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Prior police contacts and police discretion with apprehended youth

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Prior police contacts and police discretion with apprehended youth

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Abstract

When police have reasonable grounds to believe that a young person has committed a criminal offence, the decision whether to lay a charge or process the youth otherwise is strongly influenced by the number of times the youth has previously been apprehended: the more prior contacts with the police, the higher the likelihood that a charge will be laid. This conclusion is based on the results of multivariate statistical analysis of data from the Incident-Based Uniform Crime Reporting Survey (UCR2) for 1995 to 2001. The variable capturing the number of prior police contacts was constructed by linking together records from 1995 to 2001 pertaining to the same individual. This is the first time that research has been done using longitudinally linked records in the UCR2.

Background

This research was a component of a larger study of police decision-making with youth, whose purpose was to understand the ways in which police use their discretion when dealing with young persons who are believed to have violated the law, and to identify the factors which affect this exercise of discretion (Carrington and Schulenberg, 2003). There are many areas of police work in which discretion is exercised. This report is concerned with the police decision concerning the *clearance* of an incident: whether to lay a charge, or deal informally with the alleged offender. Police in Canada have the duty to enforce the law, but the authority not to charge in any particular case - even the most serious cases (Hornick et al, 1996). Under the *Young Offenders Act*, when a police officer had reasonable grounds to believe that a young person had committed an offence, s/he could process the youth informally (e.g. by giving a warning, taking the youth home, or referring the youth to another agency) rather than laying a charge.[1]

The factors which potentially affect police decision-making with youth were examined in the Department of Justice study in three groups: characteristics of the policing *environment*, such as the nature of the community; characteristics of the police *organization*, such as its size and degree of bureaucratization; and *situational* factors, or attributes of the offence and the alleged offender in individual criminal incidents. Two types of data were used to analyze the impact of situational factors on the police decision whether to charge: interviews with police officers, and statistical data from the Incident-Based Uniform Crime Reporting Survey ("UCR2"). This report concerns the analysis of situational factors, using UCR2 data.

Multivariate analysis of UCR2 data has been used in the past to study factors affecting police decision-making with youth (Carrington 1996, 1998). The novelty of the present research lies in its creation and use of a variable operationalizing the number of times in the past that the young person had been apprehended by the police. In order to construct this variable, records in the UCR2 for 1995 to 2001 which pertain to the same youth were linked together. This is the first time that research has been done using longitudinally linked records in the UCR2.

Rationale

A record of prior convictions or prior contacts with the police has been associated with placing youth at a higher risk for being charged (Cicourel, 1968; Conly, 1978; Doob & Chan, 1982; Ericson, 1982; Fisher & Mawby, 1982; Morash, 1984). Whether or not it leads to charges or a conviction, contact with police may label a youth as a probable delinquent, increasing the probability of formal treatment on subsequent contact.

Any statistical analysis of factors associated with the police decision to charge an apprehended youth versus processing him or her informally should include an

indicator of prior contacts as an independent variable. On the one hand, inclusion of prior contacts as an independent variable allows assessment of the impact of this variable on the outcome of the incident. On the other hand, failure to account for the impact of prior contacts opens up the possibility of spuriousness: other factors may appear to influence the outcome, whereas in reality they do not. For example, one might find that police charge older youth in higher proportions than younger youth, and—in the absence of a control for prior contacts—conclude that this shows that police are responding to the age of the apprehended youth. If data on prior contacts are available, they can be introduced as a control, and this may reveal that the apparent effect of the youth's age is in fact due to prior contacts: that older youth are more likely to have prior contacts, and police are more likely to charge youth (of any age) who have prior contacts.

Thus, the working hypotheses of this research were:

- Prior contacts will have a substantial positive association with the probability of an apprehended youth being charged versus processed informally.
- The introduction of prior contacts as a statistical control will substantially affect the assessment of the impact of other factors on the police decision to charge apprehended youth.

Methodology

Population

Conceptually, the unit of analysis in the research is a police decision concerning the disposition of one apprehended young person in one incident.[2] Operationally, this police decision constitutes one record in the UCR2 Accused file. The UCR2 Accused file records data for persons who are classified as "chargeable" in an incident; i.e. "any person who has been identified by police as being involved in a criminal incident and against whom an information could be laid as a result of sufficient evidence/information" (Canadian Centre for Justice Statistics, 2002: 74).[3] Thus, the population of the study is a population of police decisions, each operationalized by variables in one record in the UCR2 Accused file. For consistency with the interview data, which were collected in 2002, UCR2 data for incidents occurring in 2001 were used. These were for incidents occurring in 2001. If the same person was involved in more than one incident in 2001, his or her last incident in the year was selected, so that each person contributed only one case to the analysis.

Not all police services in Canada could be included in the study. Since the prior contacts variable was constructed by examining UCR2 data for 1995-2001 (see below), only those police services which consistently reported to the UCR2 between 1995 and 2001 could be included. This subset of police services is generally selected when UCR2 data are used to study trends over time; thus, it is known as the UCR2 Trend Database. The largest municipal police service in the UCR2 – Toronto Police Service – was also omitted from the study, because TPS reported very few Accused records to the UCR2 during 1995-2001 for apprehended youth who were not charged: in other words, the data from TPS showed that nearly 100% of youth who were chargeable were charged.[4] Thus, UCR2 data on the TPS could not be used for the analysis of differences between incidents resulting in charges and those resulting in informal action.

The resulting population of 38,727 decisions came from 186 police services (independent municipal services or detachments of provincial police) in six provinces: New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, and British Columbia.

