Criminological Highlights: Children and Youth

We gratefully acknowledge the Department of Justice, Canada, for funding this project.

Volume 5, Number 4 April 2018

This issue of Criminological Highlights: Children and Youth addresses the following questions:

1. How is society harmed by the imprisonment of those under age 25?
2. How does contact with the criminal justice system affect the mental health of an accused person?
3. Does the imprisonment of a child’s father have an impact on the likelihood that the child will commit an offence?
4. Are complex algorithms for predicting recidivism helpful?
5. Is the presence of substance abuse treatment programs in a community associated with changes in crime rates?
6. What should we do to reduce police shootings of civilians?

Criminological Highlights is designed to provide an accessible look at some of the more interesting criminological research that is currently being published. These summaries of high quality, policy related, published research are produced by the Centre for Criminology & Sociolegal Studies at the University of Toronto. The Children and Youth edition constitutes a selection of these summaries (from the full edition) chosen by researchers at the National Center for Juvenile Justice and the University of Toronto. It is designed for those people especially interested in matters related to children and youth. Some of the articles may relate primarily to broad criminal justice issues but have been chosen because we felt they also have relevance for those interested primarily in matters related to children and youth. Each issue of the Children and Youth edition contains “Headlines and Conclusions” for each of 6 articles, followed by one-page summaries of each article.

Criminological Highlights is prepared at the University of Toronto by Anthony Doob, Rosemary Gartner, Samantha Aebly, Jacqueline Briggs, Giancarlo Fiorella, Jihyun Kwon, Maria Jung, Erick Laming, Katharina Maier, Holly Pelvin, Andrea Shier, and Jane Sprott. The Children and Youth edition is compiled by Melissa Sickmund at NCJJ and Anthony Doob and Rosemary Gartner at the University of Toronto. Views – expressed or implied – in this publication are not necessarily those of the Department of Justice, Canada, the National Center for Juvenile Justice, or the National Council of Juvenile and Family Court Judges.

Full issues of Criminological Highlights are available at www.criminology.utoronto.ca and directly by email. Email Anthony.Doob@utoronto.ca or Rosemary.Gartner@utoronto.ca if you would like to be added to the email distribution list. The Children and Youth edition is also available from www.ncjj.org and www.ncjfcj.org

© Centre for Criminology and Sociolegal Studies, University of Toronto
14 Queen’s Park Crescent West | Toronto, Ontario, Canada M5S 3K9
Offenders under age 25 sentenced to prison have a lower likelihood of completing secondary school than those sentenced to house arrest enforced with electronic monitoring.

Participation in an electronically monitored house arrest program, as compared to normal imprisonment, has long term beneficial effects on secondary school completion rates. The fact that these effects showed up in the long term (2 to 3 years after the completion of the sentence) suggests that the overall program, part of which required attending school, was more effective than standard imprisonment even though the duration of the formal program was, at most, 3 months. It may have been effective, in large part, because those who participated in the electronically monitored house arrest program did not have their lives (and education) disrupted by imprisonment.

Being arrested and being incarcerated each have negative impacts on the mental health of young adults.

These data suggest that arrest and pre-trial detention – but not conviction – have independent negative impacts on the self-rated mental health status of young adults. Arrest, however, accounts for over half of the negative association between incarceration and mental health. These negative effects are fairly similar across racial/ethnic minority groups.

Legal changes can reduce crime: A change in the law in Denmark that reduced dramatically the risk of incarceration for those convicted of certain crimes also reduced dramatically the risk that the sons of fathers convicted of these crimes would commit offences.

As with previous studies, it would appear that the incarceration of a parent can have harmful – in this case criminogenic – effects on children in the family. In this case, boys – but not girls – were more likely to commit offences in the 10 years after a father's incarceration. When one considers, then, the intergenerational transmission of crime, it would appear that at least part of it has to do with criminal justice policies.

A sophisticated looking, commercially marketed risk prediction instrument is no more accurate in predicting criminal reoffending than ordinary people's risk predictions using age, sex, and readily available indicators of a person's criminal history.

“When considering using software such as COMPAS in making decisions that will significantly affect the lives and well-being of criminal defendants, it is valuable to ask whether we would put these decisions in the hands of random people who respond to an online survey because, in the end, the results from these two approaches appear to be indistinguishable” (page 3).
The presence of substance abuse treatment facilities in a community reduces crime in that community.

