

The Relative Utilization of Criminal Sanctions in Canada: Toward a Comprehensive Description of Sentencing Outcomes

Abstract:

Canada's national statistics agency relies solely on counts, percentages, and measures of central tendency to report on sentencing practices in the country. While these techniques are familiar and easy to calculate, they offer very limited perspectives. Consequently, important information may go unreported. This article presents an alternative statistical technique – a specialization quotient – to offer a different perspective. Modified from its traditional geographic focus, a location quotient calculation is used to detect specialization in sanction use across a variety of offence categories and specific criminal offences. Results of the analyses show that very different patterns are detected by the alternative measure and when used alongside conventional measurement strategies, a more complete understanding of sentencing practices is obtained. Because of its valuable contribution and ease of calculation, it is argued that the location quotient should be more widely adopted in studies of sentencing and criminal case processing.

Key words: sentences, location quotient, criminal sanction, criminal justice statistics, punishment

Introduction

In Canada, sentencing has been said to attract greater public attention than any other area of the criminal justice system (Jones and Kirkby 2011; Roberts, Crutcher, and Verbrugge 2007). Yet research has shown that people obtain most of their knowledge on the subject from media sources (Hough and Roberts 2005; Roberts and Doob 1990). Consequently, sentencing scholars have suggested that “[p]ublic views about sentencing are best thought of as beliefs formed largely on the basis of statements about sentencing rather than on a systematic study of sentencing patterns” (Doob and Webster 2008: 7). This paradox characterizing an unequivocal interest in, and desire for, information yet minimal knowledge on the subject, has long been attributed to a “lack of systematic information about sentencing” (Canada 1987: 60).

Unfortunately, the impact of this historical dearth of information has not been limited to the public and it has not dissipated over time. In fact, just five years ago Professor Doob (2011: 281) observed that “[a]n interested, intelligent member of the public or an interested, intelligent judge cannot, apparently, get systematic information about what is happening in Canada’s courts”. Unlike many other jurisdictions, Canada no longer has a sentencing commission to provide systematic analysis, research, or guidance (Jones and Kirkby, 2011). Consequently, Canadians must rely on *Juristat* reports published by the national statistical agency (Statistics Canada) to obtain accurate information on case processing in the country’s criminal courts.

The statistical measures reported in annual “Youth Court Statistics in Canada”¹ and “Adult Criminal Court Statistics in Canada”² are, however, limited to a small number of basic measures. In fact, these publications rely solely on counts, percentages, and measures of central tendency to report on sentencing practices. While these techniques are familiar and easy to calculate and interpret, it is important to recognize, that they provide a perspective – a

perspective that either identifies the direct prevalence of a phenomenon, or compares the prevalence of a phenomenon to some relative attribute.

The purpose of this paper is to introduce an additional perspective that is slightly different from this traditional approach – one that highlights the prevalence of a phenomenon in a specific context relative to the same phenomenon in a broader context. This form of specialization measurement has been used in the social sciences for nearly a century and in spatial crime analyses since the early 1990s. Despite this extensive use, it has yet to be employed without a geographic focus in criminal justice studies. The demonstrated ability for specialization measurements to detect meaningful patterns in a wide range of spatial crime issues, however, suggests that the approach could provide a useful perspective in other research areas. Recognizing this potential, the current study employs the location quotient measurement technique in a non-geographic study of sentencing patterns for adult criminal offenders. More specifically, measurements of sanction specialization are conducted alongside traditional measures of sanction prevalence to provide a broader lens by which criminal justice decision-makers, practitioners, and the public may view sentencing practices in the country.

Measurement of Specialization

The measurement of specialization has been a longstanding interest of researchers in the social sciences. Although a variety of methodological approaches to the study of specialization exist, the location quotient is a simple statistical measurement technique that has been used by researchers in economic geography and regional planning since the first half of the 20th century (Miller, Gibson, and Wright 1991). Primarily used as a method to determine how well represented a particular industry is in a local area relative to a larger reference area (Miller et al.

1991), the location quotient was later proposed for use in criminology as an alternative method to explore spatial crime patterns (Barr and Pease 1990).

First used in this capacity by Brantingham and Brantingham (1993; 1995; 1998), the technique proved to be a useful supplement to conventional measures of crime patterns. Brantingham and Brantingham (1998) were interested in comparing violent crime incidents among cities in British Columbia, Canada. Crime counts were found to easily detect large, populous urban centres because they had experienced the largest quantities of violent crime. In comparison, crime rates detected municipalities that had the greatest risk for victimization because they had large crime-to-population ratios. Offering a very different perspective, location quotients identified municipalities that had a disproportionate share of violent crime relative to the broader reference area. In other words, after controlling for the proportion of violent crime that all municipalities had experienced, the location quotient was able to detect those areas that had a disproportionate share of that particular crime type.

While largely abandoned as a statistical tool in criminology toward the end of the 1990s (Andresen 2009), the technique has recently become very popular. In just the last few years, researchers have employed the measure in studies of land use characteristics and crime (Beconytė, Eismontaitė, and Romanovas 2012; Breetzke, Landman, and Cohn 2014; Groff and McCord 2012; McCord and Tewksbury 2012; Pridemore and Grubestic 2012), the crime prevention effectiveness of closed-circuit television cameras (Caplan, Kennedy, and Petrossian 2011; Lim, Kim, Eck, and Kim 2016; Piza, Caplan, and Kennedy 2014), connections between unemployment and crime specialization across geographic regions (Andresen and Linning 2015), and the identification of crime specialization in rural communities (Carleton, Brantingham, and Brantingham 2014).

Hailed as a useful tool in studies that focus on crime across spatial units of analysis (Block, Clarke, Maxfield, and Petrossian 2012), it is important to recognize that the location quotient is not limited to use in geographic contexts (Carroll, Reid, and Smith 2007). In fact, as observed by Ratcliffe (2010: 30), “the [location quotient] is not inherently spatial because it does not reflect relationships between spatial neighbors”. Despite this assertion, the location quotient has never been used outside of the geographic realm in criminal justice studies. Further, Brantingham and Brantingham (1998) suggested that it could prove useful for research in sentencing but it has never been used for that purpose.

Recognizing its versatility in studies on a wide range of topics and its potential to be adapted in non-geographic contexts, the current study employs the location quotient technique as an alternative statistical measure to explore patterns of specialization in sentencing. More specifically, this study uses specialization quotient analyses alongside conventional measures of prevalence to offer an alternative perspective on the use of sanctions across a variety of offence categories and specific criminal offences.

Methods

Data

Data employed in this study were retrieved from the adult component of the Integrated Criminal Court Survey (ICCS). The ICCS is a comprehensive database that maintains the most detailed information on sentencing information across Canada’s provincial/territorial jurisdictions. For the purposes of the analyses below, the case outcome and sanctions associated with guilty cases were retrieved for all cases concluded in the 2013-14 fiscal year. The unit of count reported in the ICCS is the case.

