

Revising the Language of the New Zealand Youth Rights Caution to Support Understanding  
Among Young People

By

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### **Abstract**

Many young people in New Zealand will engage in antisocial behaviour during their teenage years. Consequently, many young people will interact with the police. When young people speak to police, they are read the Child/Young Persons Rights Caution (the Youth Caution) which informs them of the rights they are entitled to (legal rights), such as choosing to stay silent and speaking with a lawyer. However, many young people have an incomplete understanding of their rights as the Youth Caution does not support complete understanding. An explanation for this incomplete understanding is the language within the Youth Caution is too complex for young people. The current study sought to address this issue by creating and piloting a revised youth caution which aimed to be simpler and easier for young people to understand. Three research questions were addressed in this study: 1) What was young people's level of understanding of their legal rights? 2) Would the revised youth caution improve the level of legal rights understanding? 3) Would understanding of legal rights increase with age? To answer these questions, young people (aged 10-18 years) were recruited from schools and the community ( $n = 101$ ). Their legal rights understanding levels were then assessed, based on hearing either the standard or the revised youth caution. The results in relation to the research questions showed participants' legal rights understanding was incomplete, the revised youth caution did not improve understanding across any aspects of legal rights understanding and understanding increased with age. These results suggest simplifying the language within the Youth Caution is not sufficient to support young people's understanding, and legislation could offer further support, such as requiring a lawyer to be present as the default option when young people are speaking to the police.



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## **Literature Review**

### ***Introduction***

When young people commit an antisocial act, for many it is a normal part of growing up. To abstain from all antisocial behaviour during adolescence is considered abnormal (Moffitt, 1993). Many young people, therefore, have contact with the police. When young people are with the police, they must understand police processes including what happens when they are arrested or questioned. A key process young people need to be aware of is what rights they have when they talk with the police, that is, what they are allowed to do. When young people do not understand their rights, they are less likely to invoke them (Davis et al., 2011). The low invocation of legal rights by young people raises concerns about their level of understanding of their legal rights and whether they are benefiting from the protection legal rights can provide. For example, not incriminating themselves, being able to speak with a lawyer for advice, and/or another adult for support. This thesis will focus on developing and testing an intervention that aims to deliver legal rights to young people in a way that increases their understanding of their rights. This literature review will begin with a summary of the relevant legal context for young people and examine the developmental vulnerabilities of young people, before describing young people's level of understanding of their legal rights and the implications for an incomplete understanding. This review will end with suggestions for why young people do not understand their legal rights and how this thesis will attempt to address incomplete understanding.

### ***The International Youth Justice Context***

Within international law, young people are regarded as a vulnerable population requiring protection. Thus, young people have rights under Article 40 of the United Nations Convention on the Rights of the Child 1989 (UNCRC). The UNCRC has been signed by all countries of the world, except the United States of America (USA). Signatories of the

UNCRC agree to maintain the child's dignity and worth and, "the child, by reason of his (sic) physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth" (UNCRC, p. 3). This protection pertains to when children and young people are suspected of committing a crime and the protection includes presumed innocence until proven otherwise, access to legal support, to choose whether to speak and/or confess guilt, and to have their legal case heard by an impartial and competent judicial body. Upholding the UNCRC is the obligation of all its signatories, including New Zealand.

For young people to access the protections of the UNCRC, they must first be informed of their rights. Within justice systems globally, police read *all* interviewees a version of a police rights caution that outlines the right to silence, that any statement can/will be used as evidence, and interviewees can access a lawyer. Many international justice systems, such as Canada, Scotland, and Scandinavian countries, provide additional protection to the UNCRC (Doob & Tonry, 2004). In these jurisdictions, children and young people also have the right to access a parent/caregiver or another adult who can support them while they are questioned by the police. Adults do not have this right. In many jurisdictions, including the USA, Canada, and Australia, children and young people are also read a different rights caution to adults, which is intended to help them better understand their rights than if they were read the standard adult rights caution and may also include additional rights.

### ***The New Zealand Youth Justice Context***

As it is internationally, antisocial acts committed by children and young people are common in New Zealand. By 18 years of age, 17% of young people are known to police and have been questioned by police on one or more occasions (Spier, 2016). In 2018, there were

19,346 proceedings<sup>1</sup> against children and young people by the police (New Zealand Police, 2019). Like other signatories of the UNCRC, New Zealand children and young people are entitled to the protections in the UNCRC and must be informed of these protections, whether they are under arrest or not. In New Zealand, the police read the rights caution to all people they speak to and there are two versions of it: a child/young person's version (hereafter referred to as the Youth Caution) and an adult version (hereafter referred to as the Rights Caution). As defined by the New Zealand justice system, children are classed as people aged 10-13 years and young people are aged 14-17 years (Ministry of Justice, 2019). Adults are aged 18 years and older. Further mentions to young people within this thesis will be referring to both children and young people as they are read the same version of the Youth Caution.

The legal rights of New Zealand young people align with the UNCRC and are also written into New Zealand law in the Oranga Tamariki Act 1989 (OT Act; formerly known as the Child, Young People, and Their Families Act 1989). Young people's rights are the same as adults', e.g., they can stay silent and access a lawyer. However, young people are entitled to an additional legal right which is absent in the Rights Caution: The right to speak with a nominated person before and/or during police questioning. The nominated person can be any adult the young person chooses, and their role is to provide additional protection for young people by supporting them and ensuring due process is being followed (OT Act, s. 222). The nominated person should also help the young person understand their legal rights so the young person can make an informed decision about exercising their rights. The nominated person is not expected to provide legal advice, as this assistance should come from a lawyer if needed (Lynch, 2016).

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<sup>1</sup> A proceeding indicates each separate occasion the police dealt with an alleged offender for one or more offences.

In New Zealand, young people are further protected when they talk with the police as there are three criteria the police must meet before any statement the young person makes is valid as evidence in legal proceedings (OT Act, s. 221; Law Commission, 1994), such as in court or at a family group conference.<sup>2</sup> First, the police must explain to the young person their rights “in a manner and in language that is appropriate to the age and level of understanding of the child or young person” (OT Act, s. 218). In the Youth Caution, the police are instructed to check young people’s understanding by asking them to tell the police in their own words what each legal right means (New Zealand Police, 2011). Second, the young person must be allowed to consult a lawyer and/or nominated person before making a statement. Lastly, the statement must be made with a lawyer and/or nominated person present.

The OT Act appears to provide good support to young people when they are with the police, but its effect may be limited if young people do not understand their legal rights and, therefore, cannot exercise them. To meet the criterion in the OT Act about delivering legal rights in an age-appropriate manner for young people, police should avoid jargon in their delivery and go beyond merely stating what the rights are (*R v Z*, 2008). Police should explain each right to the young person so they have a complete understanding and can then make an informed decision about answering questions (Hopkins, 2015; Evans, 2008). An issue with the above OT Act stipulation is there is no instruction in the OT Act or elsewhere about what constitutes an appropriate manner for young people to understand or how the police can determine an appropriate level of understanding in young people. The official version of the Youth Caution includes standardised language and explanation, but early research suggests the Youth Caution may still be beyond the understanding of many young

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<sup>2</sup> A family group conference is a diversionary process which is an alternative to going to court or can precede a court process.

people (Gaston, 2017). This issue about the language of legal rights has been well-researched in international literature and suggests many official police rights cautions read to young people may be ineffective in conveying legal rights to their audiences (Eastwood et al., 2015; Grisso, 1980). This issue will be examined in detail later.

### **Why do Young People Have a Different Rights Caution to Adults?**

#### ***The Justice Process***

To account for the developmental differences between young people and adults, and consistent with the UNCRC, young people have a different justice process to adults. The procedures and values of youth justice systems vary from country to country but are intended to be more responsive to young people's needs than the adult justice system (Australian Children's Commissioners and Guardians, 2017). For example, where possible, British young people avoid adult courts except when the severity of the crime warrants it, such as homicide, or when the offence carries a 14-year prison term for adults (Magistrates' Courts Act 1980 s. 24). Similarly, when young people in Germany commit an antisocial act, imprisonment is a last resort (Subramanian & Shames, 2014). Instead, a minimum intervention such as fines, warnings, or social training courses, for example, is preferred.

New Zealand has a similar justice system division; individuals aged 17 years and under are generally dealt with in the Youth Court and, like in Britain, only appear in an adult court if the offence is serious enough (OT Act, s. 275). The youth justice system allows young people to take responsibility for their actions through diversionary processes, without hindering the opportunity for young people to develop in a responsible and pro-social manner (Finn et al., 2013). Frequently, young people who offend are dealt with by the police via alternative action, such as an apology letter to the victim or community work, rather than detention to a youth justice residence (Lynch, 2016). In 2018, only 30% of offences

committed by young people aged 14-16 years<sup>3</sup> were serious enough to result in a family group conference or court action (Ministry of Justice, 2019a). In a family group conference, if the offence is serious enough or the parties involved cannot decide what to do, the young person will face court action. More often, the people involved in the crime, including the victim(s) and police, will decide on the best way for the young person to make amends and meet the needs of the community, the victim, and the young person (Consedine, 1995; OT Act, s. 258). Severe punishment, such as being detained in a youth justice residence, is seen as a last resort for young people who have typically seriously or repeatedly committed anti-social acts (Finn et al., 2013).

### *Developmental Differences*

To understand the rationale behind the approach to youth justice in New Zealand and elsewhere, it is important to consider the developmental differences between young people and adults. To begin, young people's decision-making abilities are immature, compared to adults, resulting in some ill-conceived decisions. Cauffman and Steinberg (2000) studied how psychosocial maturity related to decisions about antisocial behaviour in young people. Psychosocial maturity was defined as having three components: responsibility (self-reliance, clarity of identity, and independence), perspective (considering another point of view and putting this in context), and temperance (avoiding impulsivity and considering consequences before acting). The results showed psychosocial maturity was negatively associated with anti-social decision making. The more psychosocially mature someone was, the less likely they were to make anti-social decisions. These results, although cross-sectional, may suggest young people who come to the attention of police through their anti-social act(s) could have increased difficulty when speaking to the police as they are less likely to be psychosocially

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<sup>3</sup> The upper Youth Justice age increased from 17 years to 18 years in July 2019 and now includes youth aged 17 years and under.

mature. Psychosocial maturity, particularly the responsibility factor, is positively associated with sound legal rights understanding and decisions about exercising one's rights (Colwell et al., 2005; Rogers et al., 2014).

Young people's developmental immaturity also influences their reasoning abilities. A study analysed Miranda Rights (the USA legal rights) reasoning decisions with American young people who were defendants (Sharf et al., 2017). When considering the decision to invoke their legal rights, these young people tended to think more of short-term consequences (e.g., displeasing a police officer) than long-term consequences, (e.g., a conviction or time in juvenile detention), particularly when considering negative consequences. When interviewed by the police, this could mean young people are more likely to consider confessing if they think it will end the interview and pressure from the police, rather than waiting to get advice from a lawyer about how to get the best legal outcome. One of the most common reasons for making a false confession among young people is doing so because they think it will end the interview (Drizin & Leo, 2004). These results suggest young people need support making decisions about their legal rights so they can consider *all* their options. The results also affirm the necessity of the presence of a nominated person and/or lawyer during police questioning.

Other factors related to immaturity may affect young people when they are with the police. Young people tend to be impulsive, more so than adults (Steinberg & Scott, 2003). Young people also tend to have more mood swings than adults, which may contribute to impulsivity. These findings have negative implications for young people given the demands of police questioning, e.g., they may not be able to manage their impulses and choose to make a statement without weighing up the costs and benefits. A further detriment is young people are also more likely to comply with requests from authority figures, such as police, compared to young adults (Grisso et al., 2003). Because of the power imbalance between the police and young people, young people often feel they cannot stand up for their rights if they

are violated (Goodwin-De Faria & Marinos, 2012). This could explain why many young people choose to make a statement and comply with the police rather than stay silent (Scott-Hayward, 2007). Because young people tend to be compliant as well as have difficulty using logical reasoning, are susceptible to peer influence, and have poor risk perception, Henning (2012) recommended any waiver of legal rights by young people should be scrutinised as it may not meet the criteria for a valid waiver decision.

As this section described, developmental immaturity influences young people's decision-making and reasoning abilities. This reflects the physiological changes occurring in the brain during adolescence (Cauffman & Steinberg, 2012). During adolescence, the brain undergoes myelination, the process of insulating the connections in the brain. Myelination speeds up the communication of signals within and between brain regions, allowing improvements in response inhibition, planning, and risk analysis. The adolescent brain also undergoes synaptic pruning, which clears away the unused connection points in the brain, allowing for more efficient communication. Synaptic pruning can contribute to improved executive function, including working memory. These physiological changes indicate young people are still developing their cognitive abilities when they are most likely to have contact with the police and will most need to make sound decisions. For example, working memory is the ability to hold and process multiple concepts in the mind at once (Cowan, 2014). Working memory can be important for applying the meaning of the entire Youth Caution to a decision about exercising one's legal rights (Goldstein et al., 2018). Without fully developed cognitive abilities, the decisions young people make when they are with the police may be impaired or ill-considered.

A large part of invoking one's legal rights is having the reasoning ability to consider the decision. The individual must consider the long-term consequences, risks and benefits of making a statement or consulting with a lawyer, and weigh up what these risks and benefits



may mean for their situation. As seen above, young people can be significantly impaired in their ability to reason through decisions and can often choose to waive their rights, perhaps without much consideration (Hopkins, 2015; Scherr et al., 2016). Having a different rights caution to adults, which affords extra support to young people is necessary due to the developmental immaturity of young people, relative to adults. Although young people are afforded several protections in the Youth Caution, this thesis will now move to whether they can access these protections by describing the extent young people understand their legal rights and the rate young people choose to exercise their rights.

### **The Understanding Levels of Legal Rights Among Young People**

#### ***International Understanding Levels***

As stated earlier, many international justice systems recognise young people are developmentally immature and afford them additional protection (e.g., access to a parent or other adult; Burke et al., 2014). However, many young people, and especially those in contact with the justice system, may be unable to access these protections due to difficulty understanding their legal rights (Goldstein et al., 2003). In seminal research with American young people, Grisso (1980) developed and piloted the first measures to assess understanding of the Miranda Warning. Grisso assessed understanding in several ways, including asking participants to define significant words from the Miranda Warning, paraphrase each legal right, and answer true-false questions about the Miranda Warning. The results were poor; when asked to paraphrase the rights, only 21.9% of young people were able to accurately do so, compared to 42.3% of adults. Similar trends were observed in Grisso's other methods to assess understanding. Recent research that used the same measures has yielded similar

results, suggesting little progress has been made in the past 40 years towards making legal rights accessible to young people in America (Frumkin et al., 2012).

Other international research using a range of measures and in different locations consistently finds young people hold an incomplete understanding of their legal rights. Understanding levels tend to range from between 14.5% to 43% (Freedman et al., 2014; Rogers et al., 2014). The results vary depending on the rights caution used for assessment, e.g., the United Kingdom (UK) caution or the Miranda Warning, the method of assessment (multiple measures exist; see Goldstein & Goldstein, 2010), and the population used, e.g., a detained or community sample. Researchers tend to conclude young people have an incomplete understanding of their rights, which can negatively impact decisions about exercising their legal rights. Difficulty with understanding legal rights may be further exacerbated for young people involved in the justice system, as this population tends to have a poorer understanding than a community sample (Ficke et al., 2006). This issue will be further examined shortly.

### ***New Zealand Legal Rights Understanding Levels***

New Zealand young people also have difficulty understanding their legal rights. In a community sample of young people aged 10-16 years, Gaston (2017) compared their understanding levels of the youth and adult versions of the New Zealand Rights Caution. To assess understanding, the New Zealand Rights Caution Competency Questionnaire (NZRC-CQ; Fortune et al., n.d.) was used. The NZRC-CQ assesses understanding of the New Zealand Rights Caution across several domains of understanding, including cued recall, vocabulary, and appreciation of rights. More information about the NZRC-CQ can be found in the method section of this thesis. Employing different domains to assess the various aspects of legal rights understanding is important as there are different facets to understanding that will not be detected using a single method. For example, the vocabulary

domain assesses understanding concretely by assessing whether the words in the Rights Caution are understandable, whereas the appreciation domain assesses whether young people can appreciate how legal rights can apply to different legal situations. Gaston (2017) found participants performed poorly across all domains of legal rights understanding, with an average understanding level of 61% across all domains. Understanding levels were similar for participants who heard either the youth or adult version of the Rights Caution, but young people understood significantly less of the vocabulary in the Youth Caution. This indicates the language in the Youth Caution may be beyond the verbal abilities of many young people who will encounter it. Gaston concluded the Youth Caution, as it is officially delivered, is ineffective in communicating to young people their legal rights and may negatively impact their decisions about exercising their legal rights. A revision of the language in the Youth Caution is required to aid in potentially increasing understanding.

### ***Legal Rights Understanding and Age***

As has been described, understanding of legal rights is generally incomplete among young people. There is a strong relationship between age and legal rights understanding where the younger someone is, the worse their understanding of their legal rights (Eastwood et al., 2016; Grisso, 1981; Kelly, 2014). The positive relationship between age and legal rights understanding is likely because the general cognitive abilities associated with understanding increase with age, e.g., reasoning, executive functioning, and attention (Viljoen & Roesch, 2005). After studying the relationship between age and understanding, Grisso (1981) concluded young people aged under 16 years are most at risk for incomplete understanding and therefore unable to make a valid decision to waive their rights. In contrast, research with New Zealand young people found no relationship between understanding and age, which was unexpected (Gaston, 2017). However, the author suggested the sample may have been confounded by the decile and age of participants. Further research with New

Zealand young people is required to confirm whether age and legal rights understanding are related.

