

ENGINEERING COMPREHENSIBLE YOUTH INTERROGATION RIGHTS

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Although youth in many Western countries have been afforded enhanced legal protections when facing police interrogations, the effectiveness of these protections may be limited by youth's inability to comprehend them. The ability to increase the comprehension of Canadian interrogation rights among youth through the simplification of waiver forms was assessed. High school students (N = 367) in grades 9, 10, and 11 were presented with one of three waiver forms that varied in level of complexity. Comprehension of the information in the forms was assessed using free recall and multiple-choice questions. Results showed that comprehension levels increased as waiver form complexity decreased and comprehension levels increased as the age of the youth increased. The implications of these findings for the development of comprehensible youth interrogation rights are discussed.

Keywords: *youth waiver forms, legal rights, interrogation rights, police interrogations, administration of justice*

INTRODUCTION

It is well accepted that youth are a vulnerable population who, because of their stage of development, need to be afforded a comprehensive set of legal protections when involved in the criminal justice system (Steinberg & Scott, 2003). In recognition of their vulnerability, governments and courts in many Western countries (e.g., United States, Britain) have created enhanced legal rights for youth facing police interrogations (e.g., *J.D.B. v. North Carolina*, 2011; Police and Criminal Evidence Act, 1984). In Canada, these protections are contained within the Youth Criminal Justice Act of 2002 (YCJA), which—along with a multitude of other legal safeguards—provides additional interrogation rights and guidance on how to administer those rights effectively. Recent research, however, suggests that the additional interrogation rights did not coincide with the implementation of waiver forms—written documents that apprise youth of their rights—that are easy to understand (Eastwood, Snook, & Luther, 2012). The failure to create comprehensible waiver forms resulted in predictably low levels of understanding by youth and, more importantly, heightened concerns about how well youth are able to make informed decisions when facing an interrogation (Freedman, Eastwood, Snook, & Luther, 2014). As a consequence, the goal of the current research is to test the possibility of

increasing youth's knowledge of their interrogation rights by engineering a comprehensible waiver form.

There are a number of cognitive and psychosocial developmental differences between adults and youth that make the latter more vulnerable when interrogated by police. Research has shown, for instance, that youth are less future-oriented and less able to consider the long-term consequences of their actions; more sensitive to rewards and thus more likely to downplay potential risks in decision-making situations; more impulsive and demonstrate less self-restraint; and less able to regulate moods (for a review of the literature related to adolescent development, see Cauffman & Steinberg, 2012; Steinberg & Scott, 2003). Given the demands of an interrogation setting—a situation where a youth will likely face heightened anxiety, uncertainty, exposure to pressure, rushed decision making, and demands to process complex legal information (Leo, 2008)—it seems reasonable to assume that, relative to adults, youth will struggle to make informed decisions when being questioned by the police (Owen-Kostelnik, Reppucci, & Meyer, 2006).

As mentioned, part of the YCJA involved the provision of additional interrogation rights to help minimize the vulnerability of youth at the outset of the criminal justice process (§ 146 of the YCJA, 2002). Along with being afforded the same rights as adults when facing an interrogation (i.e., right to silence, right to contact legal counsel), youth (i.e., between the ages of 12 and 18 at the time of committing the offense) are also given the opportunity to consult an appropriate adult at any point and have a lawyer and/or adult present when providing a statement. In addition, statements provided by a youth will only be admissible in court if s/he was informed of their rights in language appropriate to their age and understanding, and are able to comprehend the rights and the consequence of waiving them (*Clarkson v. The Queen*, 1986; *R. v. L.T.H.*, 2008). Although the exact rights afforded to youth differs among states, similar rights are present in the United States as well (see King, 2006, for a full discussion).

What then has been the impact of the legislative reforms on practice? One step taken by police organizations to meet the demands for clarity and comprehension of interrogation rights has been the development and implementation of waiver forms. These waiver forms are written documents that are typically three to four pages in length, and structured into a series of sections, with comprehension being checked after each of those sections (via a closed yes/no question about whether the youth understood the

preceding interrogation right).¹ Given that cognitive abilities such as working memory and reading skills continue to develop throughout adolescence and into early adulthood (e.g., Luna, Garver, Urban, Lazar, & Sweeney, 2004; O'Reilly & McNamara, 2007), it is important that these forms are constructed to match the abilities of the youth who encounter them. However, the results of the only study to examine the complexity of the waiver forms since their implementation suggest that the forms are unlikely to facilitate high levels of comprehension in youth (Eastwood et al., 2012). Specifically, waiver forms were found to be overly lengthy, written at a high grade level, and grammatically complex. For example, 80% of the forms contained at least one section that required a post-secondary reading ability to comprehend, and each form contained an average of 23 difficult words (e.g., “indictable,” “retain”). Eastwood and colleagues’ findings suggested that the waiver forms have not been tailored to the cognitive abilities of youth. These findings are not unique to Canada, however, as an analysis of juvenile *Miranda* warnings in the United States by Rogers and his colleagues (2012) found that nearly half of the 371 juvenile warnings analyzed were excessively long (i.e., >225 words) or had a passage written at a college reading level.