A case is one or more charges against an accused person or company, which were processed by the courts at the same time (date of offence, date of initiation, date of first appearance, or date of decision), and received a final decision. (CANSIM, 2016 ICCS footnote 2)

Because cases may include more than one charge, it is important to note that analyses conducted for specific offences or broader offence categories follow a procedure that reports on the most serious offence.³ It is also important to recognize that sentences for guilty cases can include more than one sanction. While data that document the most severe sanction are available, collapsing sentencing outcomes into a single measure has been discouraged for research that seeks to better understand the use of qualitatively different options at sentencing (Blumstein, Cohen, Martin, and Tonry 1983). For this reason, both single and multiple-sanction sentences were included in the analyses to follow.

Although comprehensive in its scope, the ICCS includes some notable limitations. First, Superior Court data was not available for the following provinces: Ontario, Quebec, Prince Edward Island, Manitoba, and Saskatchewan. Because Superior Court cases accounted for less than 1% of Canada's total adult criminal caseload in 2013-14 (Maxwell 2015), these provinces were retained in the current sample. Cases completed in a Superior Court are, however, known to be more severe (Maxwell 2015) so results presented here are likely to underestimate the severity of sanctions handed down in that subset of provinces.

Second, there were considerable limitations to the data available from Quebec and Northwest Territories. Quebec did not report on offences against the *Controlled Drugs and Substance Act*, nor any cases that resulted in a conditional sentence. In the Northwest Territories, the number of custody orders have been under-reported and the number of probation orders have been over-reported "by unknown amounts due to clerical procedures" (CANSIM, 2016 ICCS footnote 26). In addition, Northwest Territories did not report on cases that resulted in a conditional sentence. Due to these major limitations, these two jurisdictions were not included in

the analyses conducted here. Consequently, the analyses report on the combined sentencing patterns for Canada's remaining nine provinces and two territories.

Analytic Strategy

Given the prevalence of “simple unit of count programmes” and the need to provide information that is digestible for a broad readership, the United Nations (2003: 34) has encouraged the use of simple descriptive measurements in dissemination reports of criminal justice statistics. It has been suggested that counts, percentages, rates, and rates of change are capable of providing answers to many basic questions regarding crime and criminal justice systems. Indeed, areas of inquiry such as the number of persons brought before the court, the percent of guilty cases that receive a particular sanction, the rate of custody, and annual change in rate of case completion provide essential information to the most senior criminal justice decision-maker, and the layperson in search of a basic understanding of the prevalence of crime and criminal justice processes. In addition, basic descriptive statistics serve as a foundation for exploratory data analysis used by criminological researchers and criminal justice practitioners. Using these rationales, the current study employs the use of three simple descriptive statistics to report on sanction use across offences and offence categories.

Percentage and Count

First, percentages are “simple to calculate and are useful for showing the relative proportions of each category within a given class” (United Nations 2003: 33). Recognizing this assertion and maintaining consistency with annual “Adult Criminal Court Statistics in Canada” *Juristat* reports, the percentage of sanctions handed down for each offence or offence category is used to document the prevalence of sanction use. Second, for transparency and to provide an additional measurement for the interested reader, raw counts are reported alongside percentages.

Specialization Quotient

Third, to provide an alternative perspective, specialization quotients are used to calculate how well represented each sanction is for an offence or offence category relative to its overall use across all offences or offence categories. The specialization quotient is calculated by the following equation:

$$SQ = \frac{C_{sn}/C_{tn}}{\sum_{n=1}^N C_{sn} / \sum_{n=1}^N C_{tn}}$$

Where C_{sn} is a count of sanction s in offence/offence category n , C_{tn} is the count of all sanctions in offence/offence category n , and N is all offences/offence categories under study. This complex fraction is, in fact, very simple to evaluate. It includes the successive calculation of just three fractions:

- 1) First, the count of a particular sanction that was handed down in an offence/offence category is divided by the total number of sanctions handed down for that same offence/offence category; then,
- 2) The count of the same sanction handed down for all offences/offence categories is divided by the total number of sanctions handed down in for all offences/offence categories; and finally,
- 3) The statistic obtained from step one (1) is divided into the statistic obtained from step two (2).

Results and Discussion

Category 1: Offences against the Person

Figure 1 presents column charts for the three measures of sanction use with offenders guilty of an offence against the person. Considering the percent and count of guilty cases that resulted in each of the five available sanction types (Figure 1a), there are several findings that are readily apparent. First, the percentages do not sum to a total of 100. This is because it is possible for multiple sanctions to be used to form a single disposition. For this particular offence category, there was an average of 1.2 sanctions per disposition in the 2013-14 fiscal year. A second observation that is apparent is that there is considerable variation in the prevalence of sanctions. Specifically, probation is used far more frequently than any other sanction at 71%. The next most frequently used sanction accounts for nearly half of that figure; custody is used in 36% of cases. The remaining three sanctions are used very infrequently. Together they account for a total of 13%. Conditional sentences and fines are each used in 6% while restitution is used in just 1% of guilty cases.

After considering this presentation of the data, it might be tempting for readers to form an opinion about the way sentencing judges respond to offenders who have been found guilty of an offence against the person. Those who are aware that this offence category includes a variety of serious offences (such as homicide, attempted murder, robbery, common assault, major assault, sexual assault, and harassment) might be troubled by the relatively low proportion of cases that receive custody and; therefore, come away with the conclusion that judges are unduly lenient. This would certainly be consistent with many of the findings of public opinion research over the last two decades (Doob and Webster 2008). Others, however, who recognize that the most restrictive sanctions (e.g., probation and custody) are considerably more prevalent than those sanctions that require a monetary payment (i.e., fine and restitution) might feel as though the judicial response is suitably punitive.

< Insert figure 1 about here >

For an alternative perspective, Figure 1b presents results of the specialization quotient analyses for offences against the person. Although sanctions such as probation, custody, and fine appear to have a very similar depiction to that shown by the standard percent and count, there are several notable differences in this representation of the data. Most apparent is the change for conditional sentences. Specifically, conditional sentences have gone from one of the lowest ranked sanctions to second highest. Also noticeable is that restitution has gone from the lowest ranked sanction to second lowest, clearly above fines. What is the explanation for these changes between measures? In addition to their uses for offences against the person, the specialization quotients have accounted for the use of each sanction across all other offence categories. In other words, conditional sentences are shown to be overrepresented (i.e., greater than 1) in this offence category because they are used in greater proportion compared to their general, overall use.

How overrepresented is the conditional sentence sanction? There is no analytic technique to determine the statistical significance of a specialization quotient. Miller, et al. (1991), however, provided a useful categorization that may be used to interpret specialization quotient values. Specifically, values of 0.70 or less may be interpreted as very underrepresented, values between 0.71 and 0.90 are moderately underrepresented, values between 1.11 and 1.30 are moderately overrepresented, and values of 1.31 or greater are very overrepresented. In other words, with a value of 1.12, conditional sentences are moderately overrepresented for offences against the person. Custody reveals a specialization quotient of 0.95 meaning it is slightly underrepresented while probation has a value of 1.68 meaning it is very overrepresented.

Conversely, restitution is shown to be greater than fines but its specialization quotient is just 0.47. With these low values, both restitution and fines may be characterized as very underrepresented for this offence category.