Description of variables

The dependent variable was: whether the apprehended youth was charged or processed otherwise (i.e. by informal action or pre-charge diversion). This variable is in the Accused ("Charged suspect – Chargeable") file of the UCR2 Survey.[5]

The main independent variables were determined by a review of the literature and by the availability of reliable data in the UCR2 Survey. They include: the number of prior contacts with police; the seriousness of the current alleged offence, indicated

by the Criminal Code classification of the most serious alleged offence, the degree of harm done to a victim, and the presence of a weapon; the age, sex,[6] and aboriginal status of the youth;[7] whether the alleged offence was committed alone or with accomplices; any relationship between the accused youth and a victim; whether the youth and a victim were living together; and whether there was evidence that the youth had recently consumed alcohol or drugs.

Several possible influential factors were not included because they are not available within the UCR2. The major omitted variables which have been found by previous research to play a role in police decision-making are: the youth's "demeanour", victim preference as to the disposition, parental involvement in interactions between police and the youth, the living situation of the youth, the youth's school and/or employment situation, and whether the youth is affiliated with a gang. The youth's "demeanour", or attitude and behaviour in his or her interactions with police, may be particularly influential in the decision whether to process the youth informally, because, under the *YOA*, a youth is not eligible for Alternative Measures if s/he does not accept responsibility for the alleged offence, or if s/he does not "fully and freely consent" to participate. In the larger study of which this research was a component, the impact of these factors was assessed by interviewing police officers (Carrington and Schulenberg, 2003).

When possibly influential factors are omitted from a statistical analysis, there is a risk of drawing spurious causal conclusions. That is, a factor which is included in the analysis may appear to have more impact than it does, because the impact of a related, omitted factor, has not been controlled. Any correlational statistical analysis suffers from the limitation that it is never possible to collect data on, and control for, all possible influential factors - or even to know what they may be. Therefore, the conclusions from such analyses are always subject to modification on the basis of future research.

Construction of the prior contacts variable

Special programming work was required in order to create the prior contacts variable, since it is not routinely captured by the UCR2. The procedure involved examining all UCR2 records for 1995-2001 for the selected subset of police services, and matching records of previous incidents pertaining to youths who were apprehended in 2001. Each record of a previous incident (including earlier contacts in 2001) constituted one prior contact. Prior contacts which occurred before 1995 could not be captured, since relatively few police services reported to the UCR2 before 1995. However, this was not judged to be a major omission, since the impact of prior contacts is generally believed to be related to their recency. This would be particularly true of young persons, who are the subject of the present research. Their ages at the time of the incidents in 2001 ranged from 12 to 17 years, so their histories of prior contacts which were captured by searching back to 1995 would go as far back as the ages of 6 to 11 years.[8]

Matching of records for the same person was not straightforward, since there is no unique person identifier in the UCR2. Matching must be done using the person's name, date of birth, and sex. This raises the issue of *false positives*. Different people have the same name, date of birth and sex. Furthermore, the accused person's name is not recorded as such in the UCR2 – it is encoded in a 4-character SOUNDEX code, which is not unique; i.e. many names are encoded with the same SOUNDEX. Thus, matching on the SOUNDEX code, date of birth and sex could result in many

false positive matches; i.e. many records for different people would be erroneously treated as prior contacts of a single person. The result would be an underestimate of the number of unique persons and an overestimate of the numbers of their prior contacts.

This is not necessarily as great a problem in the present research as it might be in other types of research. The present study is not concerned with distributions of prior contacts in themselves, but in their correlation with the probability of being charged, and other variables. In general, errors in measurement of variables (such as overestimates of prior contacts) result in attenuation of correlations, so the result of such error would be a small underestimate of the impact of prior contacts on police dispositions, and a small overestimate of the impact of other related variables, such as the youth's age.

Methodologists at Statistics Canada conducted an analysis of the probability of false positive matches by determining the rate of occurrence of each SOUNDEX code in the populations of the provinces of Canada, using electronic telephone directories. This enabled them to establish, for each SOUNDEX code, the expected rate of false positives, when it was used for matching in combination with birth date and sex. SOUNDEX codes vary greatly in their vulnerability to false positive matches, since the names which are encoded by some SOUNDEX codes are very common, and others are not.

The probability of false positives is directly related to the number of records which one is matching, which is approximately proportional to the population of the geographical area, and the number of years, within which matching is being done. There would be many false positives if records for many years for all of Canada were being matched, and few or none if records were matched for only a few years within one town. Thus, in a study such as the present one, where the number of years of matching is fixed (1995 to 2001), the "match quality" or "match efficiency" (i.e. non-vulnerability to false positives) of SOUNDEX codes is related both to the commonness of the names which they encode, and to the population of the area within which matching is being done. Methodologists provided assessments of match quality within:

- entire provinces (actually, the parts of the province policed by respondents to the UCR2 Trend Database);
- the groups of police services working in a Census Metropolitan Area (CMA);
- the jurisdictions of individual police services outside CMA's (since there was no obvious principle with which to group non-CMA police services); and
- all police services (in the Trend Database) in a province but outside CMA's.

On the basis of this quality analysis, four categories of SOUNDEX codes were defined:

- **0** – SOUNDEX is rare enough that it can be used in province-wide matching, except in Ontario and Quebec (99% or better match efficiency rate).
- **1** – SOUNDEX is rare enough that it can be used in analysis within a given CMA or individual police service (95% – 99% match efficiency rate).

- **2** – SOUNDEX is common enough that it should be used with caution in analysis within a given CMA or individual police service (90% - 95% match efficiency rate).
- **3** – SOUNDEX is too common to be used for analysis – this will result in too many false matches (less than 90% match efficiency rate).

"Match efficiency" refers to the absence of false positives; e.g. 99% match efficiency means that 1% of matches are expected to be false positives, and "99% or better" means that 1% or fewer false positives are expected.