Preliminary findings of the effect of these waiver forms on informing youth of their interrogation rights have also been disappointing. For instance, Eastwood et al. (2012) found that only 40% of the interrogation rights were recalled correctly by high school students who were presented with a waiver form that was used by the local police organization. In addition, none of the youth comprehended all of the interrogation rights, and less than a quarter of them correctly recalled half of the information. In a follow-up study, Freedman et al. (2014) presented two different versions of a youth waiver form—both of which are in use by Canadian police organizations—to high school students in grades 7 to 11. Freedman and his colleagues found that the students recalled approximately 40% of the main interrogation rights correctly and made a number of errors on multiple-choice questions

1. Although waiver forms are the primary method of delivering interrogation rights to youth, legislation also encourages police officers to assess the cognitive abilities of individual youth and, where necessary, take additional steps to explain interrogation rights to a youth in a language appropriate to his/her level of understanding (*R v. L.T.H.*, 2008). However, there is no documentation on how often these tailored explanations are provided, on how accurate police officers are at identifying youth who need tailored explanations, or on the accuracy of the tailored explanations.

related to the interrogation rights. For example, almost half of students believed that they had to answer all of the questions asked by a police officer. They also found a small positive correlation between comprehension level and grade level. The aforementioned research suggests that the legislative reforms relating to youth interrogation rights may not have mitigated youth vulnerabilities. That is, the waiver forms may not allow the majority of youth—particularly those in lower grades—to knowingly and intelligently make decisions regarding whether to invoke or waive their rights. Research on juveniles' understanding of *Miranda* warnings in the United States has also showed low comprehension levels, with lower age and lower IQ scores, being associated with greater deficits in comprehension (e.g., Goldstein, Condie, Kalbeitzer, Osman, & Geier, 2003; Grisso, 1981; Viljoen, Zapf, & Roesch, 2007).

Despite the complex wording of waiver forms and the documented low levels of comprehension, research examining adult interrogation rights has shown that steps can be taken to improve comprehension. Specifically, Eastwood and Snook (2012) found that by first reducing the grade level required to comprehend an adult police caution (e.g., reducing grammatical complexity, removing difficult words) and then adding features to boost the clarity of the caution (i.e., providing instructions regarding the nature of the information to come, repeating important information multiple times, outlining the rights in a list format), comprehension levels increased by approximately 40%. A follow-up study using a mock police interview situation showed that the gains in comprehension largely hold up under more ecologically valid situations (Snook, Luther, Eastwood, Collins, & Evans, 2014; also see Davis, Fitzsimmons, & Moore, 2011).

I. THE CURRENT STUDY

In the current study, we assess the extent to which the gains in comprehension obtained from modifying adult interrogation rights may also be realized with youth interrogation rights. Specifically, we examine comprehension levels of students who are presented with an original waiver form (formerly used by a Canadian police organization), a simplified derivative of the original (currently in use), and a newly created form. We also examine the comprehension of these waiver forms across three grade levels. Based on the aforementioned research regarding ways to improve comprehension

of adult interrogation rights (Eastwood & Snook, 2012; Snook et al., 2014), we predict that comprehension levels will increase with decreasing complexity of youth waiver forms. Based on the aforementioned developmental research and previous studies of youth comprehension (Eastwood et al., 2012; Freedman et al., 2014), we also predict that comprehension levels will increase with increasing grade level (i.e., age of the youth).

II. METHOD

A. Participants

Participants ($N = 367$) were students attending an English-language high school near Montreal, Canada. Two students in grade 9 and one student in grade 10 did not report their gender. Of the 115 students in grade 9 who reported their gender, there were 62 young men and 53 young women ($M_{age} = 14.11$, $SD = 0.32$). Of the 145 students in grade 10 who reported their gender, there were 75 young men and 70 young women ($M_{age} = 14.99$, $SD = 0.28$). There were 54 young men and 50 young women in grade 11 ($M_{age} = 16.11$, $SD = 0.34$). There were 286 Caucasians (77.93%), 12 Asians (3.27%), 5 Blacks (1.36%), 44 students (11.99%) who chose the option of “other”, and 20 students (5.45%) who did not report ethnicity. Twenty-nine students (7.90%) reported hearing or reading a waiver form at some point previous to the study. The students who had heard or read a waiver form previously did not differ significantly from the remaining students on any of the demographic or dependent measures, and were therefore included in the analysis.