This alternative perspective might change the way readers view the sentencing of offenders found guilty of offences against the person. Specifically, it may be possible to conclude that compared to the average use of custody across all offences, it is used slightly less frequently in this category. For those who believe custody is the only meaningful benchmark for severity in sentencing, this might suggest a more lenient approach. On the other hand, there is larger gap between the most severe penalties (i.e., probation, conditional sentence, and custody) and those considered less severe (i.e., restitution and fines). For those who resonate with this interpretation of sanction use, it might signal a punitive sentencing response.

Category 2: Property Offences

Figure 2 presents results for the two measures of sanction use with offenders found guilty of property offences. This category reveals a slightly greater proportion of sanctions per case with an average of 1.3. The percentages shown in figure 2a reveal a similar pattern to that presented for offences against the person (Figure 1a) with probation ranked first (56%), custody second (42%), and the remaining sanctions considerably less prevalent (conditional sentence = 8%, fine = 13%, and restitution = 11%). By this presentation alone, many readers might be inclined to conclude that sanction use for property offences is very similar to that for offences against the person. There are certainly differences in the magnitudes of the percentages but the general pattern would probably not be characterized as markedly different.

< Insert figure 2 about here >

A very different depiction is revealed, however, by the specialization quotient analyses shown in Figure 2b. Unlike any of the other charts, restitution stands out as most prominent with a quotient value of 3.50. This value indicates that restitution is very overrepresented in sentencing offenders guilty of property crimes. While some readers may critique this presentation of the data, suggesting that it artificially inflates the frequency of restitution use, it is important to recognize that the quotient value does not report on the frequency of use. Instead, the specialization quotient reports the relative use of restitution in this offence category compared to its general use across all categories of offences.

Once one becomes comfortable with this interpretation, the results may make more intuitive sense and be more informative. As defined in section 738(1) of the *Criminal Code*, restitution involves:

- (a) in the case of damage to, or the loss or destruction of, the property of any person as a result of the commission of the offence or the arrest or attempted arrest of the offender, by paying to the person an amount not exceeding the replacement value of the property as of the date the order is imposed, less the value of any part of the property that is returned to that person as of the date it is returned, where the amount is readily ascertainable.

Although restitution may also involve payment for pecuniary damages or other monetary losses that could be associated with different offence types, property offences (such as theft, break and enter, fraud, mischief, or possession of stolen property) are most likely to attract restitution orders because by their definition, they involve some form of loss or damage to property.

Interestingly, fine is the only sanction that is found to be underrepresented for property offences. In fact, custody is moderately overrepresented ($SQ = 1.12$), and both conditional sentence ($SQ = 1.44$) and probation ($SQ = 1.33$) are found to be very overrepresented. Based on this alternative perspective, readers may come away with a very different view of sentencing. Specifically, if a person was to receive a restitution order, it is highly likely to be a judicial

response to a property crime. Equally, however, custody, conditional sentence, and probation are also more likely sanctions under this particular category compared to other offence groupings.

Category 3: Administration of Justice Offences

Turning to administration of justice offences, Figure 3 presents results of the percent, count, and specialization quotient analyses. There was an average of 1.06 sanctions per case in this category revealing a tendency for judges to use fewer sanctions for each sentenced offender. Figure 3a reveals a very different illustration of percentage sanction use compared to the previous two offence categories. Specifically, custody (51%) is used most frequently followed by probation (29%), fine (22%), conditional sentence (3%), and restitution (less than 1%). While probation, conditional sentence, and restitution reveal lower percentages than found in person or property-related offences, fine is notably greater. From this presentation, it is likely that readers would conclude that judges have taken a severe approach to sanctioning offenders who have committed an administration of justice offence. Irrespective of the greater use of fines, custody is the dominant sanction and relative to previous offence groupings, it stands out as markedly greater.

< Insert figure 3 about here >

The specialization quotient analyses reported in Figure 3b appear to confirm this sentiment. In fact, custody is the only sanction that is found to be overrepresented with a value of 1.36. While the greater percentage of fines is revealed in a specialization quotient value (0.82) that is ranked second to custody, it is still considered moderately underrepresented. Interestingly, this set of analyses is the first to reveal an underrepresentation for probation. In other words,

relative to the overall use of probation across all offence categories, it is less likely to be used as a sanction when responding to offenders found guilty for an offence such as failing to appear in court, breach of probation, or being unlawfully at large.

An explanation for these results may be found in the literature associated with criminal court responses to this offence category. In a qualitative study that focused on the use of imprisonment for administration of justice offences, Marinos (2006) found that judges use custody to fulfil a wide range of purposes including denunciation and general deterrence. In fact, the majority of judges included in the study noted that a period of custody is often needed “to communicate the seriousness of court orders and reinforce respect for the criminal justice system” (Marinos 2006: 158). From the perspective of Crown attorneys, it was found that many take administration of justice offences more seriously than other categories such as property offences. More specifically, “according to Crown attorneys, a sentence of imprisonment for administration of justice offences serves a purpose for later management of the offender, and a reliance on documentation ensures management of offenders who may return” (Marinos 2006: 164).

Category 4: Other *Criminal Code* Offences

Figure 4 presents results for other *Criminal Code* offences where there was an average of 1.13 sanctions handed down per case. This category includes offences documented in Canada’s key criminal legislative document that are not easily categorized into other main groupings. An offence such as disturbing the peace, weapons-related crimes, and offences associated with prostitution are included in this category. Similar to both offences against the person and property crimes, the percentages presented in Figure 4a show probation as the most frequently used sanction (47%), custody ranked second (40%), fine third (19%), and conditional sentences

and restitution lower with 7% and 1%, respectively. In fact, although the magnitudes of the percentages are somewhat different, the general pattern is very consistent across those three offence categories. Consequently, readers might be inclined to conclude that sanction use is similar among these offence groupings.

< Insert figure 4 about here >

The specialization quotient analyses depicted in Figure 4b, however, reveals a very different pattern of sanction use. Specifically, custody (SQ = 1.07), conditional sentence (SQ = 1.18), and probation (SQ = 1.12) are all overrepresented. While the ranking of the sanctions is somewhat similar to that shown in the property crime category (Figure 2b), restitution exhibits a notable change. Restitution is suppressed by this analysis of the data and found to be ranked last among the other sanctions. This contributes to conditional sentences emerging as the most overrepresented sanction in this crime category. From this representation, it is suitable to conclude that judges tend to use conditional sentences, custody, and probation in greater proportions for other *Criminal Code* offences than they do on average elsewhere.

Category 5: Traffic-Related Offences

Figure 5 presents results for the three measures of sanction use with offenders guilty of traffic-related criminal offences. Aligned with the number of sanctions used for other *Criminal Code* offences, judges handed down an average of 1.13 sanctions per case in this category. As is evident in Figure 5a, fine is by far the most frequently used penalty with nearly 70% of cases receiving that sanction. Contrary to all previous offence groupings, no other sanction is found to

be used in greater than 17% of cases. This serves to set fines well apart from other sanction options.