Using 95% match efficiency as a criterion of acceptability, all records with SOUNDEX codes with a quality code of 2 or 3 were omitted (with the exception of Montreal, discussed below). As most jurisdictions have small enough populations that there are very few or no SOUNDEX codes with quality codes of 2 or 3, the impact of this exclusion was minimal. The only jurisdictions included in the study with more than 1% of records with SOUNDEX codes of 2 or 3 are Montreal (28.4%), Quebec City (2.2%), Calgary (1.3%) and Edmonton (3.5%). In the case of Montreal, records with a SOUNDEX quality code of 2 were not omitted, because of the large number of such records. In order to assess the impact of including SOUNDEX codes with quality code 2, the mean number of contacts with police was calculated for the selected population of young persons in Montreal, grouped according to their SOUNDEX quality code. The underlying hypothesis is that false positive matches will result in inflated numbers of contacts in a "person's" career. Mean numbers of police contacts for persons with SOUNDEX quality codes of 0, 1, and 2 were 2.24, 2.20, and 2.20 respectively. Persons with a SOUNDEX quality code of 2 had slightly *fewer* contacts than those with SOUNDEX quality code of 0, contrary to the hypothesis. Therefore, it was concluded that it was appropriate to include them in the analysis.

The population of areas of New Brunswick reporting to the UCR2 is small enough that matching could be done with all police services treated as one unit, for SOUNDEX quality codes of 0 and 1. For Saskatchewan, Alberta, and British Columbia, matching was done with all police services in one province treated as a unit for SOUNDEX codes with a quality code of 0. For SOUNDEX codes with a quality code of 1, matching was done within CMA's. For Ontario and Quebec, matching was done within CMA or individual non-CMA police service for SOUNDEX codes with quality codes of 0 and 1. This resulted in a population of 38,727 young persons chargeable in 2001, and the same number of police dispositions involving them. These young persons had an average of 2.9 contacts, including the current one; or 1.9 prior contacts. The results of three other plausible but less conservative sets of matching criteria were also examined, which produced very similar results, ranging from 38,369 to 38,411 unique youths, and an average number of contacts (in all three cases) of 3.0. Thus, for this study, the results of matching were robust even when less stringent matching criteria were used.

Although the number of prior contacts of youths in the population ranged from 0 to 261, the great majority (96%) had 10 or fewer, and most (90%) had 5 or fewer. In assessing the relationship between the number of prior contacts and the police disposition, no significant information was lost by recoding the number of prior contacts as 0, 1, 2, 3-4, and 5 or more.

Methods

The police disposition (charged vs. processed otherwise) was cross-tabulated separately with each of the following independent variables in order to assess the strength of the association of each variable with the indicator of police discretion:

- the type of offence, indicated by the Criminal Code classification;
- the level of injury suffered by a victim;
- the presence of a weapon;
- the number of prior contacts of the youth with police;
- the age of the youth;
- the sex of the youth;
- whether the youth was an aboriginal;
- whether the youth was apprehended alone or with other persons;
- the type of relationship, if any, between the youth and a victim;
- whether the youth and a victim were living together; and
- whether there was evidence that the youth had recently consumed alcohol or drugs.

The two latter variables were omitted from further analysis, since they were not significantly related to the police disposition.

In order to assess the impact of the independent variables while controlling for related factors, all independent variables were entered simultaneously into a multiple regression analysis with the police disposition (charged vs. processed otherwise) as the dependent variable.[9] Incidents involving certain offences were omitted from this analysis, because there were too few youths in the "not charged" group for reliable statistical analysis (see Table 1). Also, a few youth in each category were excluded because, according to the "clearance status" variable in the UCR2 Survey, the reason why they were not charged was not police discretion but some other factor beyond the control of police, such as the disappearance or death of the apprehended youth.

Two statistics were calculated in the multiple regression:

- The *adjusted percentage* of youth who were charged, for each category of the independent variable: this is the percentage of youth who "would have been charged if everything about all the alleged offences and offenders were identical, except for variations in this variable". This statistic indicates the impact of the independent variable in individual incidents, while controlling for all other variables.
- *Partial eta squared*: this is an estimate of the amount of variation in all the police dispositions which is accounted for when all other variables are controlled, i.e. its overall impact on the population of police decisions.

Findings

Seriousness of the alleged crime

Table 1 shows the percentage of apprehended young persons who were charged, by offence category. Clearly, the type of alleged offence has a large influence on the probability of a charge being laid: a youth apprehended for mischief or arson has a one in three chance of being charged; those apprehended for major offences against the person and offences against the administration of justice are almost sure to be charged. However, the percentages shown in Table 1 suggest that the probability of charging is not related in a simple way to the "seriousness" of the offence, unless one believes that failure to appear in court, provincial traffic violations, etc. are exceeded in seriousness only by murder. Thus, other factors than simply the seriousness of the alleged offence appear to have an impact on the decision.

The second column of percentages are adjusted to remove the confounding effects of related factors, such as the youth's age and prior contacts. These are the percentages of youth apprehended for each category of offence who "would have been charged if everything about all the alleged offences and offenders were the same, except for the type of offence". For example, 86% of youth apprehended for robbery were charged, but the adjusted percentage is only 74%. This is because robbery tends to be committed by older youth with more prior contacts, and these factors contribute to making robbers more likely to be charged; but 74% *would have been* charged if robberies were committed by youth who were of average age and with an average number of prior contacts.

Very little discretion not to charge apprehended youth is exercised by police in recorded incidents involving certain types of offences (Table 1). These include murder and attempt murder, and administrative offences such as failure to appear for court, bail violations, offences under the Young Offenders Act (almost all being failure to comply with a disposition), breach of probation, and escaping custody or being unlawfully at large. They also include drinking-driving offences and provincial traffic and liquor offences. It is possible that police exercise discretion in many such incidents but do not record the incident in the police information system, with the result that it is not reported to the UCR Survey. Cases involving these types of offences, and certain others (dangerous operation of a motor vehicle, aggravated assault and sexual assault) were omitted from further analysis, because little or no discretion is exercised by police in recorded instances of these offences and/or there were too few youths in the "not charged" group for reliable statistical analysis.