B. Materials

The materials included (a) a parental consent form, (b) a youth assent form, (c) a demographic questionnaire, (d) a copy of one of the three waiver forms, and (e) a response booklet that contained the free recall question and five multiple-choice questions. Each student was given one of the following waiver forms to read: (1) a form used previously by a Canadian police service (henceforth referred to as the Original Form), (2) a simplified version of the Original form that is currently being used by a Canadian police service (Simplified Form), and (3) a form created by the study authors (Created Form; see Appendix A for exact wording of the waiver

Table 1. Values for the measures of complexity for each waiver form.

| Waiver Form | Measure of Complexity | | | | | |
|-------------|-----------------------|----------|-----------------|-----------------|--------------|---------|
| | Word Count | FK Score | Grammatik Score | Difficult Words | Explanations | Listing |
| Original | 455 | 7.8 | 51 | 12 | No | No |
| Simplified | 605 | 5.7 | 46 | 10 | Yes | No |
| Created | 187 | 4.1 | 33 | 0 | Yes | Yes |

Note: FK score refers to the Flesch-Kincaid grade-level score, which estimates the grade level needed for comprehension of a passage of text by using sentence length and average number of syllables per word (Flesch, 1950). Grammatik is a program contained in Corel WordPerfect software that uses the number of words and clauses in a sentence to provide a measure of sentence complexity. Scores can range from 0 to 100, with larger scores indicating a higher level of sentence complexity. Difficult words refer to those for which at least a grade 8 education level is estimated to be needed to comprehend its meaning (see Eastwood, Snook, & Chaulk, 2010). The Explanations modification builds redundancy into the form by repeating the content of each sentence in a slightly different manner. The Listing modification builds an explicit retrieval aid into the form by listing the number of rights contained in the form and notifying participants before each right was mentioned (see Eastwood & Snook, 2012).

forms).² The Simplified Form was created by replacing difficult words with easy words, breaking the information into smaller sections, and providing additional explanations after each concept. The Created Form consisted of only the five core rights contained in the YCJA (2002) and relevant case law (e.g., *R v. Bartle*, 1994; *R v. Brydges*, 1990). The Created Form was constructed to be as comprehensible as possible by using short sentences, small sections, overall shorter form length, simplified language, explaining each key right multiple times, and listing the rights explicitly to aid recall (see Eastwood & Snook, 2012). Table 1 contains the specific details regarding the complexity of each of the three waiver forms used in the current study.

C. Design

A 3 (Waiver Version: Original, Simplified, Created) x 3 (Grade: 9, 10, 11) between-participants design was used. Two dependent measures were used

2. Modifications were made to the structure of the Original and Simplified Waiver Forms to make them suitable for the current study. Modifications included removing information that was relevant only to certain age groups (e.g., some information in the form would only be read to 16- and 17-year-old youths), including only one section if two mutually exclusive options are given (e.g., if youth answers “yes,” read section A; if “no,” read section B), and any direct questions (e.g., Do you wish to make a statement?). No information directly relevant to the rights afforded to youths was modified.

to assess students' comprehension of interrogation rights. The first dependent measure was the recall of the five major rights contained in the students' responses to the open-ended questions. The second dependent variable was the students' answers to the multiple-choice questions that tested the same five interrogation rights (see Appendix B for the exact wording of the multiple-choice questions). For ease of interpretation, all values were converted to percentages.

D. Procedure

Upon receiving parental consent and student assent, testing began in classrooms containing 20 to 30 single desks. Students first completed the demographic questionnaire. They were then given one of the three versions of the waiver forms (which were distributed randomly within each class) and asked to read the document at their own pace.³ The response booklet was distributed after the waiver form was collected, and students were asked to write down everything that they could remember about their rights from the waiver form they just read, and then answer the multiple-choice questions. Students were then debriefed, and any questions regarding the study were answered. The study took approximately 25 minutes to complete.

Coding-free recall. Students' recall to the open-ended question was coded by the first author using a coding guide constructed to measure participants' comprehension of the following five main interrogation rights: (1) youth have no obligation to make a statement, (2) any statement that is made may be used as evidence against them in court, (3a) youth have the right to consult a lawyer at any point, (3b), youth have the right to consult an appropriate adult at any point, (4) any statement must be made in the presence of the contacted lawyer/appropriate adult unless the youth desires otherwise, and (5) youth have access to free legal advice if desired. For the purposes of coding, the third interrogation right was broken into two parts because we deemed that there were two discrete issues within this right.