The effects of placing additional substance abuse treatment facilities in a county were consistent. With the exception of minor crimes (minor assaults or simple thefts), additional treatment facilities in the community in a given year tended to reduce more serious crime in the following years. However, though the effects were statistically significant, they were not large in size. Hence it is unlikely that the crime reduction impact of these substance abuse facilities would be noticed in a community. Nevertheless, given that the purpose of these facilities is to address addiction issues (and deal with associated problems), the crime reducing effect is a favourable unforeseen outcome of providing a much needed service to people in need.

If we were truly interested in reducing the number of fatal police shootings of civilians, we might shift our attention from deterrence models that search for blame to prevention models that search for rare combinations of risk factors and errors that produce fatal shootings.

This paper does not offer simple solutions to police shootings, but it does suggest there is need to move beyond the view that simple deterrence (through punishing shooters) will solve the problem. And it suggests there is value in looking at shootings as failures of police systems rather than just failures of individuals. Fixing systems – involving everything from recruitment and training to the dispatching of officers – may, in the long run, provide more adequate solutions. “Policing so that all lives actually matter… requires that police, scholars, and the public go back to the drawing board to design a system specifically aimed at placing preservation of life on an equal (and often higher) level with swift enforcement of the law” (p. 441).
Offenders under age 25 sentenced to prison have a lower likelihood of completing secondary school than those sentenced to house arrest enforced with electronic monitoring.

There is a substantial amount of information suggesting not only that imprisonment does not reduce subsequent offending but that it also can have harmful effects in other domains of life (e.g., Criminological Highlights 16(4)#5, 14(6)#1, 11(4)#3). This paper examines the impact of imprisonment in comparison with electronically monitored house arrest on the completion rate of secondary school by young men in Denmark.

In 2006, Denmark amended its legislation to allow prison authorities to substitute periods of electronically monitored house arrest for short periods of imprisonment. The goals were simple: to maintain labour market participation and educational enrollment. From 2006 onwards, those sentenced to prison for up to 3 months are allowed to apply to serve their sentences at home, enforced with electronic monitoring. Assuming certain conditions (e.g., having a permanent address and consent from others living there), they are allowed to serve their sentences in the community. However, they must also attend a crime prevention program, allow unannounced visits from correctional workers, and agree to drug and alcohol testing. Denmark, like Canada, makes frequent use of relatively short sentences (In Denmark 61% of prison sentences were under 4 months; in Canada 77% of prison sentences were 3 months or less).

This study looked only at those offenders who were enrolled in an education program at the time of conviction and were sentenced to prison for 3 months or less between 2006 and 2009. The house arrest sample consisted of 443 offenders who met the criteria for release (even though only 63% actually received this treatment). The data were analyzed conservatively: the house arrest-electronic monitor group consisted of all those eligible for this program whether or not they applied for it. The ‘prison only’ group consisted of those convicted prior to the implementation of the reform who, therefore, served their sentences in prison. The two groups were matched on over 20 variables (e.g., criminal history, offence type, educational attainment, etc.). All offenders were followed for 3 years after their release from prison or the electronic monitoring program.

There were no short term (3 months to 1 year) differences between the two groups. However, two years after the end of their sentences (prison or electronically monitored house arrest), those given the opportunity to serve their sentences in the community were less likely to have dropped out of school and more likely to have completed their post-secondary education.

Conclusion: Participation in an electronically monitored house arrest program, as compared to normal imprisonment, has long term beneficial effects on secondary school completion rates. The fact that these effects showed up in the long term (2 to 3 years after the completion of the sentence) suggests that the overall program, part of which required attending school, was more effective than standard imprisonment even though the duration of the formal program was, at most, 3 months. It may have been effective, in large part, because those who participated in the electronically monitored house arrest program did not have their lives (and education) disrupted by imprisonment.

Being arrested and being incarcerated each have negative impacts on the mental health of young adults.

Arrest and incarceration repeatedly have been shown to have negative impacts on a person caught up in the criminal justice system and on others related to that person (e.g., Criminological Highlights 17(1)#6, 16(3)#2, 16(2)#1, 16(4)#5,#7, 16(6)#8 14(2)#1). This paper examines the impact of criminal justice contact on the self-rated mental health over a ten year period of a sample of people age 18-20 at the start of the study.