This section has shown young people often do not understand their legal rights and understanding tends to decrease with age. When young people do not understand their rights, for reasons which will be examined later, they will not be able to access the protections the Youth Caution is intended to provide, and may be vulnerable to the negative outcomes associated with poor understanding. The next section examines these outcomes for young people and practice.

### **What can Happen When Young People do not Understand Their Legal Rights?**

#### ***The Impact on Young People***

When young people do not understand their rights, perhaps the biggest impact is that they choose not to use them. In an analysis of video-recorded police interviews with American young people ( $n = 57$ ), researchers found young people waived their rights 90% of the time and a lawyer was not present in any interviews (Cleary, 2010). Similar results have been found in research with larger sample sizes. From a sample of 307, 92.8% of young people waived their rights (Feld, 2013) and from a sample of 707, 90.6% of young people waived their rights (Grisso, 1981). For comparison, adults waive their legal rights around 75%-78% of the time (Leo, 1996; Snook et al., 2010). Therefore, speaking to the police without advice from a lawyer is likely widespread among young people and raises concerns about whether young people appreciate a lawyer's role, and how a lawyer can help them (Cleary, 2010). Young people may choose not to ask for a lawyer because they have misconceptions about or do not understand the lawyer's role (Zelle et al., 2015). Research indicates young people who better understand their legal rights are more likely to invoke them, suggesting improved understanding may have a protective function for young people when they are questioned by the police (Davis et al., 2011).

No empirical research exists to indicate how often New Zealand young people waive their legal rights, but the rate is likely to be consistent with international research. Wellington police records indicated in 2014 only 0.5% of young people who were questioned by the police accessed a free lawyer provided by the police, compared to 7.5% of adults (Hopkins, 2015). The police records do not indicate how many young people accessed privately hired lawyers, so this figure is an estimate but suggests young people commonly go into police questioning without legal advice at a time when they can be ill-equipped to make sound decisions (Cauffman & Steinberg, 2000). A way to support young people during police questioning could be to improve their understanding of their legal rights so they can appreciate the importance of the content of the Youth Caution and what supports are available to them. Improved understanding may, in turn, increase young people's willingness to invoke their rights as there is a negative relationship between understanding levels and the decision to waive legal rights (Viljoen et al, 2005). The better young people's understanding is, the less likely they are to waive their rights. However, a causal relationship has yet to be established.

High waiver rates of legal rights by young people may be attributed to incomplete understanding, but there are alternative explanations to consider, such as an acquiescence bias (Scherr et al., 2018). When someone has an acquiescence bias, they tend to agree with questions they are asked, e.g., agreeing when asked, "do you want to tell us what happened?" Research has shown the police may present legal rights to young people as a routine formality they have to complete (Cleary & Vidal, 2016) or something to get out of the way before the suspect tells "their side of the story" (Ainsworth, 2010). When legal rights are trivialised, young people are more likely to waive them compared to when their importance is stressed (Scherr & Madon, 2013). Of concern, the acquiescence bias may be stronger when individuals do not understand the importance of their rights (Scherr et al., 2018). Helping

young people to better understand their rights may support young people to make decisions in their interest, rather than the police's.

As well as high waiver rates, poor understanding of legal rights is also linked to false confessions made by young people. A study with young people who had offended assessed the relationship between the likelihood of making a false confession and Miranda Warning understanding (Goldstein et al., 2003). Following a hypothetical interrogation simulation, 42% of participants indicated they were at least leaning towards offering a false confession, with younger (13-15 years) participants more likely compared to older participants (16-18 years). Of concern, the self-reported likelihood of making a false confession was negatively associated with Miranda Warning understanding. The less the young people understood the Miranda Warning, the more likely they were to consider making a false confession. These results suggest age and poor understanding of legal rights are both risk factors for false confessions. The authors suggested the likelihood of making a false confession may be exacerbated during a police interview, given it can be a stressful situation for young people.

### ***The Implications of Incomplete Legal Rights Understanding for Practice***

As well as considering the experience of the young person, it is also important to consider the police's perspective during an interview/interrogation. The police's overall goal is public safety and the aim of a police interview is to detain someone who may be a risk to public safety, e.g., through a confession. However, the police should be aware of young people's unique vulnerability to coercion and increased suggestibility compared to adults (Meyer & Reppucci, 2007). Further, the responsibility police hold to investigate crime should not supersede their obligation to act lawfully, as both the OT Act and UNCRC dictate (Evans, 2008). Additionally, the burden of proof for a crime is held by the state. Improved understanding of legal rights may mean fewer confessions, but it could also mean fewer false

confessions and, therefore, greater protection for innocent people who are questioned (Davis et al., 2011).

If a young person does not understand their legal rights, any statements they made during an interview can be inadmissible as evidence in legal processes. Incomplete understanding means the police did not deliver the Youth Caution in a way that was understood by the young person, which violates the OT Act s. 218 and case law (see *R v Z*, 2008). In New Zealand, appeals have been granted based on police not ensuring the young person understood their legal rights. In *R v Irwin* (1992), a 15-year old's self-incriminating statements were deemed inadmissible in court because the interviewing police officer did not adequately explain to Irwin their right to a lawyer *and* nominated person. The police merely informed Irwin of their legal rights without explanation. Consequently, Irwin chose to have only a nominated person present during questioning as they believed they could not also have a lawyer. This case, and others (e.g., *Elia v R*, 2012; *New Zealand Police v HC*, 2017; *R v Z*, 2008), demonstrate police are required to ensure young people understand their legal rights, but the extent this occurs is unknown and could be substandard. This suggests the need for a standard explanation of legal rights that can be read by police but does not require them to elaborate on it before young people understand their rights. *R v Irwin* (1992) also has implications for community safety. When evidential statements are deemed inadmissible in court, there may not be enough evidence to prove who committed the offence. This can leave the wider community vulnerable to further crimes and the victim(s) without justice. Ensuring young people understand their legal rights is in the best interests of all involved. Now that the consequences for incomplete legal rights understanding have been examined, possible explanations for why young people may have difficulty understanding their legal rights will be discussed.

**What are the Factors Affecting Legal Rights Understanding?**

No single explanation can completely address why young people tend to hold an incomplete understanding of their legal rights because many factors affect the ability to learn. This section will describe several relevant factors that may contribute to incomplete understanding, starting with the role of language, verbal intelligence, and ending with the role of the police.

***Language***

Although the youth versions of the rights caution in New Zealand and internationally are written for young people, the language is often beyond the reading abilities of its intended audience. Helms (2003) analysed the reading levels of 53 Miranda Warnings and compared the youth and adult versions. Most of the youth Miranda Warnings, in comparison to the adult versions, required a greater reading ability. Helms suggested the attempts to make the youth versions easier to understand by using additional explanation had the opposite effect and increased the difficulty. In support, Rogers and colleagues (2008a) reported youth Miranda Warnings required, on average, an additional half-grade reading ability to understand, compared to the adult warnings. Even the word *rights*, which is fundamental to the *Rights* Caution required an eighth grade (around 13-14 years old) reading level to understand as it is an abstract concept. Young people may be able to understand the word “right” as meaning “correct”, but due to incomplete linguistic development may be unable to understand its abstract legal definition as an absolute entitlement (Goldstein et al., 2012). Together, these studies show youth rights cautions can be too difficult for young people to understand and should be revised to reduce the reading level and, therefore, support understanding.

Like the Miranda Warning, the vocabulary within the New Zealand Youth Caution may also be too advanced for young people, perhaps due to the use of legal terms that are



unfamiliar to young people. For example, previous New Zealand research found young people sometimes confused “withdraw consent” with what withdraw meant in a banking context (Gaston, 2017). Similar errors are seen in international research, e.g., children confusing “charges” in a legal sense with charges, again, in a banking sense (Saywitz et al., 1990). These findings have negative implications for the legal decisions of young people. Young people may think they understand their legal rights because the words within the Youth Caution are familiar to them, but are unaware of alternative definitions and choose not to ask for clarification, which leads to uninformed decisions (Cotterill, 2000; Pavlenko, 2008). In practice, these results suggest legal terms should be avoided in all deliveries of legal rights to young people, as they are unlikely to understand them.

In addition to the use of legal terms, low rates of understanding may be influenced by the length of the Youth Caution. Compared to the adult Rights Caution, the Youth Caution contains more explanation, which contributes to a higher word count (142 vs 62<sup>4</sup> words in the Youth and Adults rights cautions, respectively; New Zealand Police, 2011). For example, the Rights Caution describes the use of evidence by saying, “*anything you say will be recorded and may be given in evidence in court*”. The Youth Caution goes further, explaining, “*this means if you are taken to court for [offence] what you say to [police] may be retold to the judge or jury*”. This additional explanation more than doubles the word count for a single legal right and may contribute to difficulty understanding. Long sentences are a strain on working memory and can negatively affect learning capacity (Sweller et al., 1998) because the listener has to remember and consider more information at once (Goldstein et al., 2012). Consideration of all parts of the Youth Caution is important as all parts contain information that may impact young people's decisions about talking to the police (Cleary & Vidal, 2016).

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<sup>4</sup> These reported word counts come from the information in both rights cautions about the rights only and excludes the information about arrest.

Supporting findings show the additional explanation in the Youth Caution may be ineffective in aiding legal rights understanding as there were no significant differences between young people's understanding of the youth and adult versions of the rights caution in New Zealand and internationally (e.g., Gaston, 2017; Helms, 2003). Therefore, the current Youth Caution may be too complex for young people and needs to be simplified as the extant research suggests the current level of detail does not aid understanding.

Another factor influencing understanding may be the sentence structure of parts of the Youth Caution. Innes and Erlam (2018) analysed the structure of the Rights Caution, with a focus on a sentence which is also in the Youth Caution: "*You have the right to speak to a lawyer without delay and in private before deciding to answer any questions*" (New Zealand Police, 2011). Innes and Erlam (2018) suggest the sentence weighs heavily on the listener's cognitive load as it contains multiple clauses (lawyer, delay, private, and speaking before making a statement). The listener must remember four pieces of information to completely understand the sentence. In the Youth Caution, the above sentence includes the additional concept of the right to speak with a nominated person as well as a lawyer, another piece of information that adds to the listener's cognitive load. Given young people's cognitive immaturity, the long and complex sentences in the Youth Caution may negatively impact young people's ability to recall and understand their legal rights (Rogers et al., 2016).

In support of the explanation that the language and structure of the Youth Caution may be impacting understanding of legal rights among young people, research that has attempted to improve understanding by revising and simplifying the language has yielded positive results. Eastwood and colleagues (2016) created a Canadian youth caution that incorporated factors to aid in understanding, then compared understanding to the original caution. In the revised caution, Eastwood et al. removed jargon, ensured a low reading level, used a retrieval aid, (e.g., you have five rights you need to remember) and built redundancy

by repeating the key rights in a slightly different way. Participants who heard the revised youth caution recalled significantly more rights than those who heard the original caution, showing that reducing the required reading level of the caution can improve understanding. However, the other factors incorporated into the revised caution, such as retrieval aids and built-in redundancy, may also have contributed to improved understanding so the authors were unable to identify the unique contribution of simplifying the language to improve understanding.

### ***Verbal Intelligence***

As well as the language within the Youth Caution influencing understanding, research has shown that young people's verbal abilities are a strong predictor of their level of legal rights understanding (Cooke & Phillip, 1998; Frumkin et al., 2012; Viljoen & Roesch, 2005). The better young people's verbal abilities are, the better they can understand and reason about decisions to waive or invoke their legal rights (Colwell et al., 2005; Zelle et al., 2015). This relationship raises concerns because research shows the verbal abilities of young people in contact with the justice system are likely to be poorer than a community population (Lount et al., 2017). A sample of young people in New Zealand youth justice residences and a general school student sample were assessed on their language and auditory processing abilities. The student sample performed significantly better than the youth justice sample on all assessments. Of the youth justice participants, 64% met the criteria for language impairment, compared to 10% of the general population. Consequently, young people in contact with the police may have greater difficulty understanding what is being said to them in the Youth Caution due to pre-existing language and auditory processing difficulties (Rost & McGregor, 2012). They may also have trouble communicating this lack of understanding to the police or their support people (Snow & Powell, 2008). Of concern, the indicators of

language impairment are subtle and are unlikely to be noticed by the police during an interview (Rost & McGregor, 2012).

### *The Police*

Thus far, this section has described the impact of language and verbal intelligence on legal rights understanding, but the police can also have a role in supporting understanding. The language issues in the Youth Caution may be partially overcome if the police adequately explain legal rights to young people, as stipulated by the OT Act s. 218. However, an explanation of legal rights may be difficult for some police and the quality of explanations can vary. In interviews with young people about their understanding of their legal rights, young people involved in the Canadian justice system commonly reported experiencing a lack of explanation about their rights, or increased confusion as police did not explain legal rights appropriately, e.g., by continuing to use jargon (Goodwin-De Faria & Marinos, 2012). Supporting results have been found in an analysis of video-recorded rights caution deliveries by police to youth suspects in England (Sim & Lamb, 2018). Over half of the police were unable to accurately explain the rights caution in its entirety. Additionally, the police rarely corrected the misconceptions interviewees held, which raises concerns as misconceptions can influence young people's decisions to invoke their rights (Blackwood, 2013). These results are echoed by young people involved in the New Zealand Youth Justice system. A thematic analysis was conducted to review the police practices relating to detaining New Zealand young people in custody (Human Rights Commission et al., 2012). When detained, some young people reported they did not understand their legal rights despite having been questioned by police recently or relatively recently. This suggests young people had been questioned by police without completely understanding their legal rights. The police should have explained the legal rights properly to the young people but had not. No systematic New Zealand research exists that describes the delivery and explanation of legal rights to young

people or adults, but the above-cited research suggests explanation by police may be of variable quality. These results indicate the police's delivery of the Youth Caution may not support understanding in young people and violates the OT Act, s. 2. A solution may be to have a standard caution, delivered in a way that maximises understanding and explains the legal rights in enough detail that young people do not have to rely on the police's explanation (Cotterill, 2000).

In addition to potentially poor explanations of legal rights by the police, the police are unlikely to ensure interviewees completely understand their legal rights. Analysis of video-recorded police interviews from the UK showed police tended to simply ask interviewees if they understood, without testing this understanding, e.g., by asking interviewees to put the caution into their own words (Medford et al., 2003). For reference, the police must ensure interviewees understand their legal rights and the England code of practice for police requires the police to explain the legal rights if the interviewee does not understand (Home Office, 2018). Simply asking people if they understand their legal rights is a poor indicator of understanding as there is a large disparity between what people report as their level of understanding, and what they can demonstrate (Cooke & Phillip, 1998; Freedman et al., 2014; Hughes et al., 2013). For example, in one study, 95% of participants claimed to completely understand the UK Caution, but only 5%-40% (depending on the condition) were able to demonstrate complete understanding (Hughes et al., 2013). Young people are also generally more suggestible than adults, so they may say they understand their rights if they are encouraged to, even if they do not (McLachlan et al., 2011). If the New Zealand police have a similar practice to the UK police, these results suggest police may not be ensuring interviewees understand their legal rights during questioning, which may leave statements by interviewees inadmissible as evidence and leave young people unprotected (Lynch, 2016; *R v Z*, 2008).

### **The Current Research**

The existing research base indicates the New Zealand Youth Caution requires revision to more effectively aid young people to understand their legal rights. Currently, the standard method of delivery is ineffective in completely conveying legal rights to young people which may affect their decisions to invoke their legal rights. The current research aims to address the language issues within the Youth Caution, as identified by national and international literature. That is, improving readability, removing jargon, and simplifying the sentence structure of the Youth Caution. A youth caution that is understandable just from police reading it to young people would ensure young people do not have to rely on additional explanation from police, which may be of poor quality (Goodwin-De Faria & Marinos, 2012), or for the police to judge whether young people understood their rights or needed additional explanation, which can be difficult for the police (Rodriguez, 2014). Creating a simplified but standardised set of phrases that convey legal rights, like this thesis attempts to develop, would aid in the consistency of delivery and would also protect police against appeals where the interviewee can claim their rights were not properly explained to them (Cotterill, 2000; Russell, 2000). Further, by delivering the Youth Caution in a way that lowers the reading level, it is, therefore, more appropriate for its audience and upholds the principles of the OT Act s. 218 to deliver the caution in an age-appropriate way.

This thesis will address three research questions. First, this research seeks to determine the level of understanding of legal rights among a community sample of young people in New Zealand. It was hypothesised that this understanding would be incomplete. Second, this thesis aims to test the effectiveness of the revised youth caution in improving young people's understanding of their legal rights. It was hypothesised there would be an increased understanding of legal rights in participants who heard the revised youth caution, compared to participants who heard the standard Youth Caution. Third, this thesis aims to

examine the effect of age on legal rights understanding. It was hypothesised there would be an effect of age, such that understanding would increase with age, regardless of whether participants heard the standard or revised youth caution.

### **Method**

This study was interested in whether a revised youth caution would improve young people's understanding of their legal rights, relative to the standard Youth Caution. It used a between-subjects experimental design to answer this and other research questions. This section will provide an overview of the method used in this experiment, starting with a description of the relevant variables, before moving through information about the participants, what measures were used, and the procedure. This section will end with information about data preparation and the intended analysis.

### **Independent Variables**

The participants' age in years was an independent variable and was measured as a continuous variable. This study has been designed to assess whether an increase in understanding of legal rights is related to an increase in age among young people.

Another independent variable was the version of the youth rights caution participants heard. The standard New Zealand Youth Caution was used in the control condition and the revised youth caution was used in the experimental condition. The condition participants were placed in was randomly assigned.

A third independent variable was participants' verbal intelligence, measured via the Kaufman Brief Intelligence Test, second edition (KBIT-2; Kaufman & Kaufman, 2004). A measure of verbal intelligence was included to control for its relationship to legal rights understanding levels during analysis and was measured as a continuous variable.