3. In reality, the exact way in which rights are delivered to youths is left to the discretion of individual officers (e.g., read the form aloud or provide a written copy). To maximize the ability of students to comprehend the information in the forms under the testing conditions, we chose to provide students with a written copy of the form and allow them to read it at their own pace prior to testing comprehension (see Eastwood & Snook, 2010).

Based on each participant's free recall, each of the six points above was coded as correct, incorrect, or missing. To ensure reliability between coders, a research assistant blind to the conditions and purpose of the study coded 50 booklets from each condition. The mean Kappa value for the coding of the six main rights for the Original Form was .88 ($SD = 0.07$; *range* .78–.96), for the Simplified Form was .81 ($SD = 0.13$; *range* .70–.1.00), and for the Created Form was .81 ($SD = 0.13$; *range* .63–1.00). The Kappa values suggest substantial agreement between the coders (Landis & Koch, 1977).

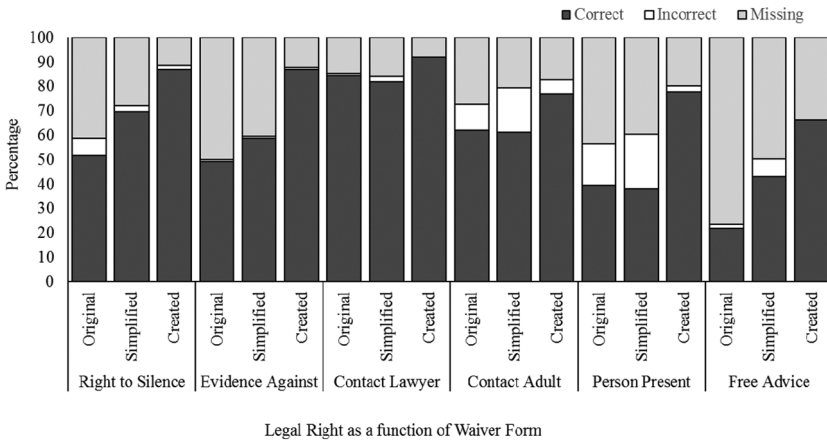
III. RESULTS

A. Correct Recall of Interrogation Rights

In terms of the interrogation rights that were recalled correctly, a 3 x 3 ANOVA revealed a significant main effect of the waiver form, $F(2, 358) = 60.93, p < .001$. Students who read the Simplified Form ($M = 58.68, SD = 25.38$) recalled significantly more interrogation rights than those who read the Original Form ($M = 51.48, SD = 23.86$), but the effect size was small, $d = 0.29$. Students who read the Created Form ($M = 81.15, SD = 18.18$) recalled significantly more interrogation rights than those who read either the Original Form or the Simplified Form, and both effect sizes were large ($d = 1.40$ and $d = 1.02$, respectively). Of the 54 participants who recalled all interrogation rights correctly, 40 (74.07%) read the Created Form, 12 (22.22%) read the Simplified Form, and the remaining 2 (3.70%) read the Original Form.

The mean percentage of the interrogation rights recalled correctly, as a function of waiver form, is shown in Figure 1. As can be seen for each interrogation right, there was a substantive difference in comprehension as the complexity of the waiver form decreased. For each interrogation right, the lowest level of comprehension fluctuated between the Original and Simplified Forms, but it was always the highest for the Created Form. The greatest gains in comprehension between forms was observed for the interrogation rights pertaining to free legal advice (44.62% increase from Original to Created), the mandatory presence of a lawyer and/or an adult unless otherwise desired (39.85% increase from Simplified to Created), the fact that the statement could be used as evidence against the youth (37.70%

Figure 1. The percentage of the six main legal rights recalled as a function of waiver form version.

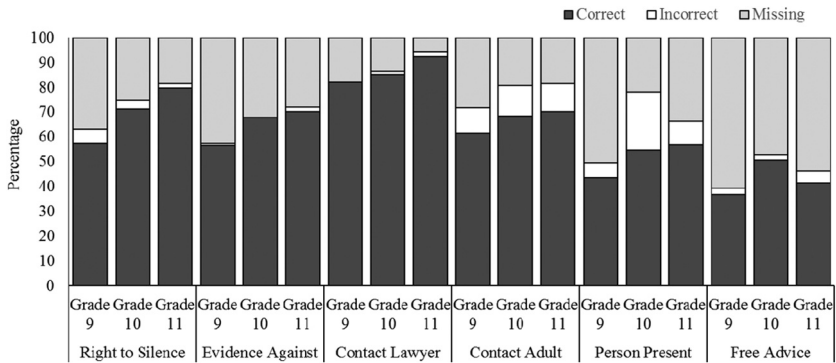


increase from Original to Created), and the right to silence (35.28% increase from Original to Created). There was relatively minimal gain in comprehension for contacting a lawyer (9.98% increase from Simplified to Created) and contacting an adult (15.89% increase from Original to Created).