Table 1

Proportion of apprehended youth charged, by type of offence, Canada (parts), 2001[a]

Offence category	Percent charged	Number	Adjusted percent charged[b]	Number[c]
All offences	**56**	**38,727**	**52**	**30,812**
Murder, attempt	100	27		...[c]
Fail to appear	99	422		...[c]
Provincial traffic	98	822		...[c]
Bail violation	97	1,459		...[c]
Young Offenders Act	97	650		...[c]
Breach probation	93	347		...[c]
Provincial liquor	91	1,827		...[c]
Drinking-driving	90	172		...[c]
Escape/Unlawfully at large	88	311		...[c]
Robbery	86	732	74	720
Dangerous operation of a motor vehicle	86	95		...[c]
Assault and sexual assault level 3	85	52		...[c]
Possess stolen property	81	1,305	72	1,285
Indictable drug (trafficking, etc.)	74	1,061	67	1,014
Miscellaneous indictable person[d]	74	151	72	146
Assault and sexual assault, level 2	72	1,239	63	1,201
Theft over $5,000	71	581	57	563
Weapons and explosives	62	403	46	399
Miscellaneous provincial offences	61	894	50	839
Miscellaneous *Criminal Code* traffic	58	62	55	51
Fraud	57	611	47	583
Sexual assault, level 1	57	412	61	367
Break and enter	55	2,183	48	2,034
Assault, level 1	53	3,758	47	3,601
Miscellaneous summary and hybrid person[e]	49	1,619	56	1,505
Miscellaneous	44	1,151	38	1,071
Summary and hybrid drug (possession)	40	3,052	38	2,751
Theft under $5,000	39	9,961	39	9,569
Mischief	33	3,052	33	2,836
Arson	31	316	37	277

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. prior contacts, the age of the accused, etc. (see Table 15 for a list of the control variables).

c. The population for the multivariate analysis (30,812) was smaller than the original population (38,727) for two reasons: some offence types (e.g. murder, fail to appear) were omitted entirely because very little discretion is exercised in such incidents; also, for every offence type, some incidents were omitted because the UCR2 Clearance Status field indicated that the youth was not charged for reasons beyond the control of the police, e.g. the death or disappearance of the accused, rather than because of police discretion.

d. Miscellaneous indictable offences against the person include arson: disregard for human life, criminal negligence causing bodily harm, kidnap and forcible confinement, extortion, and certain serious weapons and explosives offences.

e. Miscellaneous summary and hybrid offences against the person include sexual interference, unlawfully causing bodily harm, assault peace officer, criminal harassment, utter threats, etc.

Source: *UCR2 Survey, Trend Database.*

Evidently, a considerable amount of the variation in charging rates for different types of offences is due to related factors, since the range of variation is narrowed considerably when the influence of other related factors is statistically controlled. The main related factors are the youth's age and record of prior contacts. Older youth commit more serious offences (Table 2), and more serious offences tend to be committed by youth who have had previous contacts with the police (Table 3). Thus, part of the reason why some types of offences are charged in relatively high proportions is that they are committed by older youth and/or youth with longer prior records. Robbery and the more serious property offences (e.g. break and enter, possess stolen property, theft over) are examples. When we control statistically for these related factors, the charge rate for these offences is reduced (Table 1). On the other hand, arson and level 1 sexual assault tend to be committed in higher proportions by younger youth, and/or those with fewer prior police contacts, so the charge rate increases when these related factors are statistically controlled.

Table 2

Proportion of each age group apprehended, by offence category, Canada (parts), 2001

	Age of the apprehended youth (years)					
Type of offence	12	13	14	15	16	17
	%					
Robbery	1.1	1.5	2.0	2.2	2.6	3.3
Possess stolen property	2.1	3.4	3.5	4.7	4.9	4.5
Indictable drug (trafficking, etc.)	0.6	1.8	2.3	3.0	4.0	5.2
Miscellaneous indictable person	0.2	0.4	0.4	0.4	0.4	0.7
Assault and sexual assault, level 2	3.5	3.2	3.3	3.8	4.3	4.6
Theft over $5,000	0.5	0.8	1.6	1.9	2.4	2.2
Weapons and explosives	0.9	1.0	0.9	1.3	1.4	1.7
Miscellaneous provincial offences	0.8	1.5	2.1	2.7	3.2	3.9
Miscellaneous *Criminal Code* traffic	0.0	0.0	0.1	0.1	0.2	0.4
Fraud	0.5	0.6	1.2	1.3	2.1	3.8
Sexual assault, level 1	2.6	1.9	1.6	0.9	0.9	0.7
Break and enter	5.6	4.8	6.2	7.3	7.0	7.1
Assault, level 1	15.6	12.5	12.0	12.1	11.1	10.1
Miscellaneous summary and hybrid person	4.6	5.4	4.7	5.3	4.6	4.7
Miscellaneous	2.9	2.5	3.3	3.1	3.8	4.3
Summary and hybrid drug	2.5	5.8	7.7	9.6	11.0	10.7
Theft under $5,000	39.2	38.0	36.8	31.1	27.9	23.9
Mischief	14.6	13.2	9.3	8.3	7.7	7.8
Arson	1.9	1.4	1.1	1.1	0.5	0.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	**2,010**	**3,549**	**5,212**	**6,331**	**6,680**	**7,030**

Source: *UCR2 Survey, Trend Database.*

Table 3

Proportion of apprehended youth, by type of offence and number of prior police contacts, Canada (parts), 2001

