoshikawa, H. 1994, 'Prevention as Cumulative Protection: Effects of early family support and education on chronic delinquency and its risks', *Psychological Bulletin*, vol. 115, pp. 28-54.
- 21 Loeber, R. & Stouthamer-Loeber, M. 1986, 'Family Factors as Correlates and Predictors of Juvenile Conduct Problems and Delinquency', in *Crime and Justice:* An Annual Review of Research, vol. 7, eds M. Tonry & N. Morris, The University of Chicago Press, Chicago, pp. 29-149.
- 22 ibid., p. 120.
- 23 Stouthamer-Loeber, M. & Loeber, R. 1988, 'The Use of Prediction Data in Understanding Delinquency', *Behavioural Sciences and the Law*, vol. 6, no. 3, pp. 333-354.
- 24 Blumstein, Cohen, Roth & Visher, op. cit., p. 50.
- 25 Herrnstein, R.J. & Murray, C. 1996, The Bell Curve, Simon and Schuster, New York, p. 241.
- 26 Hirschi, T., & Hindelang, M.J., 1977, 'Intelligence and delinquency: A revisionist view', American Sociological Review, vol. 42, pp. 571-587.
- 27 Maguin, M. & Loeber, R. 1996, 'Academic Performance and Delinquency', in *Crime* and Justice: An Annual Review of Research, vol. 20, ed. M. Tonry, The University of Chicago Press, Chicago, pp. 145-264.
- 28 ibid., p. 248.
- 29 ibid., p. 248.
- 30 ibid., p. 247.
- 31 Baker 1998, op. cit., p. 44.
- 32 Glueck, S. & Glueck, E.T. 1950, *Unravelling Juvenile Delinquency*, Harvard University Press, Cambridge.
- 33 Hirschi, T. 1969, Causes of Delinquency, University of California Press, California, p. 140.
- 34 Elliott, D.S., Huizinga, D. & Ageton, S.S. 1985, Explaining Delinquency and Drug Use, Sage Publications, Beverley Hills, California.
- 35 Warr, M. 1993, 'Parents, peers and delinquency', *Social Forces*, vol. 72, no. 1, pp. 247-264.
- 36 Bruinsma, G.J.N., 1992, 'Differential association theory reconsidered: An extension and its empirical test', *Journal of Quantitative Criminology*, vol. 8, no. 9, pp. 29-49.
- 37 Klein, M.W. 1995, 'Street Gang Cycles', in Crime, eds J.Q. Wilson & J. Petersilia 1995, op. cit.
- 38 Larzelere, R.E. & Patterson, G.R. 1990, 'Parental management: Mediator of the effect of socioeconomic status on early delinquency', *Criminology*, vol. 28, no. 2, pp. 301-323.

- 39 Belknap, J. 1989, 'The economics-crime link', *Criminal Justice Abstracts*, March, pp. 140-157.
- 40 Braithwaite, J. 1988, *Crime, Shame and Reintegration*, Cambridge University Press, Cambridge.
- 41 Fagan, J. & Freeman, R.B. 1999, 'Crime and Work', in *Crime and Justice: An Annual Review of Research*, ed. M. Tonry, vol. 25, The University of Chicago Press, Chicago, pp. 225-290.
- 42 Thornberry, T.P. & Farnworth, M. 1982, 'Social correlates of criminal involvement: further evidence on the relationship between social status and criminal behaviour', American Sociological Review, vol. 47, pp. 505-518.
- 43 Fagan & Freeman, op. cit.
- 44 Farrington, D.P., Gallagher, B., Morley, L., St. Ledger, R.J. & West, D.J. 1986, 'Unemployment, school leaving, and crime', *British Journal of Criminology*, vol. 26, no. 4, pp. 335-356.
- 45 Elder, G.H., Van Nguyen, T. & Caspi, A. 1985, 'Linking family hardship to children's lives', *Child Development*, vol. 56, pp. 361-375.
- 46 Larzelere & Patterson, op. cit.
- 47 Boynum, D. & Kleiman, M.A.R. 1995, 'Alcohol and Other Drugs', in *Crime*, eds J.Q. Wilson & J. Petersilia, ICS Press, San Francisco 1995, pp. 295-326.
- 48 Makkai, T. 1998, Alcohol Disorder in the Australian Community: Part 2- Perpetrators, Trends and Issues in Crime and Criminal Justice no. 77, Australian Institute of Criminology, Canberra.
- 49 Jochelson, R. 1997, Crime and Place: An Analysis of Assaults and Robberies in Inner Sydney, NSW Bureau of Crime Statistics and Research, Sydney.
- 50 Stevenson, R.J. 1996, The Impact of Alcohol Sales on Violent Crime, Property Destruction and Public Disorder, NSW Bureau of Crime Statistics and Research, Sydney.
- 51 Dobinson, I. & Ward, P. 1985, *Drugs and Crime*, NSW Bureau of Crime Statistics and Research, Sydney.
- 52 Stevenson, R.J. & Forsythe, L.M.V. 1998, The Stolen Goods Market in New South Wales, NSW Bureau of Crime Statistics and Research, Sydney.
- 53 Kleiman, M.A.R. 1992, *Against Excess: Drug Policy for Results*, BasicBooks,
  Harper Collins, New York.
- 54 Hirschi, T. 1969, *Causes of Delinquency*, University of California Press, California.
- 55 Devery, C. 1992, Domestic Violence in NSW: A Regional Analysis, NSW Bureau of Crime Statistics and Research, Sydney.