### **Dependent Variable**

The dependent variable was participants' level of understanding of their legal rights, as measured by the NZRC-CQ (Fortune et al., n.d.). The NZRC-CQ assesses understanding across several domains to account for the different facets of legal rights understanding. Each domain, as well as total understanding, were analysed as a dependent variable in this study. These domains were: prior knowledge, cued recall, vocabulary, comprehension, and appreciation. Each domain is further described in the materials section.

### **Participants**

A community sample of children and young people were recruited for this study. The inclusion criteria required participants to be aged 10-18 years inclusive, have no pre-identified language disabilities, and for English to be their first language. The age range was chosen because people aged 10–17 years make up the youth justice age range in New Zealand. Eighteen-year-olds were included to support the analysis of age-based trends in understanding and are considered a vulnerable population who have not reached maturity (Farrington et al., 2012; Loomis-Gustafson, 2017). The inclusion criteria regarding language were required because whether someone has a language disability or their first language is not English can influence the validity of the NZRC-CQ (Fortune et al., n.d.). Some participants may have had contact with the police and been exposed to their legal rights from that contact. However, participants were not asked about police contact and it was not an exclusion criterion because police contact is not associated with legal rights understanding (e.g., Barnes, 2008; Ficke et al., 2006; Rogers et al., 2011).

Participants were primarily recruited from schools with a decile rating below nine. Decile ratings range from one to ten and are a measure of the socioeconomic status of the school's location (New Zealand Government, 2020). Decile ratings are determined by the Ministry of Education and low deciles indicate a low socioeconomic community. Schools



which were deciles nine and ten were not contacted for recruitment, as they were deemed to not represent a general community sample. However, two participants, recruited via posters, attended a decile 10 school and were included in the analysis. Thus, participants came from schools ranging from deciles 2–8, except two participants from a decile 10 school. A chi-square test for association was conducted to see if there was an association between decile and condition. To meet the assumptions of the test regarding expected cell frequencies, deciles were divided into two groups: low (deciles 1-5) and high (deciles 6-10). There was no significant association between condition and decile,  $\chi^2(1, N = 101) = 0.26, p = .613$ , indicating that the distribution of participants attending high and low decile schools was similar in both conditions.

There were 101 participants in total, 50 in the control condition and 51 in the experimental condition. Participants' ages ranged from 10 years to 18 years. Participants' average age was 15.12 years ( $SD = 2.03$ ) in the control condition and 15.49 years ( $SD = 1.96$ ) in the revised condition. This difference was non-significant,  $t(99) = 0.93, p = .761$ . The verbal IQ mean of participants in both conditions indicated they were of average verbal abilities, according to the KBIT-2 guide (Kaufman & Kaufman, 2004), with a slightly higher mean verbal IQ in the control condition ( $M = 100.14, SD = 13.15$ ) than in the experimental condition ( $M = 97.55, SD = 13.38$ ). There was no significant difference in verbal IQ between the two conditions,  $t(99) = 0.98, p = .949$ .

The most identified ethnic group of participants was New Zealand European ( $n = 74$ ), followed by Māori ( $n = 28$ ), and Pasifika ( $n = 8$ ). Where there were less than five participants from an ethnic group, they were put into the “other” ethnic group ( $n = 13$ ). For example, “other” was made up of participants from America, Asia, Australia, Canada, and South Africa, among others. Participants were able to report more than one ethnicity. Two participants chose not to report their ethnicity. The distribution of ethnicities across

conditions can be seen in Table 1. A chi-square test for independence was conducted. To conduct this analysis, the expected value in each cell must be greater than five (Field, 2013). The count of some ethnicities did not meet this assumption so were collapsed together. Thus, the chi-squares test of independence was conducted with New Zealand European, Māori, and other as the ethnic group. There was no significant association between condition and ethnicity,  $\chi^2(2, N = 101) = 0.84, p = .658$ , indicating that the distribution of ethnicities between the conditions was similar. Ethnicity was not further analysed as it is unrelated to young people's levels of legal rights understanding (Zelle et al., 2015).

**Table 1**

*Participant Demographic Information (N = 101)*

Demographic information	Control		Experimental	
	<i>n</i>	%	<i>n</i>	%
Ethnicity				
New Zealand European	37	75.5	38	76
Māori	13	26	15	30
Pacific	4	8	4	8
Other	9	18	5	10
Gender				
Female	32	64	26	51
Male	18	36	25	49

Looking at gender, there were more female participants ( $n = 58$ ) than males ( $n = 43$ ). This gender difference is more marked in the control condition than the experimental condition with the control condition having a greater proportion of females, as seen in Table 1. However, a chi-squared test for association indicated there was no association between condition and gender,  $\chi^2(1, N = 101) = 1.75, p = .186$ . Further, the literature has shown

gender does not influence the understanding of legal rights (Eastwood & Snook, 2010; Zelle et al., 2015), thus, the slight gender skew in the control condition was not considered an issue.

## **Materials**

**The Kaufman Brief Intelligence Test revised (KBIT-2; Kaufman & Kaufman, 2004).** The KBIT-2 is a standardised screening tool used to indicate cognitive ability in people aged 4 to 90 years. It contains measures of both verbal and nonverbal intelligence. For the current study, only the subtests that measure verbal intelligence were used because verbal intelligence is a greater predictor of understanding legal rights compared to general intelligence (Cooke & Phillip, 1998; Erickson et al., 2019). In the KBIT-2, verbal intelligence was assessed using two tasks. In the first task, participants were shown a series of pages, each with six different pictures on it. The interviewer read out a word and the participants were asked to point to the picture that best showed what the word meant. The second task was a series of riddles where participants were instructed to give a one-word answer. The scores from the two subtests make up an individual's verbal intelligence score. The KBIT-2 was selected to measure verbal intelligence as it positively correlates with the Wechsler intelligence scale (Bain & Jaspers, 2010), the most widely used clinical assessment of intelligence (Canivez et al., 2016). The Wechsler intelligence scale cannot be used with any frequency, so the KBIT-2 was used in case a participant required a clinical assessment of intelligence.

To deliver the legal rights to participants, two versions were used. The standard child and young person's version of the New Zealand Rights Caution (the Youth Caution) was used with participants in the control condition (New Zealand Police, 2011). For this study, only the rights about questioning were used, not the rights about being arrested. The Youth Caution can be seen in Appendix A. A revised youth caution (see Appendix B) was used with

participants in the experimental condition. The revised youth caution was developed for this study to simplify the language and structure of the Youth Caution while maintaining the meaning of the legal rights, as outlined in the OT Act s. 218. In developing the revised youth caution, the author consulted with experts in the legal and child development professions, from both an academic and practical perspective, to maximise developmental appropriateness and ensure the caution would be acceptable for the courts. Several versions of the revised youth caution were developed and underwent revisions. The revised youth caution was written to be shorter than the standard Youth Caution to reduce the load on working memory for young people. It also was written to avoid the difficult words within the standard Youth Caution. Removing the difficult words and reducing the word count increased the readability (reading ease) level, meaning the revised youth caution can be read and understood by a younger audience, compared to the standard Youth Caution. Readability was measured using the Flesch-Kincaid scale (Flesch, 1948), a commonly used formula based on sentence and word length (Rogers et al., 2012). For readability, a higher number connotes an easier passage to read. The Flesch-Kincaid scale also indicates the education level required for the reader to understand the passage. The Flesch-Kincaid readability of the revised and standard youth cautions were measured using Microsoft Word 2016. The readability for the standard Youth Caution was 67.3 and required a 9<sup>th</sup> grade education to understand (about 14-15 years old). The revised youth caution improved on this and had a readability score of 90.9 and required a 4<sup>th</sup> grade reading level to understand (about 9-10 years old). These scores should be interpreted as an indication of readability only, as the Flesch-Kincaid scale has some limitations, such as not accounting for difficult but short words (Innes & Erlam, 2018).

***The New Zealand Rights Caution Competency Questionnaire (NZRC-CQ; Fortune et al., n.d.)***

The NZRC-CQ (Fortune et al., n.d.) was used as the structured interview guide during interviews with participants and is a tool developed for previous research to measure someone's ability to understand the New Zealand Rights Caution. It contains five domains to orally assess the different facets of understanding (to view the interview guide, see Appendix C. The NZRC-CQ is based on two American tools, *The MacArthur Competence Assessment Tool - Criminal Adjudication* (Grisso, 1998) and *The Miranda Rights Comprehension Instruments* (Goldstein et al., 2014). These tools have been validated to assess understanding of the Miranda Rights and legal processes in the USA. They were adapted in the NZRC-CQ to assess New Zealand young people's understanding of similar topics. The use of an oral assessment was selected as it does not bias against participants who have literacy difficulties (Freedman et al., 2014). The recognition domain of the NZRC-CQ was not used in this study as the authors of the tool suggested it may not be a meaningful measure of understanding.

**Prior Knowledge.**

The first domain of the NZRC-CQ assesses prior knowledge of legal rights. Participants were asked what they already knew about their rights when they are "arrested, questioned, or detained by police". Participants who answered with "I don't know" were asked if they could "give it their best guess" or "had any ideas". If participants gave some information, this was followed up with a single prompt asking if they had "anything else to add". After they answered, participants were asked "where they learned that information". The maximum score all participants could gain in this section was 13, according to the 13 main concepts identified in the standard Youth Caution. Participants were scored a "1" if they accurately stated a concept, or a "0" if they did not state a concept or did so with a

misconception. The scores were added up and each participant's percent score was calculated for free recall.

### **Cued Recall.**

In this section, participants were told they would be read the Rights Caution and the interviewer said, "after I have read it I would like you to tell me everything you can remember about what I said". Participants were then read either the standard Youth Caution if they were in the control condition or the revised youth caution if they were in the experimental condition. Participants were then asked to tell the interviewer, "everything you can remember from what I just read; it can be in any order". Although people retain more information when given the caution orally *and* in written form (Hughes et al., 2013; Rogers et al., 2011), in this part of the interviews, the caution was delivered orally only as this is most likely to align with police practice internationally (Kassin et al., 2007), although New Zealand police practice is unknown. Once participants said what they could remember, the interviewer followed up with a single prompt asking if they had "anything else to add", before moving on. For participants in the control condition, this section was scored as in free recall, with a total possible score of 13. For participants in the experimental condition, participants could gain a maximum score of 11, due to the reduced number of concepts in the revised youth caution. In both conditions, participants were scored a "1" if they accurately stated a concept, or a "0" if they did not state a concept or did so with a misconception. The scores were added up and each participant's percent score was calculated for cued recall.

### **Vocabulary.**

This section assessed participants' understanding of ten significant words in the standard Youth Caution. For the sake of comparison, all participants were assessed on the same words, though participants who heard the revised youth caution would not have heard the words in context before. It was expected participant's understanding would be greater

after hearing the revised youth caution, compared to the standard caution, because although the significant words that were assessed in this domain were not in the revised youth caution, the revised youth caution was expected to convey the *meaning* of the words in a simple manner that would be easier to understand for participants. Participants were first told they would be read some words and asked to explain each word in their own words. Each word was read to participants and shown in a written form while participants were asked, "what does this mean to you?" Participants who answered with "I don't know" were asked if they could "give it their best guess" or "had any ideas". If participants gave an answer which appeared to show some understanding but was incomplete, participants were asked if they could "tell me more about that", "give an example", or if they "had anything else to add". Answers for each question were scored from 0-2, where 0 indicated no understanding, 1 indicated some understanding, and 2 indicated an accurate understanding. Participants could gain a maximum score of 20 on this section. The scores were added up and each participant's percent score was calculated for vocabulary.

### **Comprehension.**

The comprehension section was intended for participants to show their understanding of specific legal rights. Participants were read each of the seven rights from the standard Youth Caution and shown a written version, one sentence at a time. Participants were then asked if they could explain the right in their own words. Participants were prompted in the same manner as the vocabulary section but were not asked to give examples. Answers were scored the same as in the vocabulary section, except the right: "You have the right to speak with a lawyer and/or any person nominated by you without delay and in private before deciding whether to make any statement or answer any questions". This legal right was weighted heavier than the other rights as it contained more concepts than the other six rights and was scored out of 2.5 instead of 2 (as the other questions were). Participants could gain a

maximum score of 14.5 for the comprehension domain. The scores were added up and each participant's percent score was calculated for comprehension.

### **Appreciation.**

The appreciation section was intended to show participants' ability to appreciate the significance of legal rights and how the rights would be applied in different legal scenarios. Participants were shown four different illustrations depicting legal situations. The interviewer read a brief description of what was happening in each situation. Participants were then asked four or five questions about each illustration and were prompted in the same manner as the comprehension section. This section was scored in the same way as the comprehension and vocabulary sections, but the maximum score that could be gained was 38, based on 19 questions in this section. The scores were added up and each participant's percent score was calculated for appreciation.

### **Procedure**

Before beginning recruitment and data collection, ethical approval was first obtained from the Victoria University of Wellington's Human Ethics Committee. Participants were then recruited in several different ways. Most participants were recruited via phone calls to senior staff members of schools, initially in the Wellington region. To improve uptake, schools from around the North Island and the top of the South Island were contacted for recruitment. Schools that agreed to facilitate the research were given information pamphlets to distribute to students, which explained the purpose of the study and included a consent form. In some instances, the researcher and a colleague spoke at school assemblies to explain the process and purpose of the study to students. Interviews with students who agreed to participate were conducted at their school in a private, quiet, and well-lit space. Two participants were recruited via posters and they preferred to be interviewed in a private part



of a public cafe in Wellington. Participants were lastly recruited via friends and family and they were interviewed in a quiet place, typically in their homes or at the university.

Before completing any interviews, the interviewers familiarised themselves with and practiced using the NZRC-CQ (Fortune et al., n.d.). The two interviewers<sup>5</sup> who conducted the interviews had completed a clinical interviewing course and had experience with interviews. The first three interviews with participants were supervised by the thesis supervisor (also a registered clinical psychologist) who gave feedback on interview style and pace following the interviews. Areas for improvement were also suggested. The thesis supervisor and the interviewers discussed the transcripts of two early interviews for consistency in prompting between interviewers. The interviewers were trained to use the KBIT-2 (Kaufman & Kaufman, 2004) by a senior clinical psychology student under the supervision of a registered clinical psychologist.

To take part in the study, participants aged 16-18 years gave written consent. Participants aged 10-15 years gave written assent and their parents/caregivers gave written consent. To begin the interview, the interviewer outlined the purpose and process of the interview and the limitations to confidentiality for the participant. Participants were assured they could stop the interview at any time. The interviewer then checked for verbal assent from the participant, answered any questions they had, and if the participant agreed, opened the interview with a *karakia*, a Māori prayer used to invoke spiritual protection. The interviewer administered the NZRC-CQ (Fortune et al., n.d.) for the first part of the interview. In the second part of the interview, the interviewer administered the verbal subtests of the KBIT-2 (Kaufman & Kaufman, 2004). To conclude, participants were debriefed with an explanation about the study's purpose and allowed to ask any questions about their legal

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<sup>5</sup> All interviews were completed by either the author or a colleague, another forensic psychology master's student.

rights or the research to clarify their understanding. The interviewer typically gave the participant a rundown of their rights then all participants were given a koha (gift) of either a movie voucher or voucher from The Warehouse of similar value. To finish, participants were thanked for their time and contribution to the research and the interviewer said a karakia (prayer) to close the interview. All interviews were audio-recorded for later transcription, and the interviewer noted down the participant's responses throughout the interview as a backup record. All interviews ran for between 20.4 and 60.0 minutes. In the control condition, interviews ran for a mean of 36.72 minutes ( $SD = 7.66$ ) and 38.88 minutes ( $SD = 6.42$ ) in the experimental condition. This difference of interview times between conditions was non-significant,  $t(99) = 1.50, p = .127$ .

### **Data Preparation and Analysis**

Coding began with the existing coding guide of the NZRC-CQ (Fortune et al., n.d.). This coding guide was updated to reflect the suggested changes by previous researchers who used the guide. The coding guide was also influenced by Innes and Erlam (2018) regarding the number of concepts within the rights the young people had to identify, as described earlier. Two coders, the author and an independent party, used the updated coding guide to code five interviews independently. Only the vocabulary, comprehension, and appreciation sections were coded for reliability as they relied on a subjective assessment of understanding. The sections on free recall and cued recall were not assessed for reliability as they are about concepts recalled, rather than understanding. All answers that participants gave from a second prompt offered by the interviewer were excluded from analysis; second prompts were given on few questions. After independently coding five interviews, the coders then went through the codes to discuss scores that differed from each other and refined the coding scheme in tandem. Differences that could not be agreed on were brought to a third party to be resolved. This process was repeated twice more. Coders then independently coded 50 interviews and

calculated inter-rater reliability using Cohen's Kappa on these interviews. Using Landis and Koch's (1977) guidelines for interpreting Cohen's Kappa, there was substantial agreement between the coders for the participant's total understanding scores,  $k = .701$ , 95% CI [0.68, 0.73],  $p < .001$ . Substantial agreement was also achieved in the domains of vocabulary  $k = .635$ , 95% CI [0.56, 0.70],  $p < .001$ , comprehension  $k = 0.713$ , 95% CI [0.67, 0.76],  $p < .001$ , and appreciation  $k = 0.659$ , 95% CI [0.62, 0.70],  $p < .001$ . Although the agreement between coders was substantial, it was decided coding to consensus would be the best method of coding to ensure reliability and minimise discrepancies (Syed & Nelson, 2015). All remaining interviews were then coded independently by each coder and all discrepancies were discussed to come to an agreement. Although coding to consensus can mean one coder unduly influences the other, this was not considered an issue as both coders were highly knowledgeable of the coding scheme and were equally invested in the data. Because both coders were highly knowledgeable, they both brought different perspectives to coding which were valuable in discussions about discrepancies. A third coder was available if needed to resolve disagreements but was not required.