< Insert figure 5 about here >

After controlling for the general use of each sanction, Figure 5b reports the specialization quotients. Perhaps surprisingly, there is little distinguishable difference between the results presented in the two charts. Fine remains the dominant sanction group – very overrepresented with a value of 2.84. In fact, similar to the administration of justice offences category, only one sanction emerges as overrepresented. In this case, however, all other sanctions are very underrepresented with no value greater than 0.44. From this perspective it is possible to conclude that fines are more likely to be used for traffic-related criminal offences than any other offence category. Equally, when compared to their average use across other offences, custody, conditional sentence, probation, and restitution are less likely to be used for traffic offences.

Historically, judges have used fines as a key response to criminal offenders (Marinos 1997). In fact, up to 2000-01, fines were used more frequently than any other sanction type (Thomas 2001). In recent years, however, the use of fines has declined and probation and custody have become more frequently used overall (Maxwell 2015). As the specialization quotient analysis revealed here, however, this is not the case for all offence types. Fines are used far greater than other sanctions for traffic-related criminal offences. This is revealed by both the percent and specialization quotient analyses. Given that fines have been underrepresented in all previous offence categories, it appears that fines may now be considered a less versatile sanction by sentencing judges.

Category 6: Drug Offences

The final category of offences presented in this study is for drug crimes documented in Canada's *Controlled Drugs and Substances Act*. Judges handed down an average of 1.03 sanctions per case in this grouping. Figure 6a shows that the percentages of custody, conditional sentence, probation, and fine are far more similar than found in other categories with a range of just 16%. Restitution, however, remains very low at less than 1%. This presentation of the data suggests that sentencing judges find a wide range of sanctions appropriate for responding to offenders found guilty of a drug offence. Probation is used in 31% of cases, fine is used in 30%, custody is used in 26% and conditional sentences are used 15%.

< Insert figure 6 about here >

Figure 6b, however, reveals a considerably different pattern. Although probation was found to be most prevalent by percentage use (31%), the specialization quotient reveals that it is underrepresented ($SQ = 0.74$). In fact, conditional sentence is the only sanction found to be overrepresented with a specialization quotient value of 2.73. This is in stark contrast to the representation of this sanction in all other offence categories. Although conditional sentences were overrepresented for offences against the person, property offences, and other *Criminal Code* offences, its specialization quotient values in those groupings were at least 1.29 less than what is found here. In other words, if a person found guilty of a criminal offence was to receive a conditional sentence, they are far more likely to receive it for a drug crime than any other offence category.

This finding may come as somewhat surprising as members of the public have historically viewed conditional sentences as a relatively lenient sentencing option. In fact, in a survey that explored public attitudes toward conditional sentences, Marinós and Doob (1999) found that members of the public were unable to distinguish the sanction from probation. Because the Supreme Court of Canada has held that conditional sentences are capable of serving both punitive and restorative objectives (*R. v. Proulx*), however, it may be that sentencing judges view the sanction as an important tool for responding to offenders found guilty of drug offences.

Detailed Offences

The specialization quotients have shown a very different perspective of sanction prevalence across most offence categories. Importantly, they have highlighted several patterns that might have been missed when considering counts or percentages alone. When interpreting results, however, it is important to recognize that the offence groupings may mask variation in sentencing patterns between specific offences. For this reason, percent and specialization quotient analyses were conducted for many individual crime types. These are presented in Table 1 and Table 2, respectively with specialization quotient values greater than 1.10 highlighted in grey. Some offences such as homicide, common assault, breach of probation, and impaired driving have very similar sanction rankings across both measurements. Other offences reveal very different results. With respect to property crimes, specialization measures show that restitution is overrepresented for theft (SQ = 2.24) and break and enter (SQ = 3.03), but substantially more so for fraud (SQ = 7.60). With a percentage of only 23%, and sanctions such as custody and probation used more frequently, these results indicate that offenders are far more likely to receive restitution for fraud than any other offence documented here.

This finding may, at least in part, be due to a provision in the *Criminal Code* that required judges to consider restitution in cases of fraud. Specifically, s. 380.3(1) specified:

When an offender is convicted, or is discharged under section 730, of an offence referred to in subsection 380(1), the court that sentences or discharges the offender, in addition to any other measure imposed on the offender, shall consider making a restitution order under section 738 or 739.

And, “[i]f a victim seeks restitution and the court decides not to make a restitution order, it shall give reasons for its decision and shall cause those reasons to be stated in the record” (*Criminal Code*, s. 380.3[5]). Given that this provision was repealed in 2015, it may change the specialization of sanction use for this particular criminal offence.

< Insert table 1 about here >

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Revisiting the results for drug offences, data only allowed for more refined analyses of drug possession and ‘other drug offences’. Interestingly, the specialization analyses for drug possession reveal that fine was the only sanction overrepresented ($SQ = 1.71$). In contrast, conditional sentences were exceedingly overrepresented for ‘other drug offences’ ($SQ = 5.82$). Given that serious crimes such as drug trafficking, production, importing and exporting are included in this grouping, this finding may come as a further surprise for many readers. It is important to recognize, however, that custody is ranked first in terms of its overall use for this offence group (45%). Consequently, it is only because conditional sentences are used in greater proportion for this offence category compared to all other categories that it is found to be overrepresented by the specialization analyses. This example demonstrates how measures of

specialization can offer important information on sentencing patterns but they should be used to supplement, rather than replace conventional measurement techniques.

Conclusion

The routine publication of accurate and informative justice statistics is an essential exercise that serves important functions for countries around the world. According to the United Nations (2003):

The collection of reliable and comprehensive criminal justice statistics in countries is of immense importance to everyone involved with criminal justice, especially to the criminal justice administrator. Each component of the criminal justice system inevitably creates large quantities of records, but it is only when such raw information is transformed through purposeful collection and organization into statistical form that these records provide information valuable for criminal justice decision-making. (p.1)

It has also been recognized that indicators, along with monitoring and evaluation mechanisms, make justice institutions more transparent and accountable (Dandurand, Kittayarak, and MacPhail 2015). Further, research has demonstrated that members of the public who are better informed react differently to criminal justice issues (Roberts 2005). In fact, those with the least knowledge about the criminal justice system are known to have the least confidence in its operation (Doob 2014). It is for these rationales that countries invest considerable resources into the publication of data and statistics that report on criminal victimization, law enforcement, case processing, and correctional populations.

Due to a distinct lack of data on sentencing in Canada, it is important to present the limited data that are available from a variety of perspectives. This article introduced an alternative perspective that has not been used to study case processing, nor any other criminal justice issue outside of its traditional geographic focus. Specifically, the measurement of specialization employed here, offered a perspective on sentencing that revealed how well represented each sanction was for a particular offence or offence category, compared to its

average use across all offences or offence categories. Many important findings emerged from this approach.

First, specialization measures offered comparisons that identified weaknesses in conventional measures of sanctions use. Specifically, percentages and counts were not found to be very useful for describing the relative prevalence of lesser used sanctions. In fact, even after careful consideration of all percentage charts, most people would only be able to conclude that conditional sentences and restitution are used relatively infrequently. It would be difficult to determine for which offences judges tended to select these sanctions in greater proportion. In a similar way, conventional measures were not particularly helpful in distinguishing between the prevalence of the most frequently used sanctions across offence categories. Probation for example, was used most frequently in four of the six offence categories. Just because it was used most frequently, however, did not mean that judges relied on it to a similar degree in different contexts. In fact, probation was the most frequently used sanction for sentencing offenders of drug crimes, yet judges were less likely to use the sanction for that offence category compared to several others.