The ANOVA also revealed a main effect of grade, $F(2, 358) = 11.47, p < .001$. Students in grade 9 ($M = 56.27, SD = 28.59$) recalled significantly fewer interrogation rights than students in grade 10 ($M = 66.32, SD = 24.41$), but the effect size was small, $d = -0.38$. Students in grade 9 also recalled significantly fewer interrogation rights than those in grade 11 ($M = 68.43, SD = 23.10$), and the effect size was small, $d = -0.47$. There was no statistically significant difference in the mean number of interrogation rights recalled by students in grade 10 and grade 11, and the size of the effect was negligible, $d = -0.09$. The interaction did not reach significance. Of the 54 participants that recalled all six interrogation rights correctly, 11 (20.37%) were in grade 9, 24 (44.44%) were in grade 10, and the remaining 19 (35.19%) were in grade 11.

The mean percentage of the interrogation rights recalled correctly, as a function of grade level, is shown in Figure 2. Although the gains in comprehension across grades are small, comprehension of each interrogation right increased as grade level increased (with the exception of the right pertaining to free legal advice). Considering all the grade levels, students had the lowest level of comprehension about access to free legal advice and

Figure 2. The percentage of the six main legal rights recalled as a function of grade level.



Legal Right as a function of Waiver Form

the fact that statements must be made in the presence of an adult (unless otherwise desired), whereas the right to contact a lawyer was the only right comprehended by the vast majority of students.

B. Incorrect Recall of Interrogation Rights

In terms of the interrogation rights that were recalled incorrectly, a 3 x 3 ANOVA revealed a significant main effect of waiver form, $F(2, 358) = 20.28, p < .001$. Students who read the Simplified Form ($M = 8.82, SD = 10.77$) recalled significantly more interrogation rights incorrectly than those who read the Original Form ($M = 5.78, SD = 9.51$), but the size of the effect was small, $d = 0.30$. Students who read the Created Form ($M = 1.50, SD = 5.67$) recalled significantly fewer interrogation rights incorrectly than those who read either the Original Form ($d = -0.55$) or Simplified Form ($d = -0.85$).

The ANOVA did not reveal a significant main effect of grade, $F(2, 358) = 3.01, p = .05$. However, planned comparisons revealed that students in grade 9 ($M = 3.85, SD = 8.01$) recalled significantly fewer interrogation rights incorrectly than students in grade 10 ($M = 6.74, SD = 9.90$), but the size of the effect was small, $d = -0.32$. There was no significant difference in incorrect recall between students in grade 9 and grade 11 ($M = 5.13, SD = 9.87$), $d = -0.14$, or between students in grade 10 and grade 11, $d = 0.16$.

The mean percentage of interrogation rights recalled incorrectly by students as a function of waiver form and grade is shown in Figures 1 and 2, respectively. As can be seen in Figure 1, students in all three grades appeared to misunderstand their interrogation rights pertaining to their ability to consult an adult and the mandatory presence of an adult/lawyer when they read either the Original or Simplified Forms. Otherwise, students did not appear to recall information incorrectly.

C. Omission of Interrogation Rights

In terms of omitting the interrogation rights, a 3 x 3 ANOVA revealed a significant main effect of waiver form, $F(2, 358) = 48.40, p < .001$. Students who read the Simplified Form ($M = 32.51, SD = 24.14$) omitted significantly fewer interrogation rights than those who read the Original Form ($M = 42.74, SD = 23.50$), and the size of the effect was medium, $d = -0.43$. Students who read the Created Form ($M = 17.35, SD = 16.65$) omitted significantly fewer interrogation rights than those who read either the Original Form ($d = -1.25$) or the Simplified Form ($d = -0.73$).

The ANOVA also revealed a significant main effect of grade, $F(2, 358) = 17.86, p < .001$. Students in grade 9 ($M = 39.89, SD = 26.89$) omitted significantly fewer interrogation rights than students in either grade 10 ($M = 26.94, SD = 21.73, d = 0.53$) or grade 11 ($M = 26.44, SD = 20.98, d = 0.56$). There was a negligible difference in the mean number of interrogation rights omitted by students in grade 10 and grade 11 ($d = 0.02$). As can be seen in Figures 1 and 2, the majority of the interrogation rights that were not recalled correctly were due to omissions in recall (as opposed to recalling interrogation rights incorrectly).