Power analysis was conducted to determine the appropriate sample size for the analysis. With an  $\alpha = .05$  at 80% power to detect a medium effect size, and using age, verbal IQ, and the condition as the independent variables, a sample size of 76 was needed (Cohen, 1992). The current sample size of 101 met this requirement.

There were several pieces of missing data that were addressed. First, the data was analysed using Little's Missing Completely at Random test, which confirmed the missing data was randomly missing ( $p = .541$ ). The missing data included four questions from the appreciation section, and three KBIT-2 values. For the missing appreciation values, mean substitution was used. Preliminary analysis showed age was strongly related to participants' appreciation scores, so the missing appreciation scores for each question were filled in with

the rounded average of other participants of the same age. Although mean substitution has limitations, it was deemed appropriate due to the small number of missing values (0.11% of the data set; Saunders et al., 2006). The missing KBIT-2 scores were imputed using a simple linear regression equation based on the relationship between total understanding and KBIT-2 scores, per instruction from Laerd Statistics (n.d.-a). The regression equation to predict the KBIT-2 score for the control condition was equal to:

$$\text{KBIT-2} = 80.938 + (\text{total understanding} \times 0.296).$$

For the experimental condition the equation was equal to:

$$\text{KIBT-2} = 60.508 + (\text{total understanding} \times 0.575).$$

All participant demographic information and legal rights understanding scores were entered into Microsoft Excel 2016. When the data set was complete, it was imported into IBM's Statistical Package for the Social Sciences 24 (SPSS) for statistical analysis.

To determine participants' verbal IQ scores, their raw scores were first calculated. These were then standardised according to the guidelines by Kaufman and Kaufman (2004). Standardisation was based on participant's age and expected verbal ability for that age group. For all total scores for the different domains of the NZRC-CQ, the scores were added up and divided to get the percentage value. This was done to make comparisons across the different domains as the maximum score to be gained for each domain was different. To determine the total understanding percent score, the percent scores for the different domains were added up and divided.

Several tests were conducted to explore group differences between the two conditions on variables that could be related to analysis. Where data were continuous, such as age and verbal IQ, a *t*-test was conducted. Where data were categorical, such as decile, ethnicity, and gender, chi-square tests were conducted.

*T*-tests were also used to compare the differences between the groups on the dependent variables, which were the different domains of the NZRC-CQ (Fortune et al., n.d.). *T*-tests also indicated the descriptive information about the dependent variables and provided information to answer research question one about what level of understanding young people held about their legal rights. The second and third research questions explored the effectiveness of the revised youth caution in improving young people's understanding of their legal rights and the relationship between understanding and age. To answer these two research questions, five multiple linear regressions were run. In all regressions, the predictor variables were the same. These were: 1) verbal IQ, to control for its influence on legal rights understanding, 2) age, to explore its relationship to legal rights understanding, and 3) condition, to see whether participants who heard the revised youth caution would show a greater understanding of their legal rights than participants who heard the standard Youth Caution. The dependent variables were participants' percent scores on the different domains of the NZRC-CQ and their total percent score when the different domains were combined. Multiple regression analyses were chosen to answer the last two research questions as a regression can indicate the unique contribution of each independent variable on the variance of the dependent variable (legal rights understanding). Identifying the unique contribution was important to control for the relationship between verbal IQ and understanding of legal rights. Regression also gives insight into the unique contribution of age and the revised youth caution on legal rights understanding. Although the independent variables are measured in different units, SPSS standardises these units so each independent variable can be compared to see which variable accounts for the most variance of the dependent variable. Effect sizes for the regression were interpreted using Cohen's (1988) guidelines where  $R^2$  of .01 indicates a small effect size, .09 indicates a medium effect size, and .25 indicates a large effect size.

## Results

This study had three research questions which the following results will address. 1) What was participants' level of understanding of their legal rights? 2) Did the revised youth caution improve participants' understanding of their legal rights? 3) Was age a significant predictor of participants' level of understanding of legal rights? Each question will be addressed in turn.

### **What was Participants' Level of Understanding of Legal Rights?**

#### ***Free recall***

To begin the interview, participants were asked what they knew about their legal rights and were scored on how many concepts from the New Zealand Youth Caution they knew. Overall, participants' knowledge of their legal rights was poor with participants only knowing about 1.5 concepts on average ( $M = 1.46$ ,  $SD = 1.31$ ). No participants knew more than half of the concepts in the Youth Caution. One participant knew six concepts and 30 (30%) knew zero concepts. Twenty-four percent of participants knew one concept, 27% knew two concepts, 15% knew three concepts, and 2% knew four and five concepts. There was no significant difference in the number of concepts known by participants between the two conditions,  $t(99) = 0.98$ ,  $p = .382$ . Table 2 shows the percentage of participants who knew each concept in the Youth Caution. Most commonly, participants knew the right to silence, followed by being allowed to speak to a lawyer, and interviews with police being can be used as evidence. Few participants indicated they knew they could speak to both a lawyer and a nominated person, which raises concerns as this right is unique to the Youth Caution, suggesting participants were not aware of this extra protection. Many participants indicated their knowledge about legal rights came from movies and television. For example, one participant said, "*whenever I'm at my Nana and Grandad's they watch the police kind of shows*". Several participants used wording consistent with the American version of the rights,

the Miranda Warning when reporting what they knew, e.g., saying, “*everything you say can and will be used in a court of law*” rather than “anything you say will be recorded and may be given as evidence in court” (as in the Youth Caution). No participants reported knowing the concepts of speaking to a lawyer and/or nominated person without delay or in private. Participants’ poor baseline knowledge suggests that most young people who talk with the police will rely on the police to accurately inform them of their legal rights and will potentially hear the entirety of the Youth Caution for the first time when they are questioned by the police.

**Table 2**

*Percent of Youth Caution concepts known by participants in the free recall section*

Item	Did not know Right (%)	Knew Right (%)
Right to silence	51	50
Stop Statement	99	2
Evidence	77	24
Lawyer before statement	75	26
Nominated person before statement	94	7
Cannot be delayed	101	0
Speak in private	101	0
Speak about statement	95	6
Lawyer during statement	88	13
Nominated person during statement	93	8
During statement	95	6
Police can get lawyer	98	3
Lawyer is free	99	2

### ***Cued recall***

Next, participants were read either the standard Youth Caution or the revised youth caution and asked to recall as many rights as they could. Overall, participants were able to recall around half of the information from either youth caution, with participants recalling slightly more when they heard the revised youth caution ( $M = 50.45\%$ ,  $SD = 18.57\%$ ) compared to the standard Youth Caution ( $M = 45.38\%$ ,  $SD = 17.25\%$ ). This difference was non-significant,  $t(99) = 1.42$ ,  $p = .159$ . Participant's scores ranged from recalling 2 to 11 concepts (out of 11) from the revised youth caution and 0 to 11 concepts (out of 13) from the standard Youth Caution. The most recalled rights in the control condition were the right to silence, that statements could be used as evidence, and that young people could speak to a lawyer before they decided whether to make a statement. The least recalled concepts were that young people could speak to a lawyer and/or nominated person without delay, they could speak with the lawyer and/or nominated person in private, and the lawyer/nominated person could be present during a statement. In the revised youth caution condition, participants most commonly recalled equally the right to silence and lawyers being available to them for free, followed equally by being allowed to speak to a lawyer before deciding to make a statement and police could get young people a lawyer. The least recalled concepts were the lawyer and/or nominated person can be present during questioning, followed by a lawyer and/or nominated person being able to be present during a statement, and that young people can have support during a statement. More information is shown in Table 3.

### ***Vocabulary***

Participants were next asked to define significant words from the standard Youth Caution. Participants' average scores for the different questions in the vocabulary domain are shown in Table 4. A more detailed table can be seen in Appendix D that includes a breakdown of the number of complete answers for each question. Overall, participants performed well on the



vocabulary section, in comparison to the other sections, but participants still did not understand around 25% of the words within the Youth Caution, suggesting a significant deficit in understanding. There was no significant difference,  $t(99) = 1.31, p = .193$ , between the conditions: control [ $M = 76.50\%$ ,  $SD = 13.03\%$ ] and revised caution [ $M = 73.43\%$ ,  $SD =$

**Table 3**

*Participants' recall of each concept from the Youth Caution in the cued recall section*

Item	% Not Recalled		% Recalled	
	Standard	Revised	Standard	Revised
Right to silence	2	25	96	75
Stop Statement	62	57	38	43
Evidence	24	49	76	51
Lawyer before statement	28	45	72	55
Nominated person before statement	54	55	46	45
<u>Cannot be delayed</u>	92	n/a	8	n/a
<u>Speak in private</u>	80	n/a	20	n/a
Speak about statement	58	47	42	53
Lawyer during statement	56	67	44	33
Nominated person during statement	68	71	32	29
During statement	64	61	36	39
Police can get lawyer	58	45	42	55
Lawyer is free	62	25	38	75

Note. Standard = Standard Youth Caution, Revised = Revised youth caution. Underlined concepts were not in the revised youth caution so participants who heard this caution were not assessed on whether they could recall these concepts. Participants who heard the standard Youth Caution were assessed on these concepts.

10.37%]. Of note, participants tended not to fully understand what a *nominated person* was in both conditions, the right which is unique to the Youth Caution. Many participants were able to partially understand nominated, meaning someone you chose. However, the majority were not able to apply this meaning to a criminal justice context. For example, one person indicated they had not heard the term before, and when prompted was able to say, "*a person selected to do something*", which was a partial answer as it does not convey an understanding of what role a nominated person should fulfil. Many participants held a poor understanding of what a *statement* was. They understood statement in a non-legal context as in someone saying something, like a fact, e.g., "*something that you say that can be true or false, factual or not factual*". Many were not able to understand a statement is, in a justice context, what someone says to describe an event, a retelling. Participants also had difficulty with what a *jury* was. Many participants had heard the term before in a judicial context but were unable to correctly identify the jury's role. For example, "*aren't [juries] kind of like advisors to the judge, don't they like question defendants and stuff, something like that*". Others reported never having heard the term before. One of the least understood words/terms was *having a right*. Participants' low understanding raises concerns as understanding what *having a right* means is key to understanding the nature of the Youth Caution. In contrast, there were several words most participants were able to correctly define, including *judge*, *lawyer*, *delay*, and *in private*.

**Table 4***Participant's average scores for each item in the vocabulary domain of assessment*

Item	<i>M</i>		<i>SD</i>	
	Standard	Revised	Standard	Revised
Having a right	1.28	1.33	0.76	0.82
A statement	1.36	1.25	0.60	0.66
Recorded	1.50	1.43	0.65	0.54
Evidence	1.62	1.73	0.53	0.49
Judge	1.62	1.59	0.65	0.57
Jury	1.32	1.25	0.77	0.82
Lawyer	1.84	1.86	0.42	0.40
Delay*	1.70	1.73	0.54	0.57
In Private*	1.12	1.80	0.24	0.40
Nominated Person	1.94	0.71	0.63	0.58

Note. Standard = Standard Youth Caution, Revised = Revised youth caution. \* Items were read to all participants but were not included in the revised Youth Caution.

### ***Comprehension***

In this section, participants were read the legal rights, sentence by sentence, and asked to put each right into their own words. This method is how the police check young people's legal rights understanding when young people are being questioned. Table 5 shows participants' scores for each question in the comprehension domain. In this domain, some questions were coded based on participants conveying the overall meaning of the legal right. Others (indicated with a \*), were coded for based on the concepts within the legal rights and whether the participants were able to demonstrate an understanding of each concept. This method of

**Table 5***Participant's mean scores for each question of the comprehension domain*

Item	<i>M</i>		<i>SD</i>	
	Standard	Revised	Standard	Revised
1. Right to silence	1.54	1.16	0.73	0.95
2. No Statement	1.66	1.65	0.63	0.66
3. Stop Statement	1.32	1.39	0.91	0.78
4a. Recorded*	0.46	0.22	0.50	0.42
4b. Used Against*	0.92	0.92	0.27	0.27
5a. Lawyer**	0.23	0.23	0.25	0.25
5b. Nominated Person**	0.24	0.21	0.25	0.25
5c. Without Delay**	0.14	0.11	0.23	0.21
5d. In Private**	0.15	0.17	0.23	0.24
5e. Speak About**	0.29	0.30	0.25	0.25
6a. Lawyer and Nominated person*	0.18	0.29	0.39	0.45
6b. Help with Police*	0.86	0.86	0.35	0.35
7. Free Lawyers	1.64	1.59	0.56	0.64

Note: Standard = Standard Youth Caution, R = Revised Youth Caution. \* = questions coded with a maximum score of 1. \*\* = questioned coded with a maximum score of 0.5. Each item in the table represents a concept within the standard Youth Caution that participants had to convey their understanding of. There were seven rights in total and some rights contained several different concepts, as represented by the different letters, e.g., right five contained five different concepts.

coding was chosen as some rights have multiple different concepts within each right and each is important to understand the entirety of the right (Innes & Erlam, 2018). Participants performed poorly on this domain and did not understand around 35% of their rights. There was no significant difference between the conditions,  $t(99) = 1.04, p = .302$ : control [ $M = 66.41\%$ ,  $SD = 16.17\%$ ] and revised caution [ $M = 62.68\%$ ,  $SD = 19.79\%$ ]. In both conditions participants were best able to demonstrate their understanding of the concepts of statements can be used as evidence, young people can have support when speaking with police, and young people do not have to make a statement. In the control condition, participants were least able to show their understanding of having both a lawyer *and* nominated person present during questioning, followed by speaking to their lawyer and/or nominated person without delay, and in private. Similar deficits were seen in the revised youth caution condition, except participants were least able to show they knew that what they said would be recorded. For further detail about the participants' scores for each item, see Appendix E.

### ***Appreciation***

In this section, participants were asked questions that assessed whether they could apply the legal rights appropriately to hypothetical scenarios that represented real-life legal scenarios. Participants' mean scores for each question in the appreciation domain are in Appendix F. Generally, participants were able to appreciate their legal rights well, but participants were unable to apply their rights around 30% of the time. There was no significant difference,  $t(99) = 0.37, p = .710$ , between the conditions: control [ $M = 27.02$ ,  $SD = 4.43$ ] and revised caution [ $M = 26.65$ ,  $SD = 5.55$ ]. Mean scores are out of a maximum possible score of 38. There were several questions that participants consistently did well on. These questions relate to the nature of questioning and instructing a lawyer and suggest participants tend to understand police questioning relates to criminal activity and honesty is best when speaking to a lawyer. Other questions about the role of a lawyer and how to

instruct them tended to also be well answered by participants. Several questions in the appreciation section also revealed gaps in the participant's knowledge. For example, few participants knew the role of the nominated person is to support *and* help the young person understand their rights. Most participants were only able to understand the support part, e.g., *"She's probably just there to support her daughter because her daughter is probably a bit scared or something and making her comfortable"*.

Participants' answers also revealed misconceptions about the use of their legal rights. For example, when asked, "if the judge finds out that Stephen did not speak with the police, what difference might it make to what the judge does?" Many participants indicated this would make the person who did not speak look guilty, e.g., *"well potentially it could make the judge think that he was guilty because he didn't willingly speak to the police so it might make the judge get the wrong impression."* Participants also were not able to consistently show understanding of a right when it was assessed in different ways. For example, regarding the right to silence, participants tended to know that if someone does not want to talk, the police cannot make them, but participants often said if the police tell someone they have to tell them what happened, that person should tell the police.

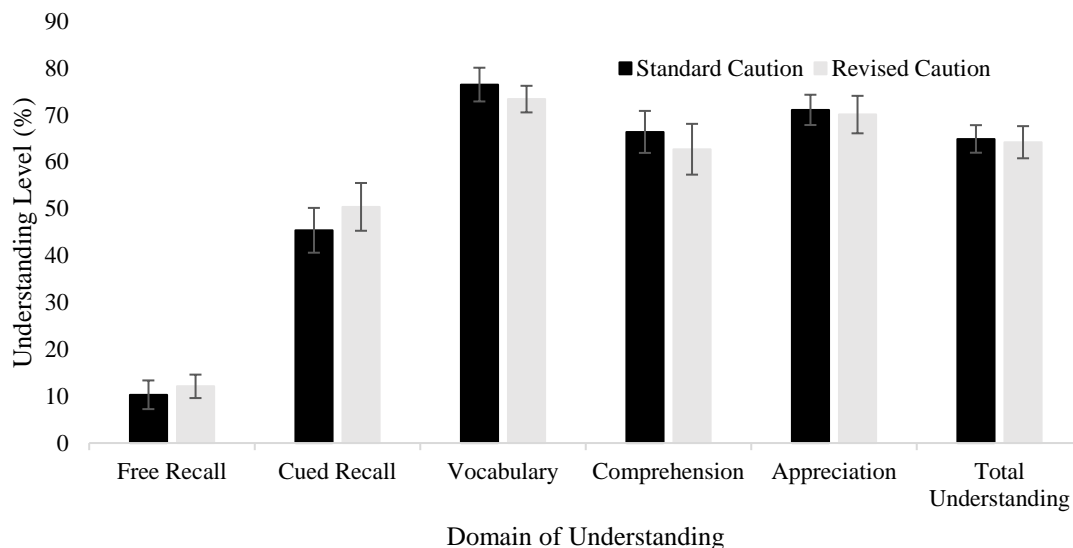
### ***Total recall***

Finally, scores from each domain (except free recall) were combined to calculate a total score. Overall, understanding levels were similar between the conditions, with participants in the control condition ( $M = 64.85$ ,  $SD = 10.67$ ) scoring slightly higher than participants in the revised caution condition ( $M = 64.17$ ,  $SD = 12.52$ ). This difference was non-significant,  $t(99) = 0.29$ ,  $p = .769$ . These scores, along with the means of all the domains

of the NZRC-CQ, can be seen in Figure 1. Participants performed the best on the vocabulary domain, followed by appreciation, comprehension, cued recall, and free recall domains.