- 56 Mugford, J. 1989, Domestic Violence, Violence Today, no. 2, National Committee on Violence, Australian Institute of Criminology, Canberra.
- 57 KPMG, 1995, 1995 Fraud Survey, KPMG, Sydney, (copy obtainable from the author).
- 58 Allen, J. 2000, Community Survey of Willingness to Receive Stolen Goods, Crime and Justice Bulletin no. 51, NSW Bureau of Crime Statistics and Research, Sydney.
- 59 Belknap, op.cit.
- 60 Chiricos, T. 1987, 'Rates of crime and unemployment: An analysis of aggregate research evidence', Social Problems, vol. 34, no. 2, pp. 187-212.
- 61 Fowles, R. & Merva, M. 1996, 'Wage inequality and criminal activity: An extreme bounds analysis for the United States 1975-1990', *Criminology*, vol. 34, no. 2, pp. 163-182.
- 62 Blau, J. & Blau, P. 1982, 'The cost of inequality: metropolitan structure and violent crime', *American Sociological Review*, vol. 47, pp. 114-129.
- 63 Sampson, R.J. & Lauritsen, J.L. 1990, 'Deviant lifestyles, proximity to crime, and offender-victim link in personal violence', *Journal of Research in Crime and Delinquency*, vol. 27, no. 2, pp. 110-139.
- 64 Weatherburn, D. & Lind, B. 2001, Delinquent-prone Communities, Cambridge University Press, Cambridge.
- 65 Sherman, L.W. 1995, 'Hot spots of crime and criminal careers of places', in *Crime* and *Place*, eds J.E. Eck and D. Weisburd, Criminal Justice Press, The Police Executive Research Forum, Washington, D.C., pp. 35-52.
- 66 Eck, J.E. 1995, 'A general model of the geography of illicit retail marketplaces', in Eck & Weisburd, op. cit., pp. 67-94.
- 67 Sampson, R.J. & Lauritsen, J.L. 1990, op. cit.
- 68 Sherman, L.W. 1992, 'Police and crime control', in *Crime and Justice: An Annual Review of Research*, vol. 15, eds M. Tonry & N. Morris, University of Chicago Press, Chicago, pp. 159-230.
- 69 Stevenson, op. cit.
- 70 Weisburd, D., & Green, L. 1995, 'Policing drug hot spots: the Jersey City Drug Market Analysis Experiment', *Justice Quarterly*, vol. 12, no. 4, pp. 711-735.
- 71 Smith, D.A. & Jarjoura, G.R. 1989, 'Household characteristics, neighbourhood composition and victimisation risk', Social Forces, vol. 68, no. 2, pp. 6-32.
- 72 Stevenson & Forsythe, op. cit.
- 73 Sampson, R.J., Raudenbush, S.W. & Earls, F. 1997, 'Neighbourhoods and violent crime: A multilevel study of collective efficacy', *Science*, vol. 277, pp. 918-924.
- 74 ibid.