D. Recognition of Interrogation Rights

All five multiple-choice questions were answered correctly by 46.87% of students. A 3 x 3 ANOVA revealed a significant main effect of waiver form, $F(2, 358) = 5.07, p = .007$. Students who read the Created Form ($M = 87.86, SD = 16.58$) answered significantly more multiple-choice questions correctly compared to those who read either the Original Form ($M = 80.16, SD = 20.48, d = 0.41$) or the Simplified Form ($M = 82.15, SD = 20.78, d = 0.30$). There was no statistically significant difference in the amount of multiple-choice questions answered correctly between those who read the Simplified and Original Forms, $d = 0.10$. There was also a main effect of

grade, $F(2, 358) = 3.15, p = .044$. Students in grade 9 ($M = 79.83, SD = 22.82$) answered significantly less multiple-choice questions correctly compared to students in grade 10 ($M = 85.07, SD = 18.91, d = -0.25$) and those in grade 11 ($M = 85.00, SD = 15.95, d = -0.26$). There was no significant difference in the amount of multiple-choice questions answered correctly between those in grade 10 and grade 11, $d = 0.00$. The interaction also did not reach significance.

IV. DISCUSSION

In recognition of their increased vulnerability relative to adults, youth in many Western countries have been afforded enhanced legal protections when faced with a police interrogation. Unfortunately, previous research has shown that the documents used to deliver said rights are overly complex (e.g., Eastwood et al., 2012; Rogers et al., 2012), and therefore youth often struggle to comprehend their legal rights (e.g., Freedman et al., 2014; Grisso, 1981). This lack of comprehension suggests that the enhanced legal protections—as they are currently delivered—are ineffectual in actually protecting youth. It is important that steps be taken to ensure that youth are able to understand fully the rights that are available to them in interrogation situations.

We tested the extent to which it is possible to improve the protections afforded to young detainees by increasing the comprehensibility of Canadian youth waiver forms. In line with our predictions, we found that waiver forms with lower levels of complexity corresponded with higher levels of comprehension. Our second prediction was also supported, as students in higher grades demonstrated higher levels of comprehension than students in lower grades. Our findings suggest that police organizations should go beyond simplifying current waiver forms, and instead develop a waiver form that is similar to our Created Form.

Our results show that reducing the complexity of the youth waiver forms can lead to higher levels of comprehension. Both the Simplified Form (created by modifying the structure of an existing form) and the Created Form (constructed to include only the key rights, and delivering them in the most comprehensible manner possible) allowed students to recall significantly more of their interrogation rights than the Original Form. However, out of the three waiver forms, the Created Form led to

the highest level of comprehension. Specifically, 43% of the students who read the Created Form recalled all of their interrogation rights correctly, compared to just 2% and 16% of students who read the Original Form and the Simplified Form, respectively. In addition, only 7% of students who read the Created Form had a direct misunderstanding of one of the interrogation rights, compared to 31% and 46% of students who read the Original Form and Simplified Form, respectively.

Students who read the Created Form also answered more multiple-choice questions correctly than students who read the other two waiver forms. For example, for the question relating to the right to silence, 89% of students who read the Created Form correctly believed that they only had to answer questions they wanted to—compared to 79% and 83% of students who read the Original and Simplified Forms, respectively. Although not as marked a difference as seen with the free recall measures, having 6% to 10% more students correctly answer that they have the right to remain silent in the face of questioning is arguably a practically important increase because of the importance of youth comprehending this right.

The Created Form had a variety of features that likely led to the large increases in comprehension. These features included avoiding complex terms or legal jargon (e.g., “duty counsel,” “proceedings”), ensuring an overall low reading level (the Flesch-Kincaid grade level score was 4.0; see Flesch, 1950), shortening the overall length of the form by including only information regarding the key interrogation rights, building redundancy into the form by repeating the content of each sentence in a slightly different manner, and building an explicit retrieval aid into the form by listing out the amount of rights contained in the form and notifying people before each right was mentioned (see Eastwood & Snook, 2012). Although replications will identify the contributions of the various features of the Created Form to the increase in comprehension, it is encouraging that the combination of features resulted in substantial improvements in comprehension of interrogation rights.