**Figure 1**

*Average Percentage of Understanding Across the Different Domains of the NZRC-CQ*



The understanding levels of the different domains of legal rights understanding have been examined and it has been revealed that, on average, understanding is incomplete across all domains. This supports the hypothesis that legal rights understanding would be incomplete among young people. The next part of the results uses multiple regression analyses to see whether the revised youth caution improves understanding among young people and if age is related to legal rights understanding levels.

### **Will the Revised Youth Caution Improve Participant's Understanding of Legal Rights?**

**And:**

### **What is the Relationship Between Age and Understanding of Legal Rights?**

The following results consider the above two research questions for each domain of the NZRC-CQ and the average total understanding score across the domains. To answer these research questions, five multiple regressions were run. To begin, participant's total

understanding scores will be considered, followed by the appreciation, comprehension, and vocabulary domains, and ending with the cued recall domain.

### ***Total Understanding***

The first multiple linear regression was run with verbal IQ, age, and condition as predictor variables. All predictor variables were entered into the model concurrently. Participants' average percent total understanding score was entered as the dependent variable.

The assumptions were checked before analysing the results. There was linearity as assessed by partial regression plots and a plot of studentised residuals against the predicted values. There was homoscedasticity, as assessed by visual inspection of a plot of studentised residuals versus unstandardized predicted values. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.956 and thus no autocorrelation. There was no evidence of multicollinearity as all correlations were below .70, the suggested cut-off point (Cohen et al., 2003). Further, all tolerance values were acceptable and all variance inflation factor (VIF) values were acceptable, being above 0.1 for tolerance values and below 10 for the VIF values (Laerd, n.d.-b). There were no outliers and all leverage values and Cook's distance values were within the acceptable range (Laerd, n.d.-b), so all participants were kept within the dataset. The assumption of normality was met, as assessed by a Q-Q Plot. All assumptions were met for the following multiple regressions unless otherwise stated. For all regressions, the issue of multiple testing was considered. The Bonferroni correction was considered but not applied because the current research had specific hypotheses, thus the Bonferroni correction was not recommended (Armstrong, 2014; Streiner & Norman, 2011).

Overall, the model significantly predicted total understanding,  $F(3, 97) = 24.57, p < .001$ . As indicated by the  $R^2$ , all the predictor variables in this equation explained 43.2% of the variance in participant's percent total understanding scores, indicating a large effect size ( $_{adj}R^2 = 0.41$ ). Verbal IQ and age were significant predictors of total understanding (see Table



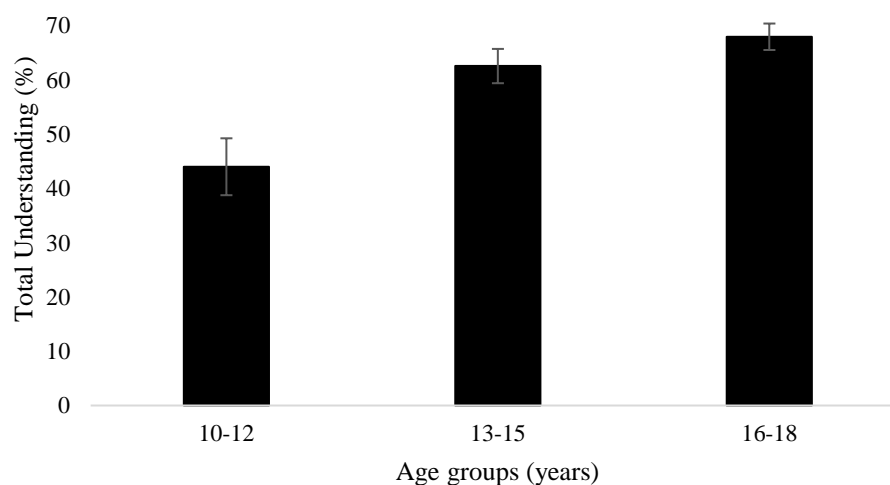
6) indicating that as participants' verbal IQ and age increased, so did their total understanding of legal rights. The positive relationship between age and total understanding supports the hypothesis that understanding of legal rights would increase with age. Figure 2 shows the increase in total understanding across different age groups. In this regression model, the standardised coefficient indicated age was the strongest predictor, compared with verbal IQ. The condition participants were in was not a significant predictor of total understanding, suggesting participant's total understanding percent scores were not influenced by whether they were in the control or experimental condition. In essence, the revised youth caution did not improve total understanding, which does not support the hypothesis. Participants' predicted total understanding is equal to:

$$-23.203 + .416(\text{verbal IQ}) + 3.119(\text{age}) - .759(\text{condition})$$

This equation indicates for every point verbal IQ increased, total understanding increased by 0.41 percentage points and for every year age increased, total understanding increased by 3.12 percentage points. When participants heard the revised caution, total understanding decreased by 0.76 percentage points.

**Figure 2**

*Average Percentage of Total Understanding Scores of Participants by Age Groups*



**Table 6**

*Summary of Multiple Regression Information for Predicting Participant's Scores in the Different Domains of the NZRC-CQ and Total Understanding Score*

Variable	<i>B</i> [95% <i>CI</i> ]	<i>SE B</i>	$\beta$	<i>t</i>
<b>Regression 1</b> Total Understanding				
Constant	-23.20* [-44.56 - -1.85]	10.76		-2.16
Verbal IQ	0.42*** [0.28 - 0.55]	0.07	.48	6.11
Age	3.12*** [2.22 – 4.02]	0.45	.54	4.90
Condition	-0.756 [-4.29 – 2.77]	1.78	-.03	-0.43
$R^2$	.43			
Adjusted $R^2$	.41			
$F$	24.57***			
<b>Regression 2</b> Appreciation				
Constant	-17.21 [-43.40 – 8.98]	13.20		-1.30
Verbal IQ	0.42*** [0.26 - 0.59]	0.08	.43	5.08
Age	3.10*** [2.00 – 4.20]	0.56	.47	5.59
Condition	-1.03 [-5.36 – 3.30]	2.18	-.04	-.47
$R^2$	.34			
Adjusted $R^2$	.32			
$F$	16.54***			
<b>Regression 3</b> Comprehension				
Constant	-50.31*** [-86.31 – -14.30]	18.14		-2.77
Verbal IQ	0.55*** [0.32 - 0.78]	0.12	.40	4.80
Age	4.34** [2.82 – 5.85]	0.76	.48	5.69
Condition	-3.92 [-9.87 – 2.04]	3.00	-.11	-1.31

Variable	<i>B</i> [95% <i>CI</i> ]	<i>SE B</i>	$\beta$	<i>t</i>
<i>R</i> <sup>2</sup>	.34			
<i>Adjusted R</i> <sup>2</sup>	.32			
<i>F</i>	16.52***			
<b>Regression 4</b>	<b>Vocabulary</b>			
Constant	31.84* [7.90 – 55.78]	12.06		2.64
Verbal IQ	0.20** [0.06 - .035]	0.08	.25	2.72
Age	1.94*** [0.91 – 2.96]	0.52	.35	3.76
Condition	-4.14* [-8.04 - -2.35]	1.97	-.19	-2.10
<i>R</i> <sup>2</sup>	.20			
<i>Adjusted R</i> <sup>2</sup>	.17			
<i>F</i>	7.78***			
<b>Regression 5</b>	<b>Cued Recall</b>			
Constant	-47.71* [-87.20 – -8.21]	19.90		-2.40
Verbal IQ	0.49*** [0.24 - 0.74]	0.13	.36	3.92
Age	2.54** [0.88 – 4.20]	0.84	.28	3.03
Condition	5.40 [-1.13 – 11.93]	3.29	.15	1.64
<i>R</i> <sup>2</sup>	.20			
<i>Adjusted R</i> <sup>2</sup>	.17			
<i>F</i>	7.91***			

Note. CI = Confidence Interval. \*  $p < .05$  (two-tailed). \*\*  $p < .01$  (two-tailed). \*\*\*  $p < .001$  (two-tailed).

### *Appreciation*

A second multiple regression was run with the same predictor variables. Participants appreciation percentage scores were entered as the dependent variable. When testing the assumptions, one participant's appreciation percent score appeared to be unusual, with a standardised deleted residual above  $\pm 3SDs$ . However, the leverage values and Cook's distance values were within the acceptable range (Laerd, n.d.-b) so this participant was kept in the dataset. To confirm, the same regression was run without this participant, but it did not change the significance of any predictors or the coefficient values. All other assumptions for the regression were met.

Overall the model significantly predicted participants' appreciation percent scores,  $F(3, 97) = 16.54, p < .001$ . As indicated by the  $R^2$ , all the independent variables in the model explained 33.8% of the variance in participant's appreciation percent scores ( $_{adj}R^2 = 0.32$ ), indicating a large effect size. Looking at the coefficients, verbal IQ and age were significant predictors of appreciation percent scores (see Table 6), indicating that as either increased, so did appreciation percent scores. The average appreciation percent scores for different age groups are shown in Figure 3. This figure shows appreciation increases with age. In the regression, the standardised coefficients indicated age was a slightly stronger predictor over verbal IQ. The condition was not a significant predictor suggesting participants' appreciation percent scores were not influenced by whether they were in the control or experimental condition. Thus, the revised youth caution did not improve understanding of legal rights, which does not support the hypothesis. Participants' predicted appreciation scores were equal to:

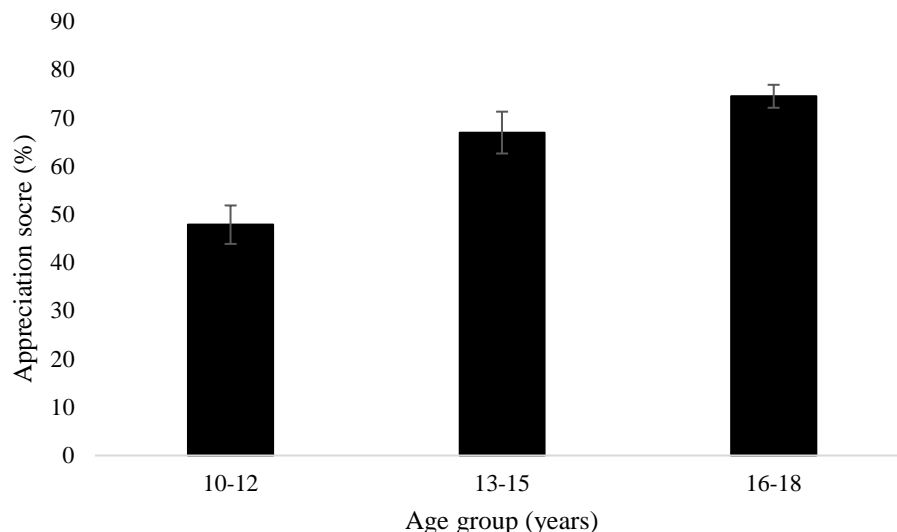
$$-17.210 + 0.424(\text{verbal IQ}) + 3.103(\text{age}) - 1.032(\text{condition})$$

This indicated for every point verbal IQ increased, appreciation scores increased by 0.42 percentage points. For every year age increased, appreciation scores increased by 3.10

percentage points and when participants heard the revised youth caution, their appreciation score decreased by 1.03 percentage points.

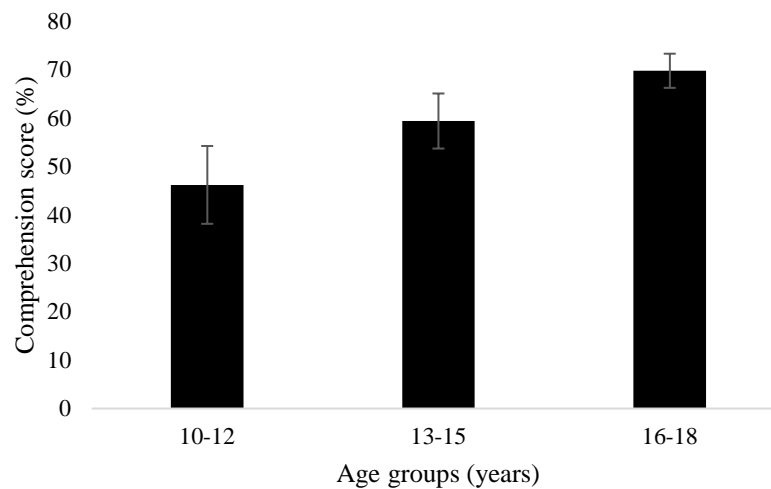
**Figure 3**

*Average Appreciation Percentage Score of Participants by Age Groups*



### ***Comprehension***

A third multiple regression was run with the same predictor variables as the previous regressions. Participant's comprehension percent scores were entered as the dependent variable. Overall the model significantly predicted participant's comprehension scores,  $F(3, 97) = 16.52, p < .001$ . As shown by the  $R^2$ , all the predictor variables explained 33.8% of the variance in participant's comprehension percent scores ( $_{adj}R^2 = .32$ ), showing a large effect size. The coefficients (see Table 6) show verbal IQ and age were significant predictors of comprehension percent scores, meaning participants who were older or had a higher verbal IQ tended to have higher comprehension percent scores, which supports the hypothesis that legal rights understanding would increase with age. This increase in comprehension percent scores by age groups is seen in Figure 4. The standardised coefficients indicated age was the slightly stronger predictor over verbal IQ. Condition was not a significant predictor of participants' comprehension percent scores, suggesting participants' comprehension percent

**Figure 4***Average Comprehension Percentage Score of Participants by Age Groups*

scores were not influenced by whether they were in the control or experimental condition.

This indicates the revised youth caution did not improve participants' comprehension scores, which does not support the hypothesis that understanding of legal rights would be improved by the revised youth caution. Participants' predicted comprehension scores were equal to:

$$-50.305 + 0.550(\text{verbal IQ}) + 4.335(\text{age}) - 3.916(\text{condition}).$$

This equation indicated for every point verbal IQ increased, comprehension scores improved by 0.55 percentage points. For every year age increased, comprehension increased by 4.34 percentage points and when participants heard the revised youth caution, their comprehension score decreased by 3.9 percentage points.

### ***Vocabulary***

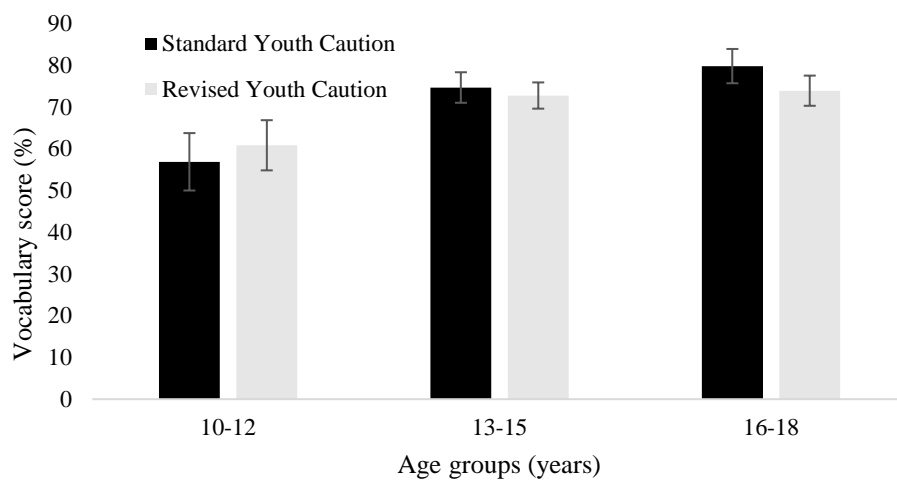
A fourth multiple regression was run with the same predictor variables as the previous regressions. Participant's vocabulary percent scores were entered as the dependent variable. When checking the assumptions, one participant had a studentised deleted residual more than 3SD below the predicted value. The leverage and cook's distance values were within acceptable values, but the regression was run to see if the data altered the predictor's

significance. When the data was excluded, the significance of condition as a predictor variable was altered. Thus, this participant's data was excluded from the analysis.

Overall the model significantly predicted participants' vocabulary percent scores,  $F(3, 96) = 7.78, p < .001$ . As shown by the  $R^2$ , all the independent variables in the model accounted for 19.6% of the variance in participant's vocabulary percent scores ( $_{adj}R^2 = .17$ ), indicating a medium effect size. The coefficients (Table 6) indicated verbal IQ, age, and condition were significant predictors of total vocabulary scores. This meant participants who had higher verbal IQ scores, were older, and heard the standard Youth Caution performed better in the vocabulary domain than younger participants, who had a lower verbal IQ score, and heard the revised youth caution. This finding supports the hypothesis that legal rights understanding would increase with age but does not support the hypothesis that participants who heard the revised youth caution would have greater legal rights understanding levels than participants who heard the standard Youth Caution. The mean vocabulary percent scores for different age groups are shown in Figure 5. The standardised coefficients indicated age was the slightly stronger predictor over verbal IQ, followed by condition. Participants' predicted vocabulary percent scores were equal to:

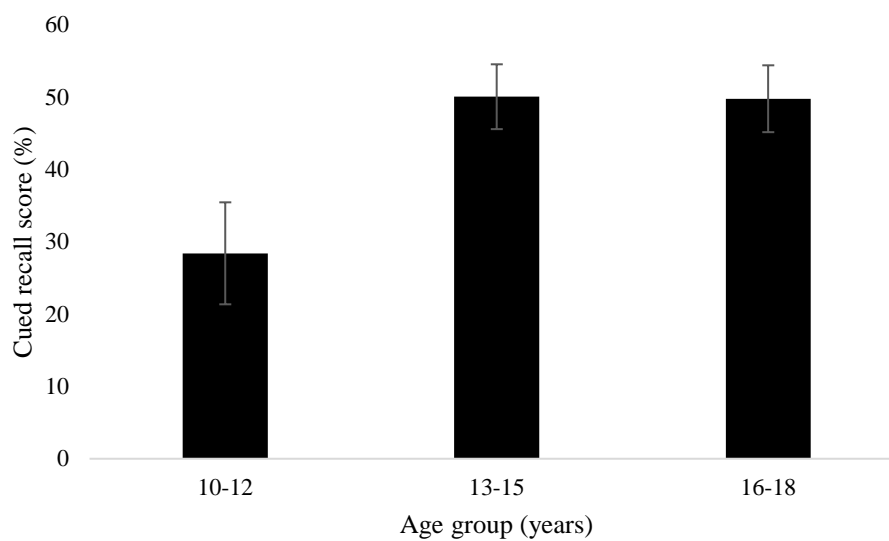
$$31.839 + 0.201(\text{verbal IQ centre}) + 1.937(\text{age}) - 4.139(\text{condition}).$$

This indicated that for every point verbal IQ increased, vocabulary improved by 0.20 percentage points. For every year age increased, vocabulary increased by 1.94 percentage points. When people were in the revised youth caution condition, the vocabulary score decreased by 4.14 percentage points, indicating that in this domain, the revised youth caution negatively impacted participants' understanding of significant terms in the standard Youth Caution.