Type of offence	Number of prior police contacts				
	0	1	2	3 or 4	5 or more
	%				
Robbery	1.5	2.2	3.6	4.0	5.6
Possess stolen property	3.5	4.1	4.9	4.8	7.9
Indictable drug (trafficking, etc.)	3.2	3.8	2.6	4.1	3.1
Miscellaneous indictable person	0.4	0.5	0.5	0.6	0.8
Assault and sexual assault, level 2	3.6	3.7	4.3	4.2	5.6
Theft over $5,000	1.2	2.1	2.3	2.9	4.6
Weapons and explosives	1.1	1.6	1.6	1.8	1.2
Miscellaneous provincial offences	2.1	3.6	3.1	4.2	3.6
Miscellaneous *Criminal Code* traffic	0.2	0.2	0.1	0.3	0.1
Fraud	1.6	2.2	1.8	2.4	2.9
Sexual assault, level 1	1.3	1.0	1.3	0.8	1.0
Break and enter	4.9	7.4	8.5	9.7	12.3
Assault, level 1	11.2	13.0	13.3	13.2	10.0
Miscellaneous summary and hybrid person	4.4	5.3	6.6	6.4	4.7
Miscellaneous	3.3	3.4	3.5	3.5	4.6
Summary and hybrid drug (possession)	9.8	8.7	8.3	7.4	5.4
Theft under $5,000	36.4	26.1	24.3	20.3	19.0
Mischief	9.3	10.3	8.6	8.9	7.5
Arson	1.1	0.9	0.9	0.4	0.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	**18,341**	**5,205**	**2,377**	**2,100**	**2,789**

Source: *UCR2 Survey, Trend Database.*

Prior contacts with the police

Prior contacts with the police play an extremely significant role in the decision to charge an apprehended youth. The first column of Table 4 shows the actual percentage charged. Apprehended youth with five or more prior contacts are more than twice as likely as those with no previous contacts to be charged. The second column of percentages are adjusted to remove the confounding effects of related factors, such as the youth's age and the seriousness of the current alleged offence. Even when related factors are controlled, the probability of a charge being laid rises with increasing numbers of prior contacts, from 32% of those with no previous contacts to 66% of youth with five or more prior contacts.

Table 4

Proportion of apprehended youth charged, by the number of prior police contacts, Canada (parts), 2001[a]

Number of prior police contacts	Percent charged	Adjusted percent charged[b]	Number
0 (first contact)	40	32	18,341
1	59	47	5,205
2	69	55	2,377
3 or 4	76	60	2,100
5 and over	85	66	2,789

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. the age of the accused, etc. (see Table 15 for a list of the control variables).

Source: *UCR2 Survey, Trend Database.*

The number of prior contacts with police is also related to every other factor affecting police decision-making which was analyzed in this research, and therefore must be statistically controlled when assessing their impact (Tables 5 and 6). The number of prior contacts increases with the age of the apprehended youth: with each year of age, the probability of an apprehended youth having no prior contacts decreases by an average of 5%, and the probability of having 5 or more prior contacts increases by an average of more than 2% - from 2% of 12 year olds to 16% of 17 year olds (Table 5).

Table 5

Number of prior contacts, by the age of the apprehended youth, Canada (parts), 2001

	Age of the apprehended youth (years)					
Number of prior contacts	12[a]	13	14	15	16	17
	%					
0 (first contact)	76.7	74.3	67.0	59.2	53.5	47.7
1	13.3	13.6	15.5	18.2	18.5	17.9
2	4.4	5.1	6.7	8.5	8.8	9.0
3 or 4	3.5	3.7	5.4	6.8	7.8	9.4
5 and over	2.1	3.4	5.4	7.3	11.4	16.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	**2,010**	**3,549**	**5,212**	**6,331**	**6,680**	**7,030**

Note:

a. Some contacts prior to age 12 may not be recorded (see endnote 8).

Source: *UCR2 Survey, Trend Database.*

The number of prior police contacts is related to the presence of a firearm, major injury to a victim, the type of relationship, if any, between the youth and a victim in the incident, solo versus group offending, and the apprehended youth's sex and aboriginal status (Table 6). Apprehended youth with 5 or more prior contacts are much more likely to have a firearm (although the probability is still extremely low), and to cause major injury to a victim, to have a stranger as a victim, to act alone, and to be male and aboriginal.

Table 6

Proportion of apprehended youth, by number of prior police contacts and other explanatory variables, Canada (parts), 2001

	Number of prior contacts				
	0	1	2	3 or 4	5 or more
	%				
Presence and type of weapon[a]					
No weapon	13.9	13.4	15.3	16.5	12.5
Other weapon[b]	84.6	84.3	82.6	80.8	82.8
Firearm	1.5	2.3	2.1	2.7	4.7
Type of injury to a victim[a]					
None/minor/unknown	97.9	97.1	98.1	98.0	96.0
Major injury	2.1	2.9	1.9	2.0	4.3
Relationship with a victim[a]					
Parent	2.3	2.1	3.0	2.3	3.0
Stranger	17.3	20.1	19.2	25.6	30.4
Close friend	4.5	4.3	4.4	3.6	5.6
Other family	11.2	10.4	11.6	9.6	6.4
Acquaintance	60.8	58.6	57.9	55.3	49.1
Unknown	4.0	4.5	3.9	3.6	5.5
Number of perpetrators					
1 (only the apprehended youth)	59.0	65.2	69.5	74.0	76.1
2+ (group crime)	41.0	34.8	30.5	26.0	23.9
Sex of the youth					
Male	67.6	78.3	81.0	85.3	88.2
Female	32.5	21.7	19.0	14.7	11.8
Aboriginal status of the youth[c]					
Aboriginal	3.0	4.1	4.8	5.7	10.2
Non-aboriginal	74.2	73.9	75.1	75.0	71.6
Unknown/not reported	22.8	22.0	20.1	19.3	18.2
Number	**18,341**	**5,205**	**2,377**	**2,100**	**2,789**

Notes:

a. This variable is captured only for offences against the person.

b. See note c to Table 7.

c. See endnote 10.