Across the conditions, youth in higher grades outperformed youth in the lower grades on both the amount of correct details recalled and the multiple-choice questions answered correctly. These findings match our predictions, and are consistent with past research demonstrating that age is a strong predictor of ability to comprehend interrogation rights (e.g., Freedman et al., 2014; Goldstein et al., 2003; McLachlan, Roesch, & Douglas, 2011). Although cognitive abilities were not directly assessed in

the current study, we suspect that the observed difference between grade levels is due to developmental differences (e.g., working memory, reading skill) between younger and older students (Luna et al., 2004; O'Reilly & McNamara, 2007; Yurgelun-Todd, 2007). Thus, additional care should be taken when delivering rights to very young detainees.

Also of interest is that, regardless of grade or waiver form, students had difficulty recalling correctly their right to contact an appropriate adult and have their lawyer or appropriate adult present during questioning. This particular finding is problematic because these individuals can provide the necessary guidance for a youth facing a stressful and complex interrogation situation. This finding is also troubling because they are the two additional interrogation rights that were added to the YCJA in order to afford youth with enhanced legal safeguards. However, if youth cannot understand these rights correctly, they cannot benefit from the additional protections that were intended with the legislative changes. In fact, one could argue that the failure of students to comprehend those rights means that the interrogation rights afforded youth are not so different than those afforded adults.

There are at least four aspects of the current study that may affect the generalizability and practicality of the results to policing practice. First, the youth were not facing an actual police interrogation, and thus did not have to manage the pressurized aspects of a real-world situation. Second, a non-offender population of high school students was used to test comprehension. Research on the cognitive capacities of delinquent youth suggests that they are at an even greater risk of not recalling their rights compared to non-offending youth (Owen-Kostelnik et al., 2006). Given the controlled testing conditions and non-delinquents sample, the results in the current study may represent the upper bounds of expected comprehension. Third, the use of a writing task to measure comprehension may have been biased in favor of the higher grades, as their writing skills may have been more advanced (see Troia, Harbaugh, Shankland, Wolbers, & Lawrence, 2013). Fourth, youth in the current study read the waiver forms. Research has shown that reading tends to result in higher levels of comprehension compared to listening (Eastwood & Snook, 2010). Replication of this research that presents the waiver forms aurally is certainly warranted to obtain an estimate of comprehension level when that particular form of delivery is used (see note 3).

The provisional conclusion of this study is that it is possible to create a waiver form that can lead to high levels of comprehension of interrogation

rights. We recognize it may be easier to modify current waiver forms, similar to what was done for the Simplified Form in our study, as they have already been vetted through a police organization's legal department. However, our results show that such an approach will likely fall short of maximizing comprehension levels. Given the vulnerability of youth in interrogation settings and the importance of ensuring full comprehension of interrogation rights, we would advocate that police organizations—in both Canada and the United States—consider replacing their existing youth waiver forms with ones that are constructed using a similar process as was used for our Created Form (also see Eastwood & Snook, 2012). Beyond any wording and structure changes, comprehension should be assessed after the form is delivered (for example, by getting the youth to explain the rights in their own words) to act as a failsafe whereby misunderstood rights are mended. Such changes will improve the overall workings of the justice system, by both safeguarding youth's interrogation rights and ensuring the admissibility of any statement that a youth provides.

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APPENDIX A. WAIVER FORMS

Original Waiver Form

- You do not have to make a statement. This means that you do not have to say anything to me. But, if you make a statement, anything that you say, write or do can be used against you as evidence in court or in other proceedings.
- Even if you have already talked to the police or someone else, you do not have to make a statement now.
- You should not make a statement because of a favour given or a promise made to you. You should not make a statement because you hope for something in return.
- You should not make a statement because you feel threatened or afraid that someone will hurt you or anyone else.
- You have the right to retain and instruct counsel in private, without delay. This means that you can talk to and get advice from a lawyer now without the police present. A lawyer's job includes telling you what your rights are and giving you advice about whether you should answer my questions or sign this form.
- You have the right to consult your parent, an adult relative or another appropriate adult of your choice in private, without delay. This means that you can talk to and get advice from that person now without the police present. If you decide to talk to a lawyer and parent, adult relative or another appropriate adult, you can choose the order in which you contact them.
- The law requires that any lawyer you consult be here with you during any statement you choose to make, unless you decide that you do not want that lawyer to be present with you.
- The law requires that any parent, adult relative or other appropriate adult you consult be here with you during any statement you choose to make, unless you decide that you do not want that person to be present with you.