**Figure 5***Average Vocabulary Percentage Score of Participants by Age Groups****Cued Recall***

The last multiple regression ran used the same predictor variables as previous regressions and included participant's cued recall percent score as the dependent variable. Overall the model significantly predicted cued recall percent scores,  $F(3, 97) = 7.91, p < .001$ . As shown by the  $R^2$ , all the predictor variables in the model together explained 19.7% of the variance in participant's cued recall percent scores ( $_{adj}R^2 = .17$ ) which indicates a medium effect size. These results are shown in Table 6. Looking at the coefficients, verbal IQ and age were significant predictors of cued recall percent scores, which supports the hypothesis that legal rights understanding would increase with age. The condition was not a significant predictor of cued recall percent scores, suggesting participant's cued recall percent scores were not influenced by whether they were in the control or experimental condition. This does not support the hypothesis that the revised youth caution would improve understanding relative to the standard Youth Caution. The coefficients also indicated verbal IQ was a slightly stronger predictor of cued recall, above age. However, as both verbal IQ and age each increased so did cued recall percent scores. This increase in cued recall percent



**Figure 6***Average Cued Recall Percentage Score of Participants by Age Groups*

scores across age groups are shown in Figure 6. Participants' predicted cued recall percent scores were equal to:

$$-47.705 + .493(\text{verbal IQ}) + 2.537(\text{age}) + 5.398(\text{condition})$$

This indicates for every point verbal IQ increased, cued recall percent scores increased by 0.49 percentage points. For every year age increased, cued recall percent scores increased by 2.54 percentage points, and when participants heard the revised youth caution, their cued recall score was 5.4 percentage points higher than participants who heard the standard Youth Caution.

### Summary

Overall, participants showed an incomplete understanding of their legal rights, which supported the hypothesis. Across the different aspects which comprise understanding of legal rights, participants performed the worst on the cued recall domain, followed by comprehension and appreciation, and best on the vocabulary domain.

Five multiple linear regressions were run and showed that across all domains of understanding, verbal IQ and age were significant predictors of participant's level of legal

rights understanding. This finding supported the hypothesis that age would be related to legal rights understanding levels as understanding of legal rights increased with age. The condition participants were in was not a significant predictor of legal rights understanding in all domains, except in the vocabulary domain where the condition predicted worse vocabulary understanding for participants who heard the revised youth caution compared to participants who heard the standard Youth Caution. This result went against the hypothesis; we expected that participants who heard the revised youth caution would show better legal rights understanding levels than participants who heard the standard Youth Caution. Possible explanations for this finding will be considered in the discussion.

### **Discussion**

During adolescence, many young people engage in antisocial behaviour and may have contact with the police because of their behaviour. When they are with the police, young people will be read their legal rights (the Youth Caution). Developmentally, adolescence is also a period of change for young people as they continue to develop their decision-making and cognitive abilities, and are more impulsive and suggestible, relative to adults (Caffman & Steinberg, 2000). This immaturity in young people raises concerns about their ability to understand and exercise their legal rights. However, little research has been conducted into what level of understanding of legal rights we can expect from young people in New Zealand, and if this level of understanding can be improved. This thesis was designed to help address this gap by exploring three research questions. These were: 1) How much of their legal rights do New Zealand young people understand? 2) Will revising the Youth Caution to simplify the language and structure increase young people's understanding of their legal rights? And 3) Does understanding of legal rights increase with age? Three hypotheses were made about each of these research questions: 1) Young people would have an incomplete understanding of their legal rights, 2) participants who heard the revised youth caution would demonstrate a

better understanding of their legal rights compared to participants who heard the standard Youth Caution, and 3) participants' legal rights understanding level would increase with age.

This discussion will consider each research question in turn, whether the hypotheses were supported, and compare the results in relation to the extant literature. Next, this thesis will consider the implications, applications, and limitations of this research. The discussion will finish with suggestions for future research directions and conclusions.

### **Hypothesis One: Young people Would Have an Incomplete Understanding of Their Legal Rights**

The first hypothesis that young people would have an incomplete understanding of their legal rights was supported. Participants understood, on average, 65% of their legal rights in both conditions. Few participants' total understanding level was above 80% and no participants showed complete understanding (i.e., scored 100%). When the different domains of understanding of the Youth Caution were assessed, participants, overall, performed worst on the cued recall domain (48%), followed by comprehension (65%) and appreciation (71%), and performed best on vocabulary (75%). The understanding levels suggest the average young person would have an incomplete understanding of their legal rights and most, if not all, young people interviewed by the police would likely not understand at least several concepts within the Youth Caution. With incomplete understanding, young people may not appreciate or access some of the protection legal rights can afford. In addressing the above hypothesis, this section will consider several domains of understanding and how the results fit with the wider literature.

#### ***Free Recall (Baseline Knowledge)***

During the assessment of free recall, participants were asked what they already knew about their legal rights. Their answers showed participants knew few concepts from the

Youth Caution, with the average amount being 11%. Almost a third of participants (30%) could recall no concepts. These results are consistent with the extant literature. A previous study with New Zealand young people showed their baseline knowledge of the Youth Caution was 6% (Gaston, 2017) and for American young people involved in the justice system, their baseline Miranda Warning knowledge was between 8% and 13%, depending on participants' maturity level (Rogers et al., 2014). Many participants in the present study reported they learned about legal rights from movies and television, both New Zealand and internationally produced. When reciting what legal rights they knew, several participants used phrases and vocabulary associated with the American Miranda Warning, e.g., referring to an "*attorney*" instead of a "*lawyer*". Research suggests the proliferation of police television shows has increased people's general awareness of legal rights, but these television shows do not contribute to an accurate or in-depth understanding (Rogers et al., 2010). The present results support these findings as no participants knew more than half of the concepts in the New Zealand Youth Caution before being read them, suggesting young people may have only a surface-level knowledge of their legal rights.

### ***Cued Recall***

In this part of the interview, participants were read either the revised or the standard youth caution and asked to state what they could remember from the caution. There was no significant difference in recall between conditions. Participants recalled about half (48%) of the concepts from either caution. This cued recall level was similar to, though slightly higher than, cued recall scores reported in international research with young people. Studies have shown 38% of Canadian high school students (Eastwood et al., 2015), 8% of British high school students (Clare et al., 1998), and 26% of American young people involved in the justice system could accurately recall all their legal rights (Rogers et al., 2016). In interpreting these results, it is important to consider the value of cued recall as an indicator of

legal rights understanding. On one hand, cued recall gives insight into understanding as people are less likely to remember what they do not understand (Chaulk et al., 2014). Cued recall also indicates working memory, which can be important for accessing and integrating the different concepts of the Youth Caution (Rogers et al., 2008a) but may only weakly relate to legal rights understanding (Erickson et al., 2019). On the other hand, cued recall is limited in indicating legal rights understanding as it fails to measure whether people can apply their legal rights recall to an appropriate legal situation or if they understand the implications for waiving their rights (Eastwood et al., 2016). Thus, participants' average cued recall score indicates participants had significant difficulty recalling most concepts from either the standard or the revised youth caution. Other domains of understanding will be analysed to see whether this low cued recall level means young people also cannot apply their legal rights or understand the implications of waiving them.

Looking now at the number of concepts participants recalled; on average, participants recalled 5.9 concepts (45%) from the standard Youth Caution and 5.6 concepts (51%) from the revised youth caution (no significant difference between conditions). These figures are consistent with Miller's (1956) "magical" working memory number which posits people can typically hold seven, plus or minus two, concepts in their working memory. The standard Youth Caution contains 13 different concepts which is, therefore, beyond what young people can be expected to hold in their working memory without memory aids. To support the retention of legal rights, the police could enact a policy to provide a written version of the Youth Caution to young people during interviews, in addition to reading the caution aloud. Then, young people could review the written information while they decide about exercising their rights (Eastwood & Snook, 2010), instead of trying to remember information that is likely already lost from their memory. Providing a written and oral version of the Youth Caution can improve understanding in a community sample (Hughes et al., 2013). However,

many young people involved with the justice system have literacy issues (Gluckman, 2018) so whether providing a written version of the Youth Caution would improve understanding with this population is unknown and could be confirmed with further research. Learning may also be aided by a visual representation of information alongside written information (Shabiralyani et al., 2015). Future research could also study whether providing a written Youth Caution, a visual aid, and the police reading it aloud would benefit young people's ability to understand.

### ***Appreciation***

Perhaps yielding the most insight into the areas of deficits in legal rights understanding among young people, the appreciation domain assessed whether participants could appreciate the significance of their legal rights and apply them to different legal scenarios. The average score for this domain was 71% (no significant difference between conditions), which appears to show a good understanding, but significant deficits are apparent when analysing participants' responses to specific questions. One question asked what the police could do if someone chose to stay silent during a police interview. Many participants (67%) recognised the right to silence applied so the police could not force someone to speak. The next question asked participants what someone should do if, during an interview, the police told that person they *have* to tell the police what happened. Fewer people (47%) grasped the right to silence also applied here and instead indicated the person being interviewed should tell the police what happened, despite recognising the right to silence applied in the previous question. This inconsistency in young people's understanding of the right to silence has several possible explanations. First, young people may not know that rights are absolute and cannot be taken away. This would fit with 'rights' being an abstract term, requiring a year 9 education (about 13-14 years old) to understand (Rogers et al., 2008b). Research with American adults who have been questioned by the police showed only

20% believed the police would fully comply with their decision to invoke their legal rights (Johnson et al., 2015). Research is needed to see whether young people have similar expectations of the New Zealand police and if so, may mean young people believe legal rights are given at the police's discretion, which is inaccurate and illegal. Second, when the police tell someone they have to do something, young people may be influenced to comply by the power imbalance between a police officer and a young person. The difference between the above two questions is the police officer is exerting pressure on the young person in the second question. Police interrogations for anyone are coercive, but young people are particularly vulnerable compared to adults as they tend to be more suggestible and compliant and thus, more likely to comply with the police's instructions (Redlich & Goodman, 2003).

These results show young people's understanding of their legal rights is nuanced. Young people can appear to understand their rights on the surface, but when this understanding is probed further, misunderstandings or misconceptions emerge. Of concern, young people's areas of deficits in understanding, like those identified above, are unlikely to be realised and, therefore, corrected, by police. The police's current method to check legal rights understanding is simply asking young people to put the rights into their own words (New Zealand Police, 2011). A more thorough method to measure understanding by the police may be necessary so that the police can identify and directly address young people's misunderstandings. What form this would take requires further research as the police would likely be under time constraints during an interview and would not have the time to administer the NZRC-CQ (Fortune et al., n.d.), for example. A brief, but thorough assessment is needed.

### ***Total Understanding***

At 65%, the average legal rights understanding level of the different domains of understanding may seem high, but it is consistent with research which has used a similar

assessment to the current study. One study assessed understanding of the Miranda Warning among young people who had offended (Zelle, 2015). The assessment involved a tool the NZRC-CQ (Fortune et al., n.d.) was partly based on, the Miranda Rights Comprehension Instruments (Goldstein et al., 2012). This tool comprises domains similar to the NZRC-CQ's appreciation, comprehension, and vocabulary domains. When understanding levels were averaged across all domains, young people understood 71% of their Miranda Rights (Zelle, 2015). In a similar study with American young people who were incarcerated, participants' average understanding score of the Miranda Warning was 1.6 on a scale from 0-2 (80% understanding; Goldstein et al., 2003). These results show young people in New Zealand and internationally understand their legal rights to a similar extent, but understanding is, on average, incomplete. These similarities in understanding levels occur despite different youth cautions being used during assessments and, therefore, different language and readability levels of the various youth cautions. Developmental factors of young people, rather than language factors, may explain why young people consistently have an incomplete understanding of their legal rights. This implication will be examined further shortly.

The total understanding score (65%) may on the surface suggest young people have a good understanding of their legal rights, but this level instead indicates significant deficiencies and room for improvement. First, an understanding level of 65% means participants, on average, did not understand 35% of the concepts in the Youth Caution. To make an informed decision about exercising their rights, young people need to understand and consider *all* their legal rights as each right may be offering unique protection (Sim & Lamb, 2018). For example, if a young person understands all their rights except the right to silence, they may comply with the police's invitation to answer questions. Second, 65% is the average understanding level across participants aged 10-18 years and is skewed upward by the older participants' higher levels of understanding (the influence of age on understanding



is discussed shortly). Participants in the 10-12 years age group showed a total understanding score, on average, of just 44%, which indicates marked deficiencies in their understanding of their legal rights compared to the overall average. Lastly, the present sample of participants likely represents the upper bounds of young people's level of legal rights understanding. Participants were a community sample with average verbal intelligence, whereas young people interviewed by the police are more likely to have learning (Gluckman, 2018) and language deficits (Metzger et al., 2018), and traumatic brain injury (Gluckman, 2020). All these factors could negatively impact young people's ability to understand their rights. The applicability of the current results to a youth justice population will be discussed further in the limitations section. Thus, we cannot be complacent with the current legal rights understanding levels among young people; the results indicate the necessity of greater effort to assist young people to understand their legal rights so they can make intelligent decisions about waiving them. The next section will discuss the effectiveness of this thesis' proposed method for addressing deficits in understanding among young people.

## **Hypothesis Two: The Revised Youth Caution Would Improve Legal Rights**

### **Understanding Among Young People**

The second hypothesis that the revised youth caution created for this study would improve young people's understanding of their legal rights was not supported; participants who heard the revised youth caution showed similar understanding levels to participants who heard the standard Youth Caution. Regression analyses indicated in most domains of legal rights understanding there were no differences in understanding levels whether participants heard the standard or revised youth caution. The exception was the vocabulary domain where participants who heard the revised youth caution showed less understanding of the vocabulary in the Youth Caution than participants who heard the standard Youth Caution.

The ineffectiveness of the revised youth caution to improve understanding is largely inconsistent with the extant literature. Other studies have simplified the language of internationally equivalent youth cautions, e.g., the Miranda Warning, and shown small but significant improvements in understanding, compared to the original youth caution (e.g., Eastwood et al., 2016; Snook et al., 2016). However, these studies simplified the youth caution alongside other methods to improve understanding. For example, Eastwood and colleagues (2016) significantly improved legal rights understanding by simplifying the Canadian youth caution *and* included a combination of listing, explanation, and repetition in their revised youth caution. Further, Eastwood et al. assessed understanding via only five multiple-choice questions and cued recall which, as mentioned earlier, is a simplistic indicator of understanding. It is unknown whether the participants could apply their improved recall to other areas of legal rights understanding, such as appreciating the function of legal rights.

Given that simplifying the language of the Youth Caution alone did not improve legal rights understanding, this supports research suggesting the difficult language in the youth caution, here and internationally, is one of many factors that inhibits understanding, but it is not the only factor. A study with adults in Canadian prisons assessed how cognitive factors such as working memory, vocabulary knowledge, and listening comprehension predicted understanding of the Canadian rights caution (Chaulk et al., 2014). All three cognitive factors were only weakly related to understanding, including vocabulary knowledge ( $r = 0.28$ ). Supporting research that attempted to address the language complexity of the Canadian youth caution found decreasing the language complexity only slightly improved understanding (Freedman et al., 2014). Whether young people heard the simplest youth caution or not, their understanding was deficient. These findings suggest factors other than language may be more influential on legal rights understanding, for example, cognitive abilities that were not

measured in this thesis, including attention and executive functioning (Viljoen et al., 2005), or maturity (Rogers et al., 2014).

Apparent within many participants' answers were misconceptions they held about their legal rights. Some of these misconceptions included staying silent conveys guilt, your lawyer is working for the police, and you can change your mind about what you have said in a statement. When interview answers were scored, participants scored zero on a question if their answer contained a misconception. Both the standard and the revised youth cautions do little to address misconceptions and instead focus on conveying the meaning of the legal rights. This suggests that targeting misconceptions in the revised youth caution could have improved young people's understanding of their legal rights. However, difficulties arise as any standardised youth caution that attempted to address key misconceptions would be lengthy and burden young people's cognitive load (Grisso, 1980; Winningham et al., 2018). As an alternative, the police or a lawyer could directly address misconceptions. A lawyer would likely be the best option as police may have a vested interest in young people retaining misconceptions as some misconceptions can make young people more likely to waive their rights, e.g., the belief a statement can be changed (Rogers et al., 2014; Winningham et al., 2018). Thus, misconceptions likely affected participants' understanding, but this explanation does not adequately account for why understanding was incomplete in the other domains of legal rights understanding, where misconceptions were rarely mentioned.