In addition, specialization measures were able to detect a number of important patterns in sanction use. Restitution, for example, was used for sentencing offenders of property crimes more so than in any other category. This may not come as a surprise to criminal justice professionals who are familiar with available sentencing options, and the purposes and principles of sentencing. For the layperson who may not have direct knowledge of the sentencing process, however, this information might be quite informative. In a more specific example, the greater specialization of restitution for fraud compared to other property crimes might even inform experienced sentencing scholars. The same might also be true for the specialization of

conditional sentences. Conditional sentences were found to be overrepresented in sentencing of offences against the person, property offences, other *Criminal Code* offences, and especially drug offences. Because they are used less frequently than probation, custody, and fine, relatively little has documented about the use of this particular sanction. Consequently, these findings might help to better inform readers about their specialized use.

Notwithstanding these contributions, caution should be exercised when interpreting the findings reported here. This study measured specialization on just one dimension of criminal sentences. Sentencing dispositions are, however, known to be very complex. Several recent studies that have explored patterns in sanction use have adopted multiple measures to account for both the type and quanta of dispositions (Doob and Webster 2008; Reid 2014; Sprott, Webster, and Doob 2013). In addition, factors such as plea bargaining are known to impact the sentencing process, yet they could not be accounted for in these results. Further, this study explored sentencing patterns for a combined set of jurisdictions. Because sentencing practices are known to vary by jurisdiction (Sprott and Doob 1998), the results presented here are unlikely to be representative of those in each provincial/territorial jurisdiction, nor the jurisdictions excluded from these analyses due to data limitations.

Still, another important feature of the approach taken in this study was the ease by which the analyses were able to be conducted. The specialization statistics were calculated via a simple series of fractions, without the aid of external statistical expertise or specialized analytic software. As a result, this approach may be suitable for use in jurisdictions with even the most basic count data programmes and resource limitations. It may also prove to be a useful technique to study other criminological or socio-legal issues. Because specialization measures are able to be employed anytime a phenomenon is recorded on multiple variables, they offer great

versatility. Consequently, future research efforts should explore patterns of specialization in the sentencing of particular offender groups, or in the outcomes of other decision points in criminal case processing.

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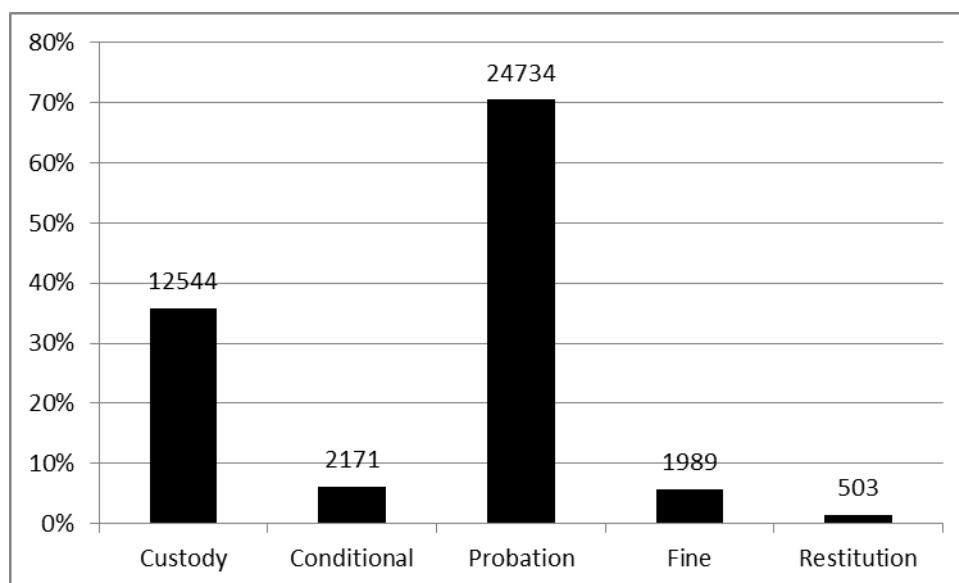
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Figures

Figure 1.

a) Percentage and count



b) Specialization quotient

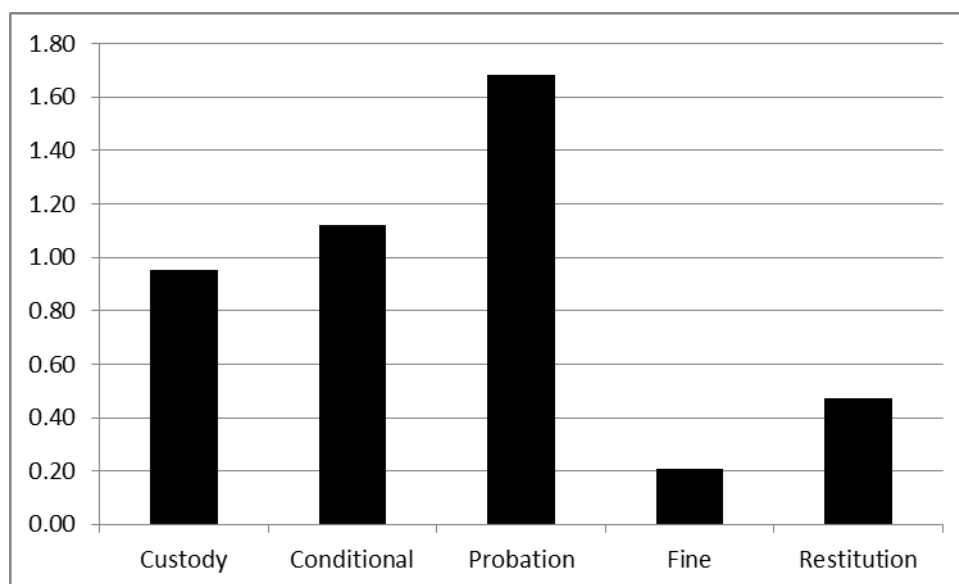
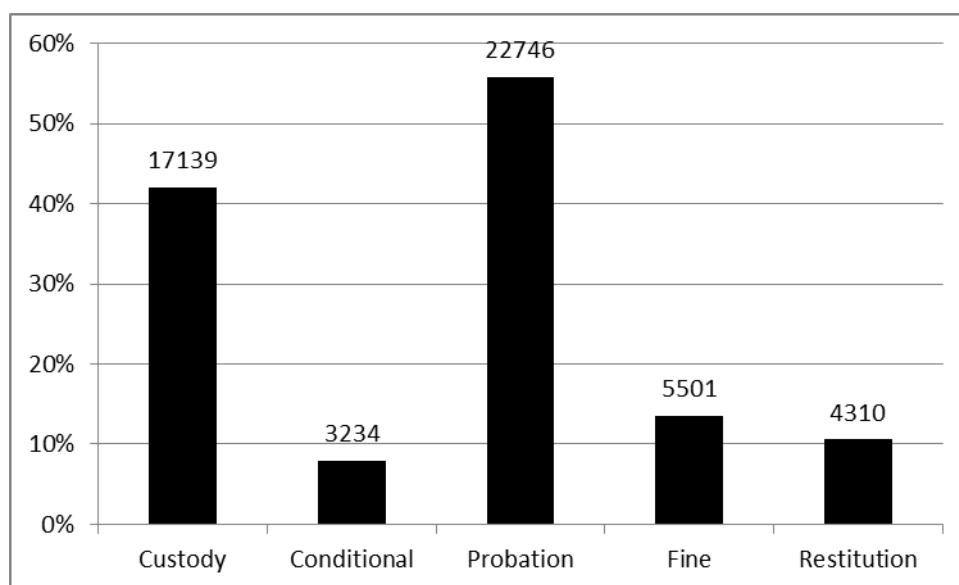