Arrest could have a negative impact on people’s mental health in a number of ways. In addition to stigmatizing effects, arrest may lead to feelings of powerlessness and alienation. Arrest also may disrupt normal obligations (e.g., work or child care) and lead to uncertainty about the future. Conviction and incarceration can have effects above and beyond the effects of arrest.

Obviously, those arrested (and perhaps subsequently incarcerated) are different from those who are not. This paper addresses this problem by looking at changes over time in self-reported mental health in a sample of about 7500 people who were interviewed every second year. In that way, it was possible to see if there were negative impacts on the mental health of a young person after the experience of arrest (and incarceration, if that occurred).

Mental health was measured with 5 questions about how often, in the previous month, respondents felt nervous, calm and peaceful (reverse coded), downhearted and blue, happy (reverse coded) and ‘so down in the dumps that nothing could cheer them up’ (p. 725). Arrest was associated with a substantial subsequent decrease in self-rated mental health, even when controlling for 13 factors that change over time (e.g., age, marital and family status, employment, economic situation, drug or alcohol abuse and delinquent behaviour). Incarceration also was related to a decrease in self-rated mental health, above and beyond the impact of arrest (including these same control variables). The simple effect of incarceration (above and beyond the effect of arrest) was, however, smaller than the effect of arrest.

Keeping in mind that this sample was relatively young and followed for about 10 years, it was possible to examine the impact of the first incarceration. When one looks at the impact of the first arrest and first incarceration, the negative impacts of these two criminal justice interventions were comparable in size. A more detailed analysis, however, suggested that it was pretrial detention (incarceration) rather than sentenced incarceration that contributed to the decline in self-rated mental health.

To strengthen the conclusion that the effects were due to criminal justice intervention causing a decline in mental health (rather than mental health problems leading to arrest and incarceration), a separate analysis determined that there was no significant impact of changes in mental health status on subsequent arrest and incarceration.

Conclusion: These data suggest that arrest and pre-trial detention – but not conviction – have independent negative impacts on the self-rated mental health status of young adults. Arrest, however, accounts for over half of the negative association between incarceration and mental health. These negative effects are fairly similar across racial/ethnic minority groups.

Legal changes can reduce crime: A change in the law in Denmark that reduced dramatically the risk of incarceration for those convicted of certain crimes also reduced dramatically the risk that the sons of fathers convicted of these crimes would commit offences.

There is substantial evidence that there are negative impacts of incarceration on the families of those sent to prison (e.g., Criminological Highlights 14(2)#1, 12(6)#7, 12(5)#1, 13(1)#7, 12(6)#8, 9(5)#6, 13(3)#3). This study examines a legislative change in Denmark in 2000 that dramatically expanded the use of probation with community service as a penalty for certain offences rather than imprisonment. Looking at those not sentenced to fines (which were not targeted by the legislation) the use of imprisonment for the remaining offenders (the “treatment group”) dropped dramatically as a result of the reform.

The study looks at the offending of children who were born in Denmark and were age 12-18 at the time of their fathers’ conviction. The study sample included fathers whose conviction took place in the year prior to the legislative change or the year after the reform that increased the use of probation/community service. The dependent measure was whether children of these fathers who were convicted during this period (the year before and the year after the change in the law) were charged with a crime. A 10 year follow-up period was used (after the father’s conviction). Various statistical controls were introduced (in three different ways) in order to eliminate effects that might be due to socioeconomic factors, family characteristics, and previous criminal justice involvement of the father. Data were collected from centralized government registries.

About 87% of the children in the pre-reform ‘treatment’ group experienced the incarceration of their fathers, compared to only about 24% of the children in the post-reform treatment group. Hence the children in the study had quite different experiences pre- and post- reform. Within 10 years of the conviction of the father, 64% of the male children whose fathers were convicted before the reform (where the father was likely to go to prison) had been charged with an offence. For those boys whose fathers were convicted post-reform (where the father was unlikely to be imprisoned), only 57% were charged with an offence within 10 years.

In order to test whether other changes in Denmark might be responsible for any effects of the legislative change, the offending rates of children of fathers convicted of crimes (before and after the reform date) but whose offences were not covered by the legal reform were also examined. The incarceration rate for fathers convicted of these other offences was relatively stable across the period being examined. Male offspring of these fathers, however, were charged at a slightly higher rate if the father was convicted after the reform date (a 60% offending rate) rather than before (57%). Various statistical techniques were used to determine whether the effects of the reform for male offspring of fathers who were convicted were stable. Looking across these analyses, it would appear that incarceration of a male child’s father increases somewhat the likelihood that the boy will commit an offence.