Vocabulary was the only domain of legal rights understanding where participants' legal rights understanding was different based on the version of the youth caution they heard. Participants who heard the revised youth caution had a worse understanding of the vocabulary in the Youth Caution than participants who heard the standard Youth Caution. Although this finding is inconsistent with expectations, it is understandable. During the interview, participants in both conditions mentioned they heard some words they were

assessed on for the first time. The participants who heard the standard Youth Caution would have heard the words in the appropriate legal context, i.e., when the Youth Caution was read out in an earlier part of the interview, which suggests hearing the context was important for interpreting the meaning. In contrast, the participants who heard the revised youth caution would not have heard the words in context. Difficult words from the Youth Caution, such as those assessed in the vocabulary domain, were removed/simplified in the revised youth caution. The results appear to support this explanation. "Nominated person" is a term with a specific legal definition in the Youth Caution. Only 6% of participants who heard the revised youth caution were able to convey a full understanding of this term. In contrast, 25% of participants who heard the standard Youth Caution showed full understanding for "nominated person". When all participants heard "nominated person" in the same context during the comprehension domain, the difference in understanding between the conditions lessened. Further testing is needed to confirm this explanation as research which has similarly aimed to improve understanding via simplification did not assess vocabulary understanding and it is unknown whether similar results would also be seen in those studies (e.g., Eastwood et al., 2016; Eastwood & Snook, 2012). It is also important to consider that although context may have aided understanding for some participants, many others did not grasp the meaning and words such as "nominated person", "statement", and "right", continued to be poorly understood.

### ***Verbal IQ and Understanding***

Supporting previous robust and well-replicated findings in the literature, verbal IQ was a significant predictor of all aspect of legal rights understanding in this study; people with better verbal abilities could be expected to better understand the Youth Caution (e.g., Colwell et al., 2005; Grisso, 1980; Winningham et al., 2018). This relationship suggests the Youth Caution would be more easily understood if the demands on verbal abilities were

lessened. Yet the revised youth caution created for this study, which sought to make legal rights accessible to people with low verbal abilities through easier readability (reading ease), did not improve understanding of legal rights. This lack of improvement may have two explanations. First, perhaps the revised youth caution only improved understanding in participants who had a low verbal IQ and thus, the demands of the standard Youth Caution were greatest. The current study's participants were of average verbal intelligence so the readability demands of the standard Youth Caution may have been more easily managed. Future research could examine whether the revised youth caution improves understanding among a youth justice population, as they have below average verbal abilities (Lount et al., 2017). Second, the revised youth caution could have been ineffective in improving understanding because of a lack of construct validity. Whether the revised youth caution was simpler and easier to read was assessed via the Flesch-Kincaid (Flesch, 1948) readability test. This test is limited because it does not consider complex sentences or organisation of sentences (Davis et al., 2011). Thus, although there appeared to be a difference between the readability of the revised and standard youth cautions, it is unknown from a young person's perspective whether this difference was meaningful. Either version of the youth caution could have been easier or harder than the Flesch-Kincaid test indicated.

### **Hypothesis Three: Understanding of Legal Rights Would Increase With Age**

The third hypothesis that understanding of legal rights would increase with age was supported; age was a significant predictor of legal rights understanding such that the older a participant was, the better their level of understanding of their legal rights. These results provide support for a consistent trend in the literature (e.g., Ficke et al., 2006; Grisso, 1980; McLachlan et al., 2011) that shows among young people, those approaching adulthood tend to have the best understanding of their legal rights. This relationship between age and legal rights understanding is likely to be because general cognitive abilities increase with age.

Hence, factors that support young people to understand their legal rights will be the most developed among older participants (Eastwood et al., 2016).

Among participants, those aged under 16 years held the lowest understanding level of their legal rights. This finding supports research suggesting this age group is particularly vulnerable to have deficient legal rights understanding and need extra support to understand, compared to their older peers (Grisso, 1980). Grisso suggests as a group young people aged under 16 years are unable to understand their legal rights without special assistance, e.g., a lawyer. The necessity of a lawyer will be further considered shortly in the implications section. Although participants aged under 16 years showed the lowest understanding levels, all participants held an incomplete understanding and, thus, support to aid understanding of legal rights should be provided to all young people and perhaps adults.

The relationship between age and legal rights understanding supports the recommendations of researchers and other figures in the youth forensic psychology area who are critical of the cut-off age of New Zealand's youth justice system. As just mentioned, all participants in this study held an incomplete understanding of their legal rights, regardless of their age. This included 18-year olds, who are adults in the New Zealand justice system, and shows they could be, like young people, vulnerable to the negative outcomes associated with incomplete understanding (see the introduction of this thesis). It is beyond the scope of this thesis to explore adults' understanding of their legal rights, but these findings raise concerns about the capacity of adults to understand, particularly as they only get informed of the rights without any explanation (Bill of Rights Act, 1990 ss. 23-24; New Zealand Police, 2011). Many researchers have suggested the youth justice age should be raised above 17 years to account for the brain development that occurs after people reach adulthood (e.g., Farrington et al., 2012; Loomis-Gustafson, 2017; OT Act 1989; Matthews et al., 2018), and is likely necessary for legal rights understanding. The current results show that reaching adulthood is

not a panacea by which people can then completely understand their rights. Young adults also need support to understand their legal rights.

Out of interest, several regression analyses were ran to further examine the relationship between age and legal rights understanding. These analyses included the same predictor and dependent variables as the analyses in the main results of this thesis, but also included an interaction between age and condition. The interaction was included to see if the revised youth caution would improve understanding in either older or younger participants. This information can be seen in Appendix G. The interaction was non-significant, meaning that regardless of what rights caution participants heard, the strength between age and legal rights understanding was the same.

### **Implications for Policy and Practice**

The current results, both significant and non-significant, have implications for New Zealand legislation and police practice. For legislation, the results suggest the guidelines in the Oranga Tamariki Act 1989 (OT Act s. 218) may be insufficient to protect young people when they are with the police. The guidelines state the police must use age-appropriate language when delivering legal rights to young people, yet this thesis has shown using age-appropriate language alone does not support complete legal rights understanding among young people. The revised youth caution created for this thesis was suitable for 10-year olds (the minimum youth justice age) and thus fulfils the OT Act's guidelines, yet participants still did not understand their rights completely. Therefore, police policy should be revised to provide further protection to young people when they are being questioned by the police. Improvements within the OT Act could include clarifying what constitutes appropriate language for young people or how police should check young people's understanding levels. Guidelines concerning checking understanding may be the most effective revision as this is where the police can detect misunderstandings and, therefore, address them. When legal

rights understanding is incomplete, young people are not protected as they are obligated to be under the United Nations Convention on the Rights of the Child (UNCRC; Barnes & Wilson, 2008). In this case, New Zealand may not be meeting its obligations under the convention and are leaving young people vulnerable to coercion and the wider community vulnerable if statements by young people are inadmissible as evidence.

The current study simplified the language of the Youth Caution but did not improve understanding. This implies factors other than difficult language should be considered when accounting for why young people have an incomplete understanding of the New Zealand Youth Caution. To start, the *concepts* within the Youth Caution, rather than the *words*, could be beyond the abilities of young people to understand. For example, young people must know what a right is and its absolute nature before they can understand the rights contained within the caution, i.e., that they are not conditional. However, around half of the participants in this study were unable to demonstrate a full understanding of what having a right meant. One participant explained it as, “*you are sort of entitled to it but if you do something, that right can be taken away from you*”. If young people think rights are conditional and given, for example, at the police's discretion, they are not going to exercise or stand up for their rights, even if they understand what the words mean (Grisso, 1997). Next, young people's immature cognitive abilities, such as immature decision-making abilities, may partially explain their incomplete understanding. Some questions in the appreciation domain assessed the rationale of legal decisions. Participants were marked down if the decision appeared ill-informed. In one question many participants recognised a lawyer was the best person to give them advice if they were in court. But, when choosing between a lawyer and a parent, many young people chose to listen to the parent, despite previously recognising the lawyer's advice is in the young person's best interest. This finding suggests young people's ability to understand their



legal rights is limited by their immature decision-making and cognitive abilities, neither of which could be targeted with the present intervention.

Following on from this study and others (e.g., see Eastwood et al., 2016; Ferguson & Douglas, 1970; Freedman et al., 2014), the utility of interventions that address the language of legal rights to improve young people's understanding may be limited. The factors which research (including this thesis) indicate are most strongly associated with understanding, such as verbal intelligence, age, and maturity (Colwell et al., 2005; Salseda, 2012) cannot be targeted with an intervention, only time and life experience. Hence, young people may not have the ability to understand their legal rights on their own. To overcome this issue, a policy could be introduced that requires every young person questioned by the police to have a lawyer as their default support option. Currently, young people do not consult with a lawyer unless they request it, which is uncommon (Hopkins, 2015). Instead, a nominated person is often the only support present for young people when they are questioned by the police. The role of a nominated person is to compensate for young people's developmental immaturity and help young people understand their legal rights (Lynch, 2016). However, there are limitations to the effectiveness of a nominated person. There is variability between jurisdictions but research typically finds nominated people (e.g., a Justice of the Peace) receive no training to fulfil their role (Human Rights Commission et al., 2012), they may not take an active role to assist the young person during a police interview (Hopkins, 2015), parents/caregivers can act against their child's best interest (Cleary, 2014), and the nominated person may not completely understand the young person's legal rights, which is essential to their role (Cleary & Warner, 2017). In contrast, a lawyer has the legal expertise and experience to better fulfil this role. Research shows whether young people have contact with a lawyer or not positively predicts their legal capacities during police questioning (Viljoen & Roesch, 2005). Ensuring a lawyer is always present during police interviews with young

people would support the recommendations of researchers in this area (e.g., Goldstein et al, 2003; Grisso, 1980; Hopkins, 2015; McCardle et al., 2020) and protect young people in a manner consistent with the aims of the UNCRC and OT Act.

A lawyer may be a partial solution to support young people when they are with the police, but it is not without limitations. For a lawyer to effectively fulfil their role, young people must be able to instruct the lawyer about how they want the lawyer to proceed and tell the lawyer what happened so they can work together to build a defence. Young people may not have these abilities as many young people are judged to be legally incompetent, key to which is being able to instruct a lawyer (Klinger, 2007). Nonetheless, there are benefits to young people consulting with a lawyer in addition to the lawyer helping young people understand their rights. Young people who discussed their legal situation with a lawyer are helped to consider their options and the potential consequences for decisions and are, therefore, in a better position than young people who choose to make a statement without speaking with a lawyer (Henning, 2012). In consultation with a lawyer, young people can have time to discuss and reflect on strategies to get the best outcome. A lawyer could also accurately correct any misconceptions young people hold about their legal rights (*New Zealand Police v HC*, 2017). Research internationally indicates not all police provide an accurate explanation of legal rights to interviewees (Sim & Lamb, 2018). Thus, a lawyer is not a perfect solution to protect young people, but there are significant positive benefits for young people who speak with a lawyer and making lawyers the default support option would offer substantially more protection than a nominated person alone.

For police practice, these results provide insight into the substantial deficits in young people's understanding of their legal rights and how widespread incomplete understanding is. In applying these results, it would be safe for the police to start with assuming no young person will fully understand their legal rights just from being read the Youth Caution and *all*

young people will need assistance to understand their rights. The police will need to explain each right beyond the explanation in the Youth Caution. This implication is important as international research shows the police tend to think legal rights are easily understood by young people (Meyer and Reppucci, 2007; Patry et al., 2017), which is inconsistent with the present results and the wider literature (Chaulk et al., 2014; Freedman et al., 2014; Grisso, 1980).

### **Strengths and Limitations**

The current study had several strengths. First, participants were diverse; they were recruited from around the North Island and identified with a wide range of ethnicities. The range of deciles also indicated variety in participant's socio-economic backgrounds. This diversity increased the generalisability of the results to a community sample. A second strength was using the NZRC-CQ (Fortune et al., n.d.) as it assessed legal rights understanding in several ways. This provides insight into the areas of the legal rights participants had difficulty with understanding and provides a more complete picture of understanding, compared to using just one method of assessment, e.g., recall. A third strength was using an interview assessment, as it did not bias the results against participants with literacy issues (Freedman et al., 2014). Some reading was involved during the interview, e.g., using flashcards, but all writing was also read aloud by the interviewer, so participants were presented with the material through two modalities.

Along with the strengths of this study, there were also limitations. The generalisability of this thesis' results to young people who are questioned by the police is limited as our participants were a community sample assessed in optimal conditions. The interviews were conducted in quiet, private rooms. Participants were assured it was fine to get wrong answers and no one would know what they had said. The interviewers were friendly and built rapport with participants to minimise stress. In comparison, a police interview could be a highly

stressful situation for many young people (Kassin et al., 2010). Police can be coercive (Ainsworth, 2010) and the interviewee could be intoxicated or sleep-deprived (Cleary & Vidal, 2016). These and other situational factors (e.g., tension between the young person and the arresting officer after a chase) could impair young people's legal rights understanding (Scherr & Madon, 2012). Further, there is an inherent power imbalance between a police officer and an interviewee which was not replicated in our interviews but could significantly influence an interviewee's decision to exercise their rights (Goodwin-De Faria & Marinos, 2012). Therefore, our results are likely an optimistic estimate of young people's ability to understand their legal rights when they are with the police. During a police interview, the police can expect to encounter markedly lower understanding levels among their interviewees.

Of interest to the current study was whether participants who heard the revised youth caution would show a greater understanding of their legal rights than participants who heard the standard Youth Caution. The nature of the assessment may have meant the standard Youth Caution influenced understanding among participants who were assessed on the revised youth caution. In the interview, these participants were exposed to the standard Youth Caution in the comprehension domain of the assessment when all participants were asked to put each right from the standard Youth Caution into their own words. This exposure to the standard Youth Caution may have carried over to the appreciation domain when participants applied the legal rights to different legal scenarios and participants may have drawn on knowledge from the standard Youth Caution to do so. To gain a more accurate picture of the revised youth caution's effect on understanding, future research could remove the comprehension domain and see if there are any changes between the groups on understanding. This way, the effects of the revised Youth Caution could be more accurately be identified as the knowledge participants drew on would be from the revised youth caution

alone, not the standard Youth Caution. However, given there were no significant improvements from the revised youth caution in the domains preceding the comprehension domain, there likely would have been no significant improvements in the appreciation domain also.

Although not a limitation per se, the applicability of the current research to New Zealand police practice is unknown as there is no systematic or descriptive research regarding police practice in New Zealand. Police policy and the OT Act require all police ensure young people understand their legal rights before an interview proceeds, but to what extent this occurs in practice is unknown. Research into New Zealand police practice is largely anecdotal or based on young people's recollections, and are thus limited (e.g., Human Rights Commission et al., 2012). As such, the implications from the current research that suggest the police should assume all young people do not understand their rights and need extensive support may not apply to the police in New Zealand who may already take the time to ensure young people understand their rights. However, evidence from the Court of Appeal suggests the police inconsistently assist young people to fully understand their legal rights (e.g., see *Elia v*, 2012; *New Zealand Police v HC*, 2017; *R v Z*, 2008) so there is room for improvement for at least some police officers in New Zealand.

### **Future Research**

In this study, neither the revised nor the standard youth cautions were effective in supporting complete legal rights understanding among young people, suggesting alternative ways to help young people understand their rights need to be identified. To identify areas where support could be implemented, a systematic analysis of New Zealand police practice is needed to determine how police deliver legal rights to young people. The analysis may reveal some areas for improving legal rights understanding. For example, as suggested earlier and if it is not current practice, providing both oral and written versions of the Youth Caution could

improve young people's ability to understand their rights compared to if the rights are only given orally (Eastwood & Snook, 2010). The delivery speed of the Youth Caution is also important in supporting understanding, but, again, New Zealand police practice is unknown (McCardle et al., 2020; Sim & Lamb, 2018). Thus, beyond improving the language of the Youth Caution, there is room for the police to assist young people to understand their legal rights, but the veracity of the different factors needs first to be determined with New Zealand research.

Using requests for a free lawyer as a proxy for rates of legal rights waivers, it appears New Zealand young people are at a high risk of waiving their rights (Hopkins, 2015). Interventions, such as simplifying the language of legal rights and using repetition and listing also appear to have a limited effect on increasing young people's understanding of their rights (Eastwood et al., 2016). With these points in mind, future research could focus on helping young people feel comfortable exercising their rights as situational factors are likely to inhibit the invocation of rights. For example, young people are less likely to invoke their rights if the police negatively frame rights (Ainsworth, 2010; Grisso, 1981). This research could involve qualitative research with young people who have been or are involved with the youth justice system to understand how they felt during the police interview. Young people could be asked if there were factors that inhibited their understanding or made them feel uncomfortable exercising their rights. Once barriers to understanding and exercising legal rights have been identified, they can be overcome. It is not enough that young people understand their rights, but that they feel comfortable exercising them (Goodwin-De Faria & Marinos, 2012).

Internationally, an alternative intervention to addressing the language of legal rights has shown promise in improving understanding. In a study with school students, participants were grouped and asked questions about the meaning of the Miranda Rights and to explain the reasoning behind their answers (Clomax, 2016). The researcher then corrected any

misunderstandings or misconceptions held by participants and continued questioning. Using a pre-test post-test method, understanding of legal rights significantly improved post-intervention. Key to this improvement may have been the interactive nature of the intervention, e.g., young people could ask questions and receive an accurate answer. Further, the intervention directly addressed misconceptions participants held, which can be effective in educating people about a topic if they have inaccurate knowledge about the topic (Otto et al., 2007; Sinatra & Broughton, 2011; Tippet, 2010). As mentioned earlier, addressing misconceptions may be necessary to improve understanding in young people. A similar educational intervention could be piloted to explore its effectiveness with New Zealand young people. If the intervention improved understanding, it could be implemented in schools across New Zealand. Then, when young people are read their rights by police, it would be a reminder of what they already know rather than new concepts that young people are expected to understand the first time they hear it. The latter is current practice and is not conducive to sustained learning. People can more easily remember information if it presented to them gradually over time, rather than in one instance only (Vlach & Sandhofer, 2012). The value of an educational intervention in schools is likely to be great because even if young people do not have contact with the police through their own actions, there are many other ways they may do so, e.g., as a victim or witness to a crime (Peterson-Badali & Abramovitch, 1992).