Figure 2.

a) Percentage and count



b) Specialization quotient

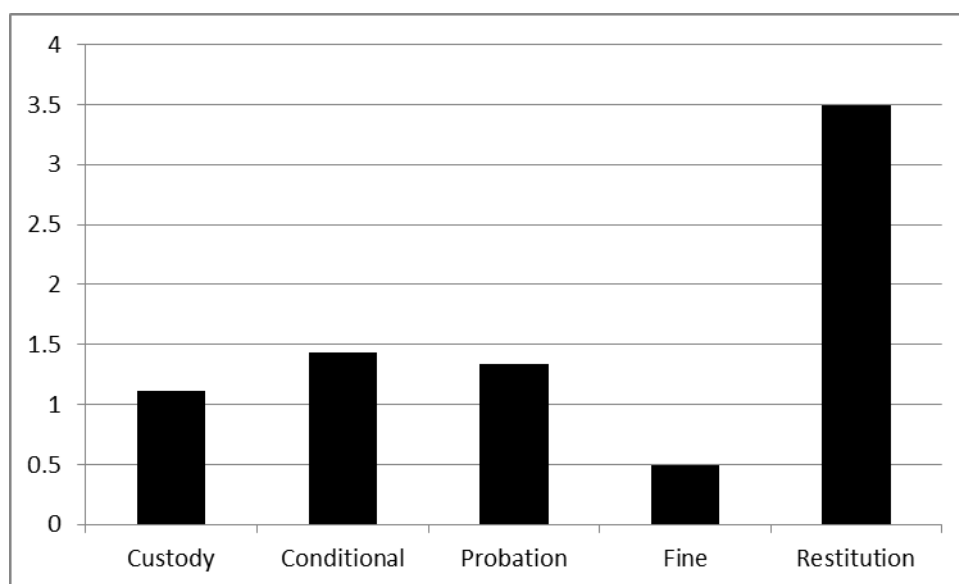
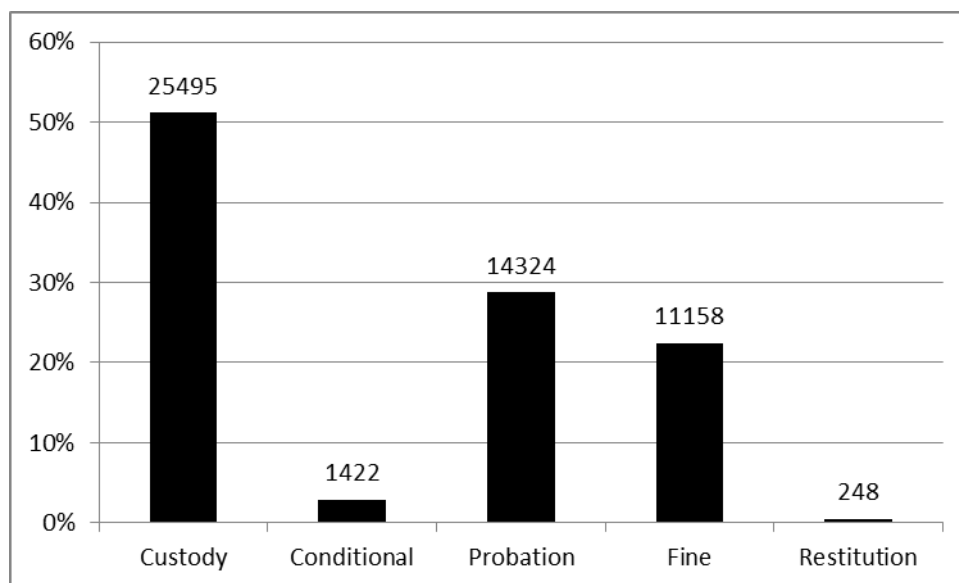


Figure 3.

c) Percentage and count



d) Specialization quotient

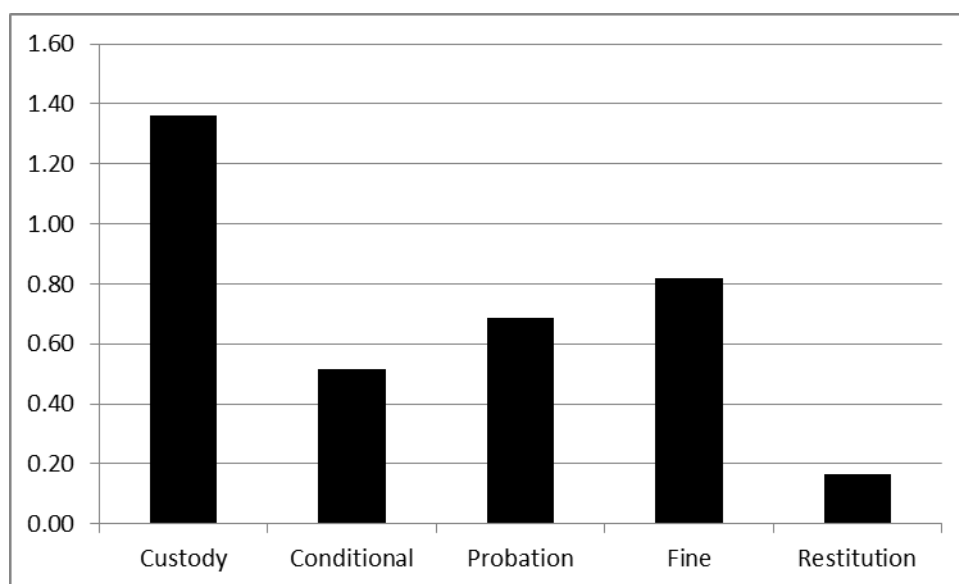
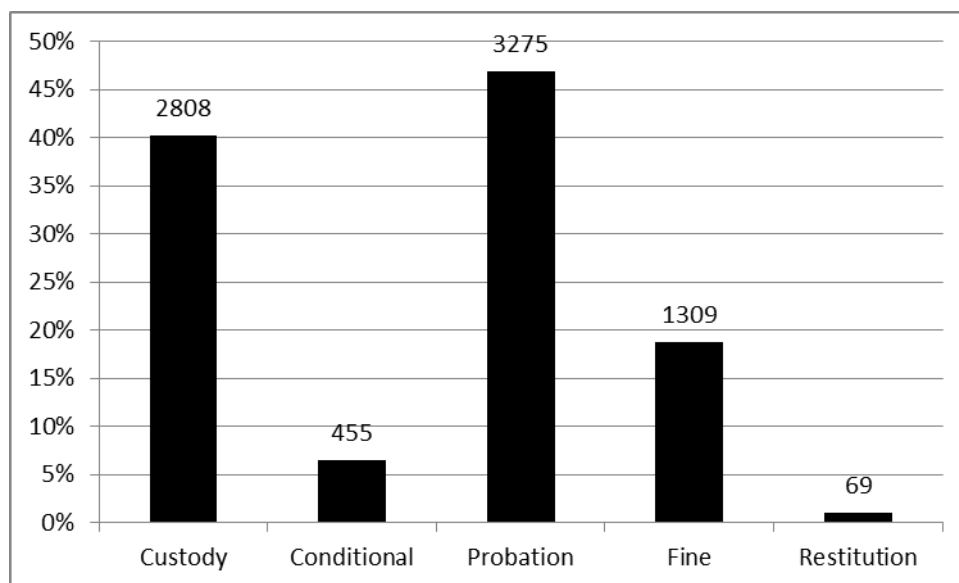