- 75 Maxson, C.L. 1995, Street Gangs and Drug Sales in Two Suburban Cities, National Institute of Justice Research Brief, September, US Department of Justice, Washington D.C.
- 76 Cloward, R.A. & Ohlin, L.E. 1960, Delinquency and Opportunity: A Theory of Delinquent Gangs, The Free Press, New York.
- 77 Stares P.B. 1996, Global Habit: The Drug Problem in a Borderless World, Brookings Institution, Washington, DC.
- 78 Klein, M.W. 1995, 'Street Cycle Gangs', in *Crime*, eds J.Q. Wilson and J. Petersilia, op. cit. pp. 217-236.
- 79 Levi, M. 1998, 'Organising plastic fraud; enterprise criminals and the sidestepping of fraud prevention', *The Howard Journal*, vol. 37, no. 4, pp. 423-438.
- 80 Marvell, T.B. & Moody, C.E. 1996, 'Specification problems, police levels, and crime rates', *Criminology*, vol. 34, no. 4, pp. 609-646.
- 81 Abrahamse, A.F., Ebener, P.A., Greenwood, P.W., Fitzgerald, N. & Kosin, T.E., 1991, 'An experimental evaluation of the Phoenix repeat offender program', Justice Quarterly, vol. 8, no. 2, pp. 141-168.
- 82 Brown, D.W. 1978, 'Arrest rates and crime rates: when does a tipping effect occur?', Social Forces, vol. 57, no. 2, pp. 671-682.
- 83 Nagin, D. 1998, 'Criminal deterrence at the outset of the twenty-first century', in *Crime* and Justice: A Review of Research, vol. 23, ed. M. Tonry, The University of Chicago Press, Chicago, pp. 1-42.
- 84 Pate, A.M. & Hamilton, E.E. 'Formal and informal deterrents to domestic violence: The Dade County spouse assault experiment', American Sociological Review, vol. 57, pp. 691-698.
- 85 Devery, C. 1992, Mapping Crime in Local Government Areas: Assault and Break and Enter in Waverley, NSW Bureau of Crime Statistics and Research, Sydney.
- 86 Nguyen da Huong, M. & Salmelainen, P. 1992, Family, Stranger and Acquaintance Homicide in New South Wales, NSW Bureau of Crime Statistics and Research, Sydney.
- 87 Chiricos, op.cit.
- 88 Field, S. 1999, Trends in Crime Revisited, Home Office Research Study 195, Home Office, London.
- Kapuscinski, C.A., Braithwaite, J. & Chapman, B. 1998, 'Unemployment and crime: Toward resolving the paradox', Journal of Quantitative Criminology, vol. 14, no. 3, pp. 215-241.
- Field, S. 1990, Trends in Crime and their Interpretation: A Study of Recorded Crime in England and Wales, Home Office Research Study 119, HMSO, London.

- 91 Cohn, E.G. 1990, 'Weather and crime', British Journal of Criminology, vol. 30, no. 1, pp. 51-62.
- 92 Hale, C. 1998, 'Crime and the business cycle in post-war Britain revisited', *British Journal of Criminology*, vol. 38, no. 4, pp. 681-698.
- 93 McKetin, R., Hall, W., Darke, S., & Dietze, P. 1999, *Drug Trends Bulletin*, May, National Drug and Alcohol Research Centre, Sydney.
- 94 Australian Bureau of Statistics 1999, Recorded Crime Australia, Australian Bureau of Statistics, catalogue no. 4510.0, Canberra.
- 95 Stevenson & Forsythe, op. cit.
- 96 Levitt, S.D. 1999, 'The limited role of changing age structure in explaining aggregate crime rates', *Criminology*, vol. 37, no. 3, pp. 581-597.
- 97 Blumstein, A. & Rosenfeld, R. 1998, 'Explaining recent trends in US homicide rates', *Journal of Criminal Law and Criminology*, vol. 88, no. 4, pp. 1175-1216.
- 98 Schuerman, L. & Kobrin, S. 1986, 'Community Careers in Crime', in *Crime and Justice: An Annual Review of Research*, vol. 8, eds A.J. Reiss (jnr) & M. Tonry, The University of Chicago Press, pp. 67-100.
- 99 ibid.
- 100 ibid.
- 101 Kapuscinski et al., op. cit.

# Other titles in this series

No. 20	Adult Sexual Assault in NSW
No. 21	Trends in Homicide 1968 to 1992
No. 22	Women as Victims and Offenders
No. 23	Why does NSW have a higher imprisonment rate than Victoria?
No. 24	Household Break-ins and the Market for Stolen Goods
No. 25	The Limits of Incapacitation as a Crime Control Strategy
No. 26	Women in Prison
No. 27	Risk Management in Assembling Juries
No. 28	Crime Perception and Reality: Public Perceptions of the Risk of Criminal Victimisation in Australia
No. 29	Methadone Maintenance Treatment as a Crime Control Measure
No. 30	Measuring Trial Court Performance: Indicators for Trial Case Processing
No. 31	'Home Invasions' and Robberies
No. 32	Young People and Crime
No. 33	Child Neglect: Its Causes and its Role in Delinquency
No. 34	Aborigines and Public Order Legislation in New South Wales
No. 35	Anabolic Steroid Abuse and Violence
No. 36	Hung Juries and Majority Verdicts
No. 37	Crime Trends in New South Wales: The Crime Victim Survey Picture
No. 38	Mental Health and the Criminal Justice System
No. 39	Measuring Crime Dispersion
No. 40	Are the courts becoming more lenient? Recent trends in convictions and penalties in NSW Higher and Local Courts
No. 41	Cannabis and Crime: Treatment Programs for Adolescent Cannabis Use
No. 42	Predicting Violence Against Women: The 1996 Women's Safety Survey
No. 43	Crime Against International Tourists
No. 44	Public perception of Neighborhood Crime in New South Wales
No. 45	The Effect of Arrest on Indigenous Employment Prospects
No. 46	Heroin Harm Minimisation: Do we really have to choose between Law Enforcement and Treatment
No. 47	Predicting Women's Responses to Violence: The 1996 Women's Safety Survey
No. 48	Performance Indicators for Drug Law Enforcement
No. 49	Drug Use Among Police Detainees
No. 50	New South Wales Drug Court Evaluation: Program and Participant Profiles
No. 51	Community survey of willingness to receive stolen goods
No. 52	New South Wales Drug Court: Monitoring Report