Simplified Waiver Form

- You do not have to talk to me. This means that do not have to answer my questions about the crime(s) or speak to me at all. It also means that if you choose not to talk to me, you will not get into trouble for not talking.
- Anything you tell me can be used as evidence against you in court. This means that what you tell me about the crime(s) can be used to help show a judge or a jury that you committed the crime(s).
- You should not talk to me because someone did you a favour or someone made a promise to you. This means that you should not talk to me because you are returning a favour. It also means that you should not talk to me because you think you will get something in return.
- You should not talk to me because you feel threatened or afraid that someone will hurt you or anyone else. This means that you should not talk to me because you feel you are being bullied. This also means that you should not talk to me because you feel that you or someone else might get hurt if you do not talk to me.
- You can hire and talk to your own lawyer now and in private. This means that you can pay for any lawyer you want and talk to that lawyer before I ask you any questions. It also means that what you say to the lawyer will not be heard by anyone else.
- You can get free legal advice from a government lawyer right away and in private. This means that you can talk to a lawyer for free before I ask you any questions. It also means that what you say to that lawyer will not be heard by anyone else.
- I will give you a telephone number that you can call if you want free legal advice. This means that I will give you a phone and number so you can get free legal advice.
- You can talk to any parent, adult relative, or appropriate adult now and in private. This means that you can talk one of these adults before I ask you any questions. It also means that what you say to that adult will not be heard by anyone else.
- I will give you a phone if you want to call a parent or adult relative or appropriate adult. This means that I will give you a phone so you can talk to the adult you chose.
- You must have the lawyer that you talked to here with you unless you say you do not want the lawyer here. This means that the lawyer that you to talked has to be here with. But, the lawyer will not be here if do not want them here.

- You must have any parent, adult relative or other appropriate adult that you talked to here with you, unless you say you do not want them here. This means that the adult that you talked to has to be here. But, the adult will not be here if you do not want them here.
- If you want the lawyer or the adult person that you talked to here with you, you will be given a reasonable chance to have them here. This means that I will do my best to get these people here with you.
- You can apply for a free lawyer to help with your case if you are charged with a crime. This means that if you go to court you can apply to get a free lawyer.
- You may consult any lawyer you want for immediate legal advice. You can also ask a lawyer to be here with you. I can give you a telephone book or a list of lawyers to call. Or, I can help you to reach a free lawyer, through legal aid or duty counsel. I can help you to reach a lawyer now. Once you do, police will leave. Your conversation with the lawyer is private.
- I want to remind you that if you decide to make a statement and say, write or do anything now you can stop at any time. The police will stop asking you questions. You can also, at any time, talk to a lawyer and have that lawyer here with you and talk to a parent, adult relative or another appropriate adult and have that person here with you.

Created Waiver Form

You have five rights that you need to know about.

1. You do not have to talk to me. This means that you can choose to talk to me or choose to not talk to me.
2. Anything that you say can be used as evidence against you in court. This means that what you tell me now can be used later to show that you did the crime.
3. You can talk to your lawyer right now. Or, I can give you the telephone number to call a free lawyer. This means that you can get help from your own lawyer, or a free lawyer, before I ask you any questions.
4. You can talk to an adult right now. This adult can be a parent, relative, or another person you choose. This means that you can talk to an adult before I ask you any questions.
5. If you do talk to a lawyer or an adult, you can decide if you want them here when I ask you questions. This means that it is your choice to have a lawyer or adult here with you when I ask questions.

APPENDIX B. MULTIPLE-CHOICE QUESTIONS

1. When being interviewed by a police officer, I need to:
 - (a) Answer all the questions that they ask me
 - (b) Only answer the questions that I want to answer
 - (c) Only answer questions that are related to a crime
 - (d) Only answers questions related to my personal life

2. If I answer questions from a police officer during an interview, then:
 - (a) My answers will be recorded and may be used in court
 - (b) I can change my answers later if I decide I want to
 - (c) My answers cannot be used in court because I am a minor
 - (d) My lawyer and I can choose what answers are used in court

3. In a police interview, I am allowed to call all of the following people EXCEPT:
 - (a) My parents
 - (b) A lawyer
 - (c) A classmate
 - (d) I am allowed to contact all of these people

4. If I call someone during a police interview, then:
 - (a) This person(s) must be with me when I answer questions
 - (b) It is up to me whether or not this person(s) is with me when I answer questions
 - (c) It is up to the police whether or not this person(s) is with me when I answer questions
 - (d) This person(s) cannot be with me when I answer questions

5. If I decide that I want to call a lawyer during a police interview, then:
 - (a) I have to contact my own personal lawyer I have paid for
 - (b) The police interviewer decides what lawyer I can contact
 - (c) I am not allowed to contact a lawyer during a police interview
 - (d) I can contact a free lawyer who will give me advice at no cost