Figure 4.

a) Percentage and count



b) Specialization quotient

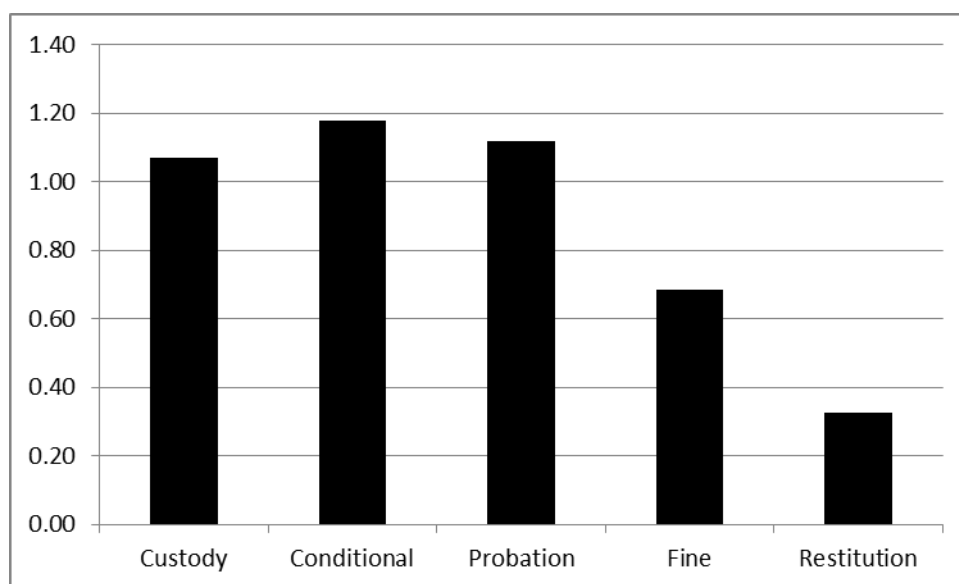
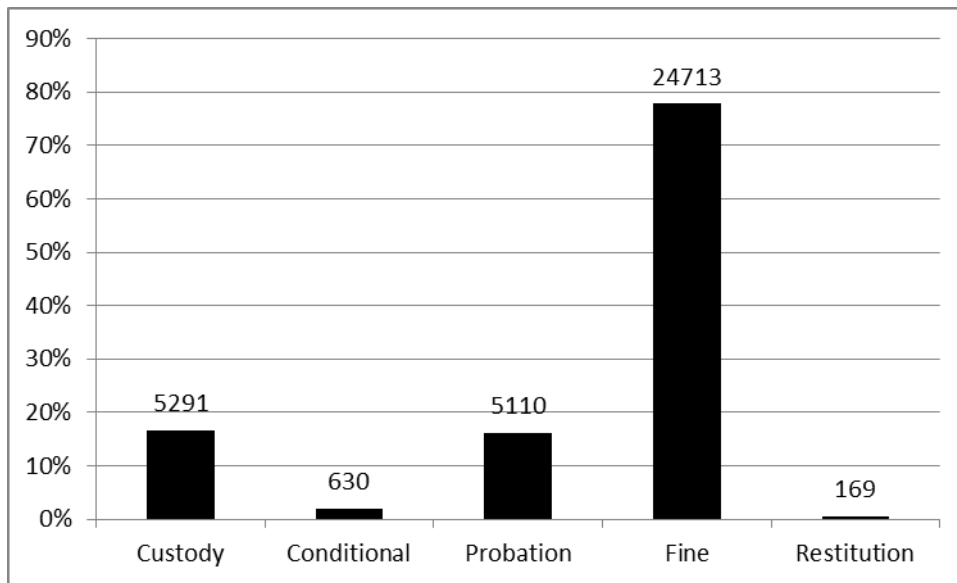


Figure 5.