There were, however, no consistent effects for female offspring of incarcerated fathers. Girls were considerably less likely than boys to be charged with an offence, but the incarceration of the father appeared to have no significant effect.

Conclusion: As with previous studies, it would appear that the incarceration of a parent can have harmful – in this case criminogenic – effects on children in the family. In this case, boys – but not girls – were more likely to commit offences in the 10 years after a father’s incarceration. When one considers, then, the intergenerational transmission of crime, it would appear that at least part of it has to do with criminal justice policies.

A sophisticated looking, commercially marketed risk prediction instrument is no more accurate in predicting criminal reoffending than ordinary people’s risk predictions using age, sex, and readily available indicators of a person’s criminal history.

Complex algorithms, using many data points, to predict recidivism (or offending while on pretrial release) are attractive to criminal justice professionals because they give an apparently objective answer to the question, “Is it safe to release this person into the community?”

This study provides a detailed analysis of one such prediction system, COMPAS, which was developed by Equivant (previously Northpointe). The details of the algorithm used by COMPAS are not public.

There is little question that such systems are “valid,” in that they predict better than chance. The more important questions are what kinds of errors they make and whether they are more accurate than less sophisticated systems.

This paper uses data from 7214 defendants in one county in Florida and compares the accuracy of the predictions made by COMPAS, using an undisclosed number of features, to two other kinds of predictions: (a) Ordinary statistical predictive models using a small number of characteristics of the person, and (b) Intuitive predictions made by ordinary people who have no particular expertise in predicting recidivism. There are disputes in the research literature concerning the best measures to use to describe the accuracy of a predictive scale. This paper presents a number of them that, fortunately, are readily interpretable.

The results are remarkably consistent. Overall accuracy for COMPAS predictions of recidivism (arrest within two years) was indeed better than chance. But its accuracy was no different from simple logistic regression models using age, sex, charge, and some features of the criminal record. Perhaps most interesting is that ordinary people who volunteered to do a web-based survey and were presented with summaries of information about these Florida defendants that included only sex, age, offence, and 3 features of their criminal record, performed just as well as COMPAS.

Though COMPAS was more accurate than chance (65.2% accuracy overall), and was equally accurate for black and white defendants, the types of errors made by the software were different for the two racial groups. False positives (predicting recidivism when it didn’t occur) were much more common for black defendants than for white defendants. On the other hand, false negatives (predicting recidivism would not occur when it did) were more common for white defendants. These same differences were found for untrained people in the web-based survey and for an additional sample of ordinary people who were given the defendant’s race when making their predictions. In other words, the commercial software disadvantaged black defendants – and gave advantages to white defendants – in a manner that was very similar to the manner in which ordinary people’s risk assessments disadvantaged black defendants.

Conclusion: “When considering using software such as COMPAS in making decisions that will significantly affect the lives and well-being of criminal defendants, it is valuable to ask whether we would put these decisions in the hands of random people who respond to an online survey because, in the end, the results from these two approaches appear to be indistinguishable” (page 3).

The presence of substance abuse treatment facilities in a community reduces crime in that community.

Drug addiction problems do not happen in isolation. One of the possible benefits of having substance abuse treatment (SAT) facilities readily available in a community is that these organizations can refer their clients to other programs (e.g., for mental health treatment) that clients might not otherwise connect with. This paper examines the influence of SAT facilities at the (US) county level, not on individuals, but instead on a set of indicators of the well-being of the community: crime rates. Hence the study “cannot separate the effects of SAT facilities on those who receive treatment from the effects of SAT facilities on the broader community” (p. 4).

From a national data set in the US, it was possible to estimate the number of SAT clinics in a given county. The study examined counties in which there was at least one SAT in the period 1999-2010 and looked at the relationship of changes in the concentration of SATs to changes in homicides, violent crimes, and financially-motivated crimes. Various controls (e.g., unemployment rate, police officers per capita, age and racial makeup of the county) were included in the analyses. The primary analyses examined the effects of the number of SATs in the community in one year on crime in the next year.

Not surprisingly, an increase in the concentration of SATs was associated with a net reduction in drug-induced mortality rates. As the concentration of SATs increased, there tended to be a reduction in homicides, though there was no apparent effect of SATs on intra-familial homicides. More generally, there was a reduction in various forms of violent crime associated with an increase in the concentration of SATs. The exception to this was simple/common assaults (which constituted about 77% of all violent crime): There was no association between an increased presence of SATs and simple/common assaults. However, an increased concentration of SATs was associated with a small reduction in financially-motivated crimes (when excluding the most minor forms).