Source: *UCR2 Survey, Trend Database.*

Presence of a weapon

Table 7 shows the proportion of apprehended youth who were charged, by the presence and type of weapon. The UCR2 records information about weapons only in incidents involving an alleged offence against the person; thus there are only small numbers of youth in this analysis. The presence of a weapon, especially a firearm (which is rare) during the commission of a youth crime greatly increases the probability of charging, even when other relevant factors are controlled. The percentage charged for incidents involving a firearm is substantially reduced when other related factors are controlled, partly because of the relationship with the number of prior police contacts (Table 6), and partly because the presence of a firearm usually results in the classification of the offence as a serious indictable offence; therefore much of the impact of this variable is already accounted for by the variable, Seriousness of the Alleged Crime, which is discussed above.

Table 7

Proportion of apprehended youth charged, by the presence and type of weapon, offences against the person, Canada (parts), 2001[a]

	Percent charged	Adjusted percent charged[b]	Number
No weapon	47	43	1,018
Other weapon[c]	64	63	6,091
Firearm	84	62	154

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. prior contacts, the age of the accused, etc. (see Table 15 for a list of the control variables).

c. "Other weapon" includes: knife, other piercing or cutting instrument, club/blunt instrument, explosives, fire, and other.

Source: *UCR2 Survey, Trend Database.*

Injury to a victim

Table 8 shows the relationship between injury to a victim and the likelihood of charging. Obviously, injury is a factor only in incidents involving offences against the person. Major injury to a victim is rare, but greatly increases the probability that charges will be laid. The increase is much less when other related factors are controlled, because major injury usually results in the classification of the offence as a serious indictable offence; so much of the impact of this variable is already accounted for by the variable (See Seriousness of the Alleged Crime).

Table 8

Proportion of apprehended youth charged, by the type of injury to a victim, offences against the person, Canada (parts), 2001[a]

Type of injury	Percent charged	Adjusted percent charged[b]	Number
None/minor/unknown	61	48	7,153
Major injury	89	60	179

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. prior contacts, the age of the accused, etc. (see Table 15 for a list of the control variables).

Source: *UCR2 Survey, Trend Database.*

The relationship between the victim and the apprehended youth

The relationship between a victim and an apprehended youth plays a significant role in the decision to charge, even when other relevant factors are controlled (Table 9). This variable is coded in the UCR2 only for incidents involving an alleged offence against the person. The probability of a charge is higher if the victim is a parent or close friend, and lower if s/he is another family member or an acquaintance. As with other circumstances of the incident, the percentage differences are much reduced when other factors are controlled. The association between the victim-youth relationship and the number of prior police contacts is shown in Table 6. Also,

young persons tend to commit different types of offences against different types of people: robbery and major assault and sexual assault against strangers, and level 1 assault and sexual assault against family members and/or close friends and acquaintances (Table 10).

Table 9

Proportion of apprehended youth charged, by the relationship between a victim and the apprehended youth, offences against the person, Canada (parts), 2001[a]

Relationship of victim to apprehended youth	Percent charged	Adjusted percent charged[b]	Number
Parent	78	67	179
Stranger	74	50	1,501
Close friend	64	54	338
Other family	57	47	786
Acquaintance	57	38	4,390

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. prior contacts, the age of the accused, etc. (see Table 15 for a list of the control variables).

Source: *UCR2 Survey, Trend Database.*

Table 10

Proportion of apprehended youth, by type of offence and relationship with victim, offences against the person, Canada (parts), 2001

Type of offence[a]	Parent	Other family	Close friend	Acquain-tance	Stranger
			%		
Assault and sexual assault, level 2	11.2	16.8	15.4	14.9	19.0
Robbery	0.6	0.0	2.4	4.9	29.8
Miscellaneous indictable person	1.7	0.5	5.6	1.5	2.3
Sexual assault, level 1	2.2	14.4	9.5	4.2	1.2
Assault, level 1	62.0	51.5	47.3	53.5	29.4
Miscellaneous summary and hybrid person	22.3	16.8	19.8	21.1	18.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	**179**	**786**	**338**	**4,390**	**1,501**

Note:

a. See notes to Table 1 for explanations of the offence categories.

Source: *UCR2 Survey, Trend Database.*

Group crime

A youth who allegedly commits an offence with one or more accomplices is less likely to be charged (Table 11). Group crimes allegedly committed by youth tend to be the least serious, such as theft under $5,000, and to be committed by youth with fewer prior police contacts (Table 6), and by younger youth (Carrington, 2002). Therefore, controlling for related factors reduces the difference in the estimated probabilities of being charged between alleged solo and group offenders.

Table 11

Proportion of apprehended youth charged, by whether accomplices were involved, Canada (parts), 2001[a]

Number of persons apprehended	Percent charged	Adjusted percent charged[b]	Number
1 (only the apprehended youth)	57	57	19,536
2 or more (group crime)	42	48	11,276

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. prior contacts, the age of the accused, etc. (see Table 15 for a list of the control variables).

Source: *UCR2 Survey, Trend Database.*

Age of the youth

The age of the youth plays a major role in the decision to charge. An apprehended seventeen year old is more than twice as likely to be charged as a twelve year old (Table 12, first column). Some of the effect of the youth's age is mediated by other factors, especially his or her accumulated record of prior contacts (Table 5), and the increasing seriousness of offences committed (Table 2). However, even when these other factors are held constant, for each additional year of age, the probability of being charged increases by approximately 10% over the previous year, so that a seventeen year old whose offence, prior contacts, etc. are the same as those of a twelve year old, still has a more than 50% higher probability of being charged (Table 12, column 2). Some of this differential might be due to factors not included in the statistical analysis, such as the availability of diversion programs, the demeanour of the youth, or the role of the parents, but it seems unlikely that these could account entirely for the clear relationship shown in the second column of Table 12.