a) Percentage and count



b) Specialization quotient

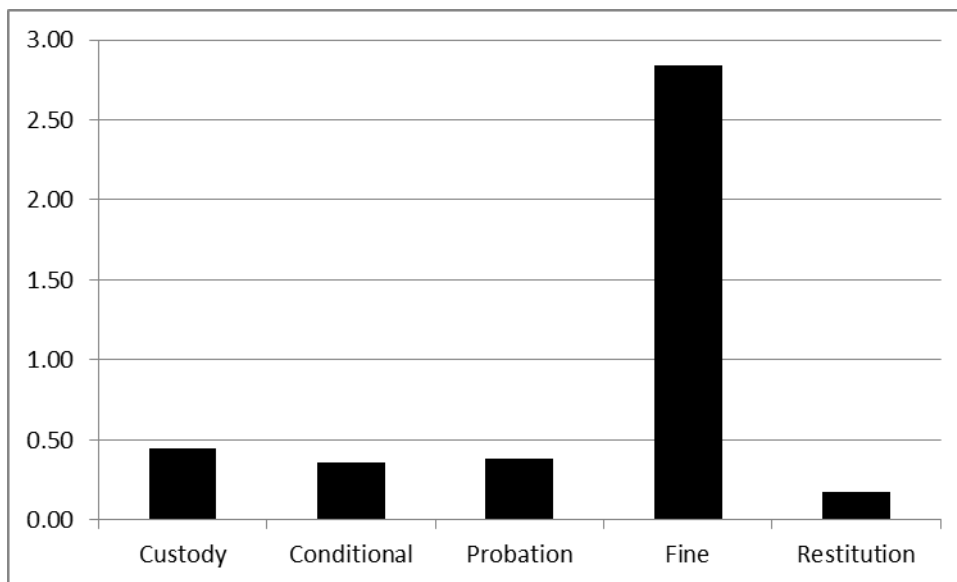
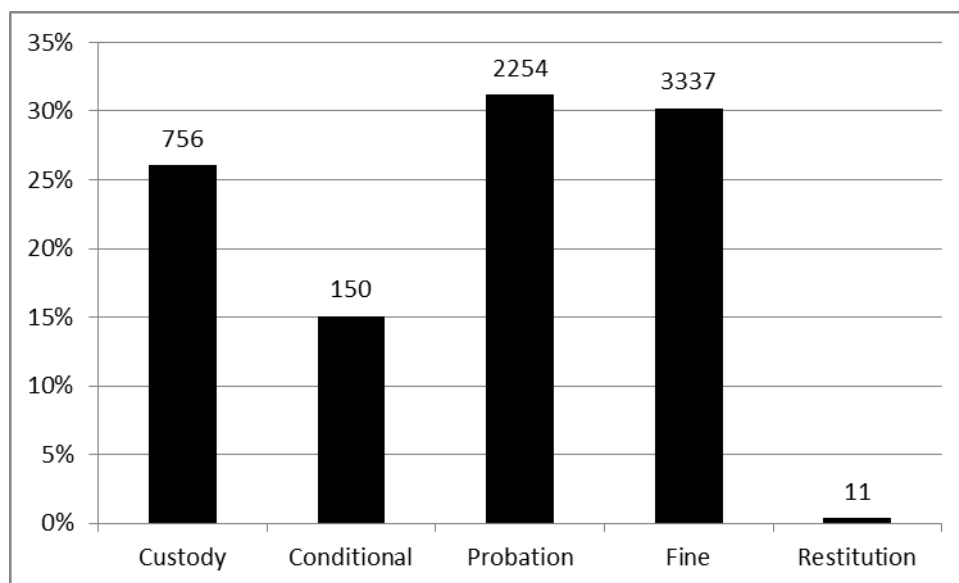
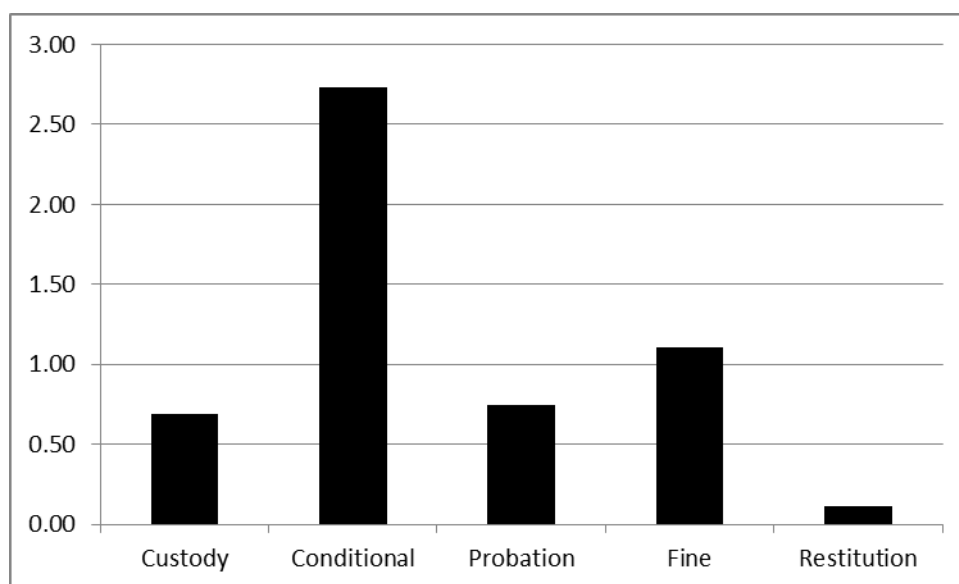


Figure 6.

a) Percentage and count



b) Specialization quotient



Tables

Table 1.

	Homicide	Robbery	Sexual Assault	Major Assault	Common Assault	Harassment	Theft	Break and Enter	Fraud	Fail to Appear	Drugs	Prostitution	Impaired Driving	Possession	Other Progs	Offences
Custody	69.4	82.7	51.5	48.9	16.6	31.1	43.0	59.8	35.7	41.9	60.8	22.4	8.9	11.0		45.4
Conditional Sentence	1.7	2.4	15.6	11.1	3.7	6.1	6.3	11.5	16.2	1.9	3.8	7.9	0.6	2.2		31.7
Probation	7.4	46.3	62.7	62.9	77.0	87.3	52.4	60.2	58.8	25.3	30.0	42.8	11.6	32.7		29.2
Fine	2.5	0.8	1.6	5.0	6.9	2.8	17.0	3.2	10.1	30.1	19.1	31.6	88.7	48.5		6.8
Restitution	0.0	3.4	0.4	2.0	1.4	1.3	6.6	9.0	22.5	0.4	0.8	0.0	0.4	0.2		0.6

Table 2.

	Homicide	Robbery	Sexual Assault	Major Assault	Common Assault	Harassment	Theft	Break and Enter	Fraud	Fail to Appear	Proven	Probation	Prostitution	Impaired Driving	Possession of Dangerous Drugs	Offences
Custody	1.88	2.24	1.39	1.32	0.45	0.84	1.17	1.62	0.97	1.14	1.65	0.61	0.24	0.30	1.23	
Conditional Sentence	0.30	0.43	2.88	2.04	0.68	1.12	1.15	2.11	2.97	0.35	0.70	1.45	0.11	0.40	5.82	
Probation	0.18	1.13	1.53	1.53	1.87	2.13	1.28	1.46	1.43	0.62	0.73	1.04	0.28	0.80	0.71	
Fine	0.09	0.03	0.06	0.18	0.25	0.10	0.60	0.11	0.36	1.06	0.68	1.12	3.13	1.71	0.24	
Restitution	0.00	1.15	0.13	0.69	0.46	0.44	2.24	3.03	7.60	0.14	0.28	0.00	0.13	0.05	0.20	

Notes

¹ Youth Court Statistics in Canada “highlights youth court key indicators, including the number of completed charges and cases, characteristics of youth who appear in court, case decisions, sentencing outcomes, and the length of time it takes to complete youth court cases” (Alam 2015: 4).

² “Adult Criminal Court Statistics in Canada” is an annual publication that “presents several key indicators of the adult criminal court process, and focuses on the number of completed cases (including the most common types of offences), the decisions made in cases, as well as the types of sentences that are imposed on accused persons who are found guilty” (Maxwell 2015: 4).

³ The ICCS includes the following footnote regarding the most serious offence: “A case that has more than one charge is represented by the charge with the “most serious offence” (MSO). The most serious offence is selected using the following rules. First, court decisions are considered and the charge with the “most serious decision” (MSD) is selected. Court decisions for each charge in a case are ranked from most to least serious as follows: (1) guilty, (2) guilty of a lesser offence, (3) acquitted, (4) stay of proceeding, (5) withdrawn, dismissed or discharged, (6) not criminally responsible, (7) other, and (8) transfer of court jurisdiction. Second, in cases where two or more charges result in the same MSD (for example, guilty), Criminal Code sanctions are considered. The charge with the most serious offence type is selected according to an offence seriousness scale, based on actual sentences handed down by courts in Canada (The offence seriousness scale is calculated using data from both the adult and youth components of the Integrated Criminal Court Survey from 2006/2007 to 2010/2011). Each offence type is ranked by looking at (1) the proportion of guilty charges where custody was imposed and (2) the average (mean) length of custody for the specific type of offence. These values are multiplied together to arrive at the final seriousness ranking for each type of offence. If, after looking at the offence seriousness scale, two or more charges remain tied then information about the sentence type and duration of the sentence are considered (for example, custody and length of custody, then probation and length of probation, etcetera)” (CANSIM 2016: ICCS footnote 32).