As well as the series Contemporary Issues in Crime and Justice, the Bureau publishes statistical and research reports. Recent releases include: **Price** \$27.50 Validation of NSW Police Crime Statistics: A Regional Analysis (ISBN: 0 7313 2621 0) This report presents a series of statistical tests which examine the link between crimes notified to NSW police, and crimes recorded by police at the level of Local Area Command. Managing Trial Court Delay: An Analysis of Trial Case Processing in the NSW District Criminal Court \$27.50 (ISBN: 0 7313 2615 6) Delay in the NSW District Criminal Court has been a longstanding problem. This report examines the principal causes of delay in bringing criminal matters to trial, and considers whether delay is primarily a problem of inefficiency in case processing or a shortage of trial court capacity. \$27.50 An Evaluation of the NSW Youth Justice Conferencing Scheme (ISBN: 0 7313 2618 0) This report examines conference participants' satisfaction with the conferencing process and resulting outcome plans, and the extent to which specific statutory requirements relating to the conferencing scheme are met. Drug Law Enforcement: Its Effect on Treatment Experience and Injecting Practices (ISBN: 0 7313 2611 3) \$27.50 This report presents the findings of a survey of more than 500 heroin users who were interviewed to determine whether drug law enforcement encourages drug users into methadone treatment, and whether drug law enforcement promotes unsafe injection practices. \$27.50 Juveniles in Crime - Part 1: Participation Rates and Risk Factors (ISBN: 0 7313 2602 4) Based on a pioneering survey of self reported offending behaviour among NSW secondary school students, this report provides valuable information on the nature and extent of juvenile offending and the risk factors that lead juveniles to become involved in Crime and Place: An Analysis of Assaults and Robberies in Inner Sydney (ISBN: 0 7313 1124 8) \$33.00 This report investigates the assault and robbery patterns of Sydney's inner city. Assault and Robbery "Hot Spots" in Sydney Police District are identified, and the characteristics of persons particularly at risk, including the factors which place these persons at risk, are identified. The report includes 21 full-colour, street-level crime maps of Sydney. Key Trends in Crime and Justice 1999 (ISSN: 1321 - 3539) \$27.50 This report includes tables and graphs of the major trends in Court Processes over the five-year period, 1994/95 to 1998/99. The report details trends in case registrations, disposals, delays and sentencing in Local, District and Supreme Courts, and patterns of Children's Court registrations, disposals and outcomes. The Correctional Processes section includes graphed trends of prisoner populations, receptions and community-based corrections. In addition, trends in recorded crime are presented for the five-year period, 1995 to 1999, as well as a summary of the results of victimisation surveys in NSW for the period 1994 to 1999. New South Wales Criminal Courts Statistics 1999 (ISSN: 1038 - 6998) \$27.50 This report is the most recent summary of statistical information on criminal court cases finalised in NSW Local, District and Supreme Courts in 1999 and in NSW Children's Courts in 1998/99. The report includes information about charges, outcomes, delays and sentencing in the Local, District and Supreme Courts of New South Wales in 1999. The Children's Courts section includes information about trends in appearances, determined offences and outcomes of charges before the Courts in 1998/99. New South Wales Recorded Crime Statistics 1999 (ISSN: 1035 - 9044) \$27.50 This report is the most recent summary of statistical information on crimes reported to and recorded by the NSW Police Service in 1997, 1998 and 1999. It includes an overview of major trends in recorded crime and a comparison of the number of incidents and crime rates by Statistical Division in New South Wales and by Statistical Subdivision within the Sydney region. The report also includes information about the time it takes for recorded criminal incidents to be cleared by charge or otherwise. If you would like to order a publication, please write to the Bureau indicating the title of the publication and enclosing a cheque or money order payable in AUSTRALIAN CURRENCY ONLY to the NSW Bureau of Crime Statistics and Research and forward to: NSW Bureau of Crime Statistics and Research,

GPO Box 6, Sydney NSW 2001. NB: Credit card facilities are now available.

Website: www.lawlink.nsw.gov.au/bocsar ISSN 1030 - 1046 ISBN 07313 2625 3