Given the design of the study, there is always the possibility that the causal relationship is in the opposite direction: Facilities may move into locations where crime is coming under control. To test for this, an analysis was carried out in which crime rates were used to predict the number of SAT facilities in a future year. These effects were never significant, suggesting that it is the increased presence of SATs that may be responsible for a lower crime rate.

Conclusion: The effects of placing additional substance abuse treatment facilities in a county were consistent. With the exception of minor crimes (minor assaults or simple thefts), additional treatment facilities in the community in a given year tended to reduce more serious crime in the following years. However, though the effects were statistically significant, they were not large in size. Hence it is unlikely that the crime reduction impact of these substance abuse facilities would be noticed in a community. Nevertheless, given that the purpose of these facilities is to address addiction issues (and deal with associated problems), the crime reducing effect is a favourable unforeseen outcome of providing a much needed service to people in need.

If we were truly interested in reducing the number of fatal police shootings of civilians, we might shift our attention from deterrence models that search for blame to prevention models that search for rare combinations of risk factors and errors that produce fatal shootings.

When police killings of citizens take place and the police officer who fired the gun is not charged with or not found guilty of a crime, the incident is often characterized as “a tragic failure to hold an individual police officer accountable” rather than even considering the possibility that, in addition, the death was “a failure to hold organizational systems accountable” (p. 422). Said differently, it is important that police be held accountable for their actions, but if we wish to reduce police killings, we should broaden our approach to understanding and intervening to reduce the size of the problem.

There are reasons to believe that the number of people killed as a result of officer-involved shootings (currently about 1000 per year in the US) will not be reduced solely by punishing police. These reasons include the fact that convictions are hard to obtain, the high esteem in which police are held by the public, and the fact that many killings do not involve criminal intent or the breaking of police rules. Police shootings in the US occur primarily in smaller cities: 69% of police shootings in the US took place in cities of 250,000 or less. About half occurred in cities with 50,000 or less.

The number of police shootings has been reduced before. Between 1970 and 1985, the number of civilians killed by police was cut in half, in large part because of bans on shooting nonviolent fleeing suspects. Restrictions on when police could shoot were shown (in the early 1980s) to have “no adverse effects on police officer safety and crime, but…large reductions in police shootings did follow [the implementation of these restrictions]” (p. 426). These restrictions, to be effective, had to be supported internally, implemented appropriately, and enforced.

After 1985, the number of police killings rose in part, perhaps, because police were increasingly armed with semiautomatic firearms with large ammunition clips. More recently, attempts to reduce police shootings of civilians (e.g., through mandatory training in de-escalation tactics) have never been evaluated properly. But a fair amount is known about police shootings (see Zimring’s 2017 book When Police Kill). What is needed to fully to use this information effectively is what has been called “preventive imagination” (p. 441). Zimring notes that if one wants to save lives, four approaches can be taken: look for ways to reduce shooting incidents, reduce the number of shots fired, provide immediate medical attention, and transport the victim immediately to a trauma centre.

A broader approach to police killings of civilians would be to examine how other (safety) systems learn from rare catastrophic events (such as plane crashes). Shifting attention from a ‘blame culture’ to a ‘learning culture’ would focus on what organizations can do to reduce harm. “It is the complexity of the high-risk systems that causes extreme harm…. Fatal police shootings shine the spotlight on the shooter rather than the complex organizational processes that recruited, hired, trained, supervised, disciplined, assigned, and dispatched the shooter before anyone faced a split-second decision to shoot” (p. 434). Focusing on ‘who is to blame’ distracts attention from the manner in which a complex interacting system might have failed.

Conclusion: This paper does not offer simple solutions to police shootings, but it does suggest there is need to move beyond the view that simple deterrence (through punishing shooters) will solve the problem. And it suggests there is value in looking at shootings as failures of police systems rather than just failures of individuals. Fixing systems – involving everything from recruitment and training to the dispatching of officers – may, in the long run, provide more adequate solutions. “Policing so that all lives actually matter… requires that police, scholars, and the public go back to the drawing board to design a system specifically aimed at placing preservation of life on an equal (and often higher) level with swift enforcement of the law” (p. 441).