Table 12

Proportion of apprehended youth charged, by the age of the youth, Canada (parts), 2001[a]

Age	Percent charged	Adjusted percent charged[b]	Number
12 years	28	39	2,010
13 years	36	45	3,549
14 years	45	51	5,212
15 years	52	55	6,331
16 years	58	59	6,680
17 years	65	62	7,030

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. prior contacts, etc. (see Table 15 for a list of the control variables).

Source: *UCR2 Survey, Trend Database.*

Sex of the youth

Although apprehended male youth are more likely than females to be charged (Table 13, column 1), practically all of this difference disappears when other related factors are statistically controlled.

Table 13

Proportion of apprehended youth charged, by the sex of the youth, Canada (parts), 2001[a]

Sex	Percent charged	Adjusted percent charged[b]	Number
Male	54	53	22,641
Female	45	51	8,171

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. prior contacts, the age of the accused, etc. (see Table 15 for a list of the control variables).

Source: *UCR2 Survey, Trend Database.*

The youth's aboriginal status[10]

There is a large difference (19%) between the charge rates for apprehended youth identified as aboriginal and those who are identified as non-aboriginal or whose aboriginal status is not known or not reported (Table 14). Some of this difference is due to related factors, such as the history of police contacts (Table 6), but when these are controlled, apprehended aboriginal youth are still 12% more likely to be charged. It is not possible to determine from the available data whether this substantial difference is due to other related factors which were not included in the statistical analysis, such as the youth's demeanour, the role of the parents, the victim's preference,[11] the availability of diversion programs which could serve as alternatives to charging, etc.

Table 14

Proportion of apprehended youth charged, by the aboriginal status of the youth, Canada (parts), 2001[a]

Aboriginal status	Percent charged	Adjusted percent charged[b]	Number
Aboriginal	70	58	1,272
Non-aboriginal	51	46[c]	22,815
Unknown/not reported	50		6,725

Notes:

a. Standard errors and significance tests are not reported since the data represent a subset of a population, not a random sample.

b. Adjusted by multiple regression to control for the confounding effects of other related variables, e.g. prior contacts, the age of the accused, etc. (see Table 15 for a list of the control variables).

c. The categories "non-aboriginal" and "unknown/not reported" were combined in the multiple regression analysis, since the proportions charged were practically the same (51% and 50%).

Source: *UCR2 Survey, Trend Database.*

Summary

Table 15 shows the relative importance of the situational factors affecting police decision-making with youth which could be analyzed in this paper. The value of partial eta squared is an indicator of the overall impact of the variable on the entire population of police decisions, excluding the types of offences in which little or no discretion not to charge is exercised (Table 1). A variable may have a large impact on individual incidents (indicated by large adjusted percentage differences in the tables above) while having only a small overall impact (indicated by a small value of partial eta squared in Table 15). For example, major injury to a victim increases the adjusted probability of the accused youth being charged by 12% (Table 8), but injury to a victim has very little overall impact in this population of police decisions (Table 15). The reason is that major injury to a victim was recorded only rarely in the incidents which were analyzed (in 179 of 30,812 incidents), so it has little *overall* importance. The same is true of the aboriginal status of the accused youth: youths who are coded as aboriginal have a substantially higher probability of being charged, but there are very few of them (Table 14), so this factor has very little overall impact.

Table 15

Overall ranking of situational factors affecting police discretion with apprehended youth[a]

Rank	Factor	Overall impact (partial eta squared)
1	Prior police contacts	0.061
2	Seriousness of the offence (*Criminal Code* classification)	0.046
3	Age of the youth	0.019
4	Group vs. lone offender	0.008
5	Presence of a weapon	0.003
6	Aboriginal status of the youth[b]	0.002
7	Victim-accused relationship	0.001
8	Sex of the youth	0.000
9	Injury to a victim	0.000
		(Number = 30,812)

Notes:

a. Excludes youth apprehended for offences in which very little discretion is exercised (see Table 1).

b. See endnote 10.

The most influential factor overall is the history of prior contacts with the police. Next in importance comes the seriousness of the offence, as indicated by its Criminal Code classification. The age of the youth, and whether the incident involved a lone alleged offender or a group, also have substantial impacts on police discretion. The other two indicators of the seriousness of the incident – the presence of a weapon and the level of injury to a victim – have only minor *overall* impacts on police decision-making. However, their minor overall impacts are due to their rarity: when a weapon or major injury is present, the probability of charges being laid is elevated considerably. The remaining variables – the sex and aboriginal status of the youth, and any relationship between the accused youth and a victim – have minimal overall importance when other factors are controlled.

Both hypotheses of this research were strongly confirmed. The number of prior contacts with police has a substantial impact on police decision-making with youth. The probability of charges being laid increases substantially with the number of prior police contacts, even when other factors are controlled, and the overall impact of prior contacts is the greatest of any variable considered in the multivariate analysis of factors affecting police decision-making. The number of prior contacts with police is also correlated – strongly, in most cases - with every other explanatory variable. Thus, it is crucial to control for prior police contacts when assessing the impact of other correlated factors on the police disposition – as is clear from a comparison of the raw and adjusted percentage differences in the tables of police dispositions by such variables as offence seriousness and the age of the youth.

Bibliography

Black, Donald and Albert J. Reiss, Jr. 1970. Police control of juveniles. *American Sociological Review* 35: 63-77.

Canadian Centre for Justice Statistics. 2002. *Canadian Crime Statistics 2001*. Ottawa: Canadian Centre for Justice Statistics, Statistics Canada. Cat. No. 85-205.

Carrington, Peter J. 1996. *Age and Youth Crime in Canada*. Working Document No. 1996-1e. 2 vols. Ottawa: Department of Justice Canada. At: http//arts.uwaterloo.ca/~pjc/pubs/ayc96/welcome.html.

Carrington, Peter J. 1998. *Factors Affecting Police Diversion of Young Offenders: A Statistical Analysis.* Ottawa: Solicitor General of Canada. At: http://www.psepc-sppcc.gc.ca/Publications/Policing/199802_e.pdf.

Carrington, Peter J. 2002. Group crime in Canada. *Canadian Journal of Criminology* 44: 277-315.

Carrington, Peter J. and Jennifer L. Schulenberg. 2003. *Police Discretion with Young Offenders*. Ottawa: Department of Justice Canada. At: http://canada.justice.gc.ca/en/ps/yj/research/carrington-schulenberg/report.html.

Cicourel, Aaron V. 1968. *The Social Organization of Juvenile Justice*. New York, NY: John Wiley & Sons, Inc.

Conly, Dennis. 1978. *Patterns of Delinquency and Police Action in the Major Metropolitan Areas of Canada, During the Month of December, 1976.* Ottawa: Ministry of the Solicitor General.

Doob, Anthony N., and Janet B. L. Chan. 1982. "Factors affecting police decisions to take juveniles to court". *Canadian Journal of Criminology* 24: 25-37.

Ericson, Richard V. 1982. *Reproducing Order: A Study of Police Patrol Work*. Toronto: University of Toronto Press.

Fisher, C.J., and R.I. Mawby. 1982. "Juvenile Delinquency and Police Discretion in an Inner City Area". *British Journal of Criminology* 22(1): 63-75.

Hanushek, E.A. and J.E. Jackson. 1977. *Statistical Methods for Social Scientists*. Orlando, Fla.: Academic Press.

Hornick, Joseph P., Tullio Caputo, Ross Hastings, Patrick J. Knoll, Lorne D. Bertrand, Joanne J. Paetsch, Lyle Stroeder, A. Owen Maguire. 1996. *A Police Reference Manual on Crime Prevention and Diversion with Youth*. Cat. No. JS42-75/1996E. Ottawa: Canadian Research Institute of Law and the Family and the Solicitor General Canada.

Judge, G.G., W.E. Griffiths, R. C. Hill, H. Lütkepohl, and T-C. Lee. 1985. *The Theory and Practice of Econometrics*. 2nd ed. New York: Wiley.

Long, J.S. 1997. *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks, CA: Sage.

Morash, Merry. 1984. "Establishment of a Juvenile Police Record". *Criminology* 22(1): 97-111.

Endnotes

1. This research uses data from 2001, when the *Young Offenders Act* was in force. It was replaced in April, 2003 by the *Youth Criminal Justice Act*.
2. Under the *Young Offenders Act*, a young person was defined as a person who had reached his or her 12th birthday but had not yet reached the 18th birthday, on the date of the alleged offence.
3. In this report, the terms "apprehended" and "chargeable" are used interchangeably.
4. This under-reporting of youth not charged was apparently due to technical problems in the recording and reporting process, which were addressed in 1999. Data for subsequent years appear to report more accurately numbers of youth not charged.
5. In New Brunswick, Quebec, and British Columbia, it is the Crown which makes the decision concerning charging, following submission of a recommendation by police. For New Brunswick and Quebec (Sûreté du Québec only), persons are coded as "charged" in the UCR Survey if the Crown approves the recommendation to charge. In the rest of Quebec and British Columbia, persons are coded in the UCR Survey as charged if police have recommended charging, regardless of the Crown decision (Canadian Centre for Justice Statistics, 2002: 73).
6. Criminological theories of the response of police to "male" and "female" suspects (e.g. the "chivalry" hypothesis) refer implicitly or explicitly to police stereotypes of (socially defined) gender roles, not to (biological) sex. However, police records and the UCR Survey record the biological sex, not the gender role, of the apprehended person. Therefore, the present research is restricted to analysis of the impact of the sex of the accused.
7. This field is not reported to the UCR2 by many police services; therefore a large proportion of apprehended youth are coded as "unknown" for this variable. See endnote 10, below.
8. However, the reporting of alleged offences by children aged 11 or younger (who legally cannot be charged with criminal offences) is not consistent across respondents to the UCR2 nor is it consistent over the time period covered.
9. The conventional approach to multivariate analysis with a dichotomous dependent variable and a set of discrete independent variables is the discrete logit or probit model. In this case, the ordinary least squares regression model was preferred because it can estimate adjusted means (see below), the differences among which provide a simple and intuitive estimate of the impact of each independent variable. These differences can also be compared with the differences among the unadjusted (simple) means, to assess the impact of introducing control variables. Although the parameter estimates produced by OLS regression with a dichotomous dependent variable are unbiased (Long, 1997: 38-39), they are not the most efficient, i.e. they have inflated standard errors, and therefore the associated confidence intervals and significance tests are inaccurate. This was not an issue in the present research, for three reasons: (i) the data are not a random sample, but a subset of a population, so the issue of generalizing to a population does not arise, and "significance tests" are consequently not reported; (ii) the number of observations (30,812) is so large that all differences of any magnitude would be "significant" if significance levels were calculated, and (iii) despite the theoretical inferiority in this situation of OLS regression to logit or probit models, simulation research has found that all three types of models produce equivalent results when the split on the dependent variable is not extreme (i.e. skewed)(Judge et al. 1985: 768; Hanushek & Jackson 1977: 209-210) – as in the present case, where 52% of the cases resulted in charges, and 48% did not.
10. Results based on the 'aboriginal status' variable in the UCR2 Survey must be interpreted with caution, for two reasons: (i) some police services which report to the UCR2 Survey do not report data for this variable; and (ii) the variable is coded as "unknown" for a large proportion of individuals. Reporting police services use either self-identification or visual identification to identify aboriginal status.
11. Some research on the question of whether the suspect's race affects police decision-making in the USA has concluded that the apparent over-charging of black youth is explained by the expressed preferences of (black) complainants (e.g. Black and Reiss, 1970).

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