### **Conclusions**

Police interviews are often essential to identify the perpetrator of a crime and protect the community from further offences. Many New Zealand young people will speak to the police due to their engagement in antisocial behaviour. However, the current thesis, in support of international research, suggests police interviews could occur when young people do not understand their legal rights. When young people speak to the police without understanding their rights, it violates the Oranga Tamariki Act 1989. Further, the purpose of

legal rights is to protect interviewees against coercion by the police. If someone does not understand their rights, they are vulnerable to making a coerced statement, with young people at particular risk to make a coerced statement (Ainsworth, 2010).

A consistent theme in the literature to support young people to understand their legal rights is to make them easier to read, remove difficult words, and simplify the sentence structure. The current study employed these methods to improve understanding and created a revised youth caution which was then assessed among a community sample of young people to see whether their understanding of their legal rights would be improved. Delivering rights in this way also met the criteria of the Oranga Tamariki Act by conveying legal rights information to young people in an age-appropriate way. The results showed young people's legal rights understanding level were the same whether they heard the standard or revised youth caution. This finding suggests the difficult language in the Youth Caution is one of many factors that explain why young people do not completely understand their legal rights, but alternative explanations may be more insightful. For example, young people may not be able to completely understand their rights because they do not have the ability to do so. As young people age, their cognitive abilities develop further, which explains why age was also related to legal rights understanding in this study. Despite following the Oranga Tamariki Act's guidelines to support understanding, young people's understanding of their legal rights was incomplete. This suggests New Zealand legislation requires revision to better protect young people when they are with the police. Until young people's understanding of their legal rights is complete, they should always have a lawyer with them when they are with the police. A lawyer can accurately explain legal rights to young people and provide expert advice for young people's legal decisions.

This thesis has shown simplifying the language of the Youth Caution is not enough to improve young people's understanding of their legal rights but has suggested other avenues



that may yield improvements in young people's understanding. For example, an interactive educational intervention in schools or reducing situational barriers to exercising and understanding legal rights. Continuing to work towards improving young people's understanding of their legal rights is an essential role of researchers. As a vulnerable population, young people need adults to advocate for change, so young people are supported to make decisions in *their* best interests, not anyone else's.

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## Appendices

### Appendix A: Child/Young Person's Rights Caution

52. Rights Caution	Child/Young Persons
<p><b>Ensure that all advice is provided in a language and manner that the child/young person can understand.</b></p> <p><b>Provide the following advice if there are reasonable grounds to suspect a child/young person has committed an offence or before asking the child/young person any question intended to obtain an admission of an offence.</b></p> <p><b>IN ALL CASES</b>  <i>I am speaking to you about (give reason) OR you have been arrested/detained for (give reason).</i></p> <p><b>NOT UNDER ARREST</b></p> <ul style="list-style-type: none"> <li><i>You may be arrested if you refuse to give your name and address (if sufficient evidence to arrest for an offence but a refusal to give details means a summons could not be served).</i></li> <li><i>You are not obliged to accompany me, and if you consent, you can withdraw that consent at any time.</i></li> </ul> <p><b>QUESTIONING: IN ALL CASES</b>  <b>After giving each statement of the following rights caution to the child/young person, ask him/her to tell you, in his or her own words, what rights he or she has as follows:</b>  <i>(*Please explain to me in your own words what this means to you)</i></p> <ul style="list-style-type: none"> <li><i>You have the right to remain silent.*</i></li> <li><i>You do not have to make any statement or answer any questions.*</i></li> <li><i>If you agree to make a statement and/or answer any questions you can change your mind and stop at any time.*</i></li> <li><i>Anything you say will be recorded and may be given in evidence in court – this means if you are taken to court for [offence] what you say to me may be retold to the judge or jury.*</i></li> <li><i>You have the right to speak with a lawyer and/or any person nominated by you without delay and in private before deciding whether to make any statement or answer any questions.*</i></li> <li><i>You have the right to have your lawyer and/or nominated person with you while you make any statement or answer any questions.*</i></li> <li><i>Police have a list of lawyers you may speak to for free.*</i></li> </ul> <p><b>Note: Any nominated person also needs to be advised of these rights.</b></p>	

Source: New Zealand Police (2011).

**Appendix B: Revised Youth Caution**

- You don't have to talk to me/us or any other police officer.
- You can change your mind about talking to us at any time.
- The things you tell us can be used (in court) to help prove what happened.
- You can talk to a lawyer about what to do and have them with you while we talk. We can get you a lawyer for free.
- You can also talk to another adult about what to do and have them with you while we talk.

**Appendix C: Interview Guide - NZRC-CQ Questions**

*Firstly, I would just like to explain that we are using the same questions for students aged 10-18 years old, so we would expect that you might find some of the questions quite difficult, and others not so difficult, you don't need to worry about this though. You may have seen on television at some point when a police officer is talking to someone, they first read them their rights. In New Zealand, we have a version of this called the Rights Caution, and this is what I want to talk with you about today. If you don't understand something, or didn't hear what I said, please let me know and I will say it again for you. Also, a lot of the questions are very similar with just one or two differences, so you might like to ask me to repeat some questions to make sure that you hear what the differences are and that's fine.*

**Free recall initial question:**

***“Firstly, I would like you to tell me everything you know about what your rights are when you are being arrested, detained, or questioned by a police officer. Do you understand what it is that I would like you to do”?***

*Note. If the examinee doesn't appear to understand, repeat the instructions and answer any specific questions that they have*

**Inquiries:**

- If response is “I don't know”, prompt to “give it your best guess”.
- If participant can give you some information, follow up one prompt asking: “Anything else to add?” Then ask: “Can you tell me where you learnt that from?”



**Cued Recall:**

*“Now I am going to read you the rights caution, after I have read it I would like you to tell me everything that you can remember about what I said. Do you understand what it is that I would like you to do”?*

**Read participant the standard Youth Caution if they are in control condition.**

**Read participant the revised youth caution if they are in the experimental condition.**

*“Now tell me everything that you can remember from what I just read; it can be in any order.”*

*Note. If the examinee doesn't appear to understand, repeat the instructions and answer any specific questions that they have*

**Inquiries:**

- If response is “I don't know”, prompt to “give it your best guess”.
- If participant can give you some information, follow up with the question: “Anything else to add?”

**Vocabulary:**

*“Now I am going to read you some words and show them to you on these cards. I would like you to tell me in your own words what they mean. Do you understand what it is that I would like you to do”?*

*Note If the examinee doesn't appear to understand, repeat the instructions and answer any specific questions that they have*

Inquiries:

- All 0 or 1 point answers must be enquired.
- If response is "I don't know", prompt to "*give it your best guess*".
- Enquire when:
  - The response does not seem to be related to the meaning of the word
  - When the response seems related, but does not convey complete understanding of the meaning of the word, e.g. repeated from something heard on TV
  - One enquiry per question, but you can enquire following a "*give it your best guess*" response also.
- Enquiries can be: *What do you mean by...., Can you tell me more about that...., Can you give me an example...., Is there anything else....*

Questions:

- What does having a right mean?
- What is a statement?
- What does recorded mean?
- What does evidence mean?
- What is a judge?
- What is a jury?
- What is a lawyer?
- What does delay mean?
- What does in private mean?

- *What is a nominated person?*

**Comprehension:**

*“Now I am going to read through the Rights one sentence at a time, they are also on these cards. After I read each Right, I want you to explain to me in your own words what it means to you. Do you understand what it is that I would like you to do”?*

*Note If the examinee doesn't appear to understand, repeat the instructions and answer any specific questions that they have.*

**Inquiries:**

- All 0 or 1 point answers must be enquired.

- If response is “I don't know”, prompt to “*give it your best guess*”.

- Enquire when:

- The response does not seem to be related to the meaning of the sentence

- When it seems related, but does not convey complete understanding of the meaning of the sentence, e.g. repeated from something heard on TV

- When response contains the wording of the original sentence

- One enquiry per question, you can enquire following a “*give it your best guess*” response also.

- Enquiries can be: *What do you mean by....., Can you tell me more about that....., Can you give me an example....., Is there anything else....., In your own words...*

**Questions:**

- *You have the right to remain silent. What does this mean to you?*
- *You do not have to make a statement or answer any questions. What does this mean to you?*
- *If you agree to make a statement and/or answer any questions you can change your mind and stop at any time. What does this mean to you?*
- *Anything you say will be recorded and may be given in evidence in court - this means if you are taken to court for a crime, what you say to me may be retold to the judge or jury. What does this mean to you?*
- *You have the right to speak with a lawyer and/or any person nominated by you without delay and in private before deciding whether to make any statement or answer any questions. What does this mean to you?*
- *You have the right to have your lawyer and/or nominated person with you while you make any statement or answer any questions. What does this mean to you?*
- *Police have a list of lawyers you may speak to for free. What does this mean to you?*

**Appreciation of Rights:**

*“Now I am going to show you pictures with different people in them. I am then going to ask you some questions about what you think might be happening in the pictures. Do you understand what it is that I would like you to do”?*

*Note If the examinee doesn't appear to understand, repeat the instructions and answer any specific questions that they have.*

-Inquiries:

-All 0 or 1 point answers must be enquired.

- If response is "I don't know", prompt to "*give it your best guess*".

- Enquire when:

- The response does not seem to be related to the underlying purpose of the question

- When the response seems related, but does not convey complete understanding of the purpose of the question, e.g. seems like it may be repeated from something heard on TV

- One enquiry per question, you can enquire following a "give me your best guess" response also.

- Enquiries can be: *What do you mean by....., Can you tell me more about that....., Can you give me an example....., Is there anything else....., In your own words.....*

Questions:

***"This is a picture of a girl named Jane, and a police officer. They are at the police station because there has been a crime, and the police officer wants to talk to Jane about it".***

**- A1: Why do you think the police officer wants to talk to Jane?**

**- A2: What do you think they are hoping to learn from asking her questions?**

**- A3: What are some things that the police officer might do with what Jane tells them?**

**- A4: Can the police officer do anything if Jane chooses not to talk to them?**

**- (If yes) What can the police officer do if Jane chooses not to talk to them?**

**– (If no) Why can't the police officer do anything if Jane chooses not to talk to them?**

**- A5: What could happen if Jane chooses not to talk to the police officer?**

*“Here is a different picture of a boy named Stephen, Stephen is also at the police station. The police have told Stephen that they think he has stolen from a clothing shop. Stephen has not talked to the police but is speaking to a lawyer who is the other person in the picture with Stephen”.*

**- A6: What is the role of Stephen's lawyer at the police station?**

**- A7: What will Stephen's lawyer want to know?**

**- A8: Why do you think his lawyer will want to know this?**

**- A9: What do you think is the best thing for Stephen to do while he is talking with his lawyer?**

**- A10: The lawyer asks Stephen to tell him what happened. Why do you think the lawyer said this?**

*“Here is another picture of a girl named Kiri who has been taken to the police station to be questioned, Kiri's mother has also come to the police station with her. Kiri's neighbour has said that Kiri stole some money from them, but the police don't have any evidence as no one saw her do it. Kiri knows that she doesn't have to talk to the police officer, and she is trying to decide if she should or not”.*

**- A11: If Kiri decides to talk to the police officer about what happened, what might the police officer do with the information that Kiri tells them?**

**- A12: If Kiri decides that she doesn't want to talk to the police, what are some of the things that the police officer might do?**

**- (If yes) What are some of the things that the police officer can do if Kiri chooses not to talk to them?**

**- (If no) Why can't the police officer do anything if Kiri chooses not to talk to them?**

**- A13: If the police officer tells Kiri that she has to tell them what happened, what should Kiri do next?**

**- A14: If Kiri starts to talk to the police, but then changes her mind and decides to stop talking to them, what should the police do next?**

**- A15: What is the role of Kiri's mother at the police station?**

*"This is Stephen 1 week later in court. Stephen's dad is at court with him, along with Stephen's lawyer, and a judge".*

**- A16: What is the main job of Stephen's lawyer in the court?**

**- A17: If the judge finds out that Stephen did not speak with the police, what difference might it make to what the judge does?**

**- A18: Stephen has told his lawyer he was there but didn't steal the clothing, his friend did. The lawyer said he thinks it's a good idea for Stephen to tell the judge this, but Stephen doesn't want to get his friend in trouble. Do you think Stephen should listen to his lawyer? Why?**

**- A19: Stephen's dad disagrees with his lawyer. He thinks Stephen is just as responsible as his friend, as Stephen was there and knew his friend was stealing the clothing. Should Stephen listen to his dad or lawyer? Why?**



### Appendix D: Participant's Scores for Specific Items in the Vocabulary Domain of the NZRC-CQ

Item	0 Score		1 Score		2 Score	
	S	R	S	R	S	R
Having a right	9	11	18	12	23	28
A statement	3	6	26	26	21	19
Recorded	4	1	17	27	29	23
Evidence	1	1	17	12	32	38
Judge	4	2	11	17	35	32
Jury	9	12	16	14	25	25
Lawyer	1	1	6	5	43	45
Delay*	2	3	11	8	37	40
In Private*	0	0	3	10	47	41
Nominated Person	7	18	30	30	13	3

Note. \* Items were read to all participants but were not included in the revised Youth Caution. S = Standard Youth Caution, R = Revised Youth Caution. 0 Score indicates no understanding or word/term, 1 score indicates partial understanding, and 2 score indicates complete understanding.

### Appendix E: Participant's Scores on Each Question of the Comprehension Domain of the NZRC-CQ

Item	No		Partial		Complete	
	Understanding		Understanding		Understanding	
	S	R	S	R	S	R
Right to silence	7	19	9	5	34	27
No Statement	4	5	9	8	37	38
Stop Statement	15	9	4	13	31	29
Recorded*	27	40	n/a	n/a	23	11
Used Against*	4	4	n/a	n/a	46	47
Lawyer**	27	28	n/a	n/a	23	23
Nominated Person**	26	30	n/a	n/a	24	21
Without Delay**	36	40	n/a	n/a	14	11
In Private**	35	34	n/a	n/a	15	17
Speak about**	24	20	n/a	n/a	29	31
Lawyer and Nominated person*	41	36	n/a	n/a	9	15
Help with Police*	7	7	n/a	n/a	43	44
Free Lawyers	2	4	14	13	34	34

Note: S = Standard Youth Caution, R = Revised Youth Caution. \* = questions coded with maximum score of 1. \*\* = questioned coded with maximum score of 0.5.

**Appendix F: Participant's Scores and Means for Each Question in the Application****Section**

Right	Item	0 Scores		1 Scores		2 Scores		<i>M</i>		<i>SD</i>	
		S	R	S	R	S	R	S	R	S	R
NoQ	A1	1	0	0	2	49	49	1.96	1.96	0.28	0.20
NoQ	A2	1	1	2	7	47	43	1.92	1.82	0.34	0.43
Evi	A3	2	1	19	13	29	37	1.54	1.71	0.58	0.50
Evi	A11	5	5	15	13	30	33	1.5	1.55	0.68	0.67
RTS	A4	5	5	3	5	42	41	1.74	1.71	0.63	0.64
RTS	A5	28	26	10	10	12	15	.68	0.78	0.84	0.88
RTS	A12	7	12	6	8	37	31	1.60	1.37	0.73	0.85
RTS	A13	16	18	7	12	27	21	1.22	1.06	0.91	0.88
RTS	A14	15	15	10	10	25	26	1.20	1.22	0.88	0.88
RTS	A17	37	35	6	10	7	6	0.40	0.43	0.73	0.70
RTL	A6	2	4	14	15	34	32	1.64	1.55	0.56	0.64
RTL	A7	0	3	6	7	44	41	1.88	1.75	0.33	0.56
RTL	A8	9	7	10	12	31	32	1.44	1.49	0.79	0.73
RTL	A9	1	2	1	2	48	47	1.94	1.88	0.31	0.43
RTL	A10	9	15	20	14	21	22	1.24	1.14	0.74	0.85
RTL	A16	1	4	13	7	36	40	1.70	1.71	0.51	0.61
RTL	A18	8	7	8	12	34	32	1.52	1.98	0.76	0.73
RTL	A19	18	21	10	10	22	20	1.08	0.98	0.90	0.91
NP	A15	13	6	37	45	n/a	n/a	0.74	0.88	0.44	0.33
NP	Support* A15 Rights*	46	42	4	9	n/a	n/a	0.08	0.18	0.27	0.39

Note. NoQ = nature of questioning. Evi = evidence. RTS = right to silence. RTL = right to lawyer. NP = nominated person. S = Standard Youth Caution, R = Revised Youth Caution. \* = question marked out of 1 as there are two important roles of the nominated person that participants had to understand to show complete understanding. Each question can be seen in Appendix C, e.g., question A1 is “why do you think the police officer wants to talk to Jane?”

**Appendix G: Multiple Regression Information to Predict Legal Rights Understanding**  
**Including Age\*Condition Interaction**

Variable	<i>B</i>	<i>SE B</i>	95% CI	$\beta$	<i>t</i>
<b>Regression 1</b>		Total Understanding			
Constant	65.652***	2.833	[60.027 - 71.276]		23.17
Verbal IQ	.417***	.069	[.279 - .555]	.477	6.00
Age	3.153***	.646	[1.871 – 4.434]	.543	4.88
Condition	-.757	1.788	[-4.306 – 2.793]	-.033	-.42
Age*Condition	-.066	.912	[-1.876 – 1.744]	-.008	-.07
$R^2$	.432				
<i>Adjusted R<sup>2</sup></i>	.408				
<i>F</i>	18.241***				
<b>Regression 2</b>		Appreciation			
Constant	72.134***	3.469	[65.247 – 79.020]		20.79
Verbal IQ	.415***	.085	[.246 - .584]	.418	4.88
Age	2.774**	.791	[1.204 – 4.343]	.420	3.51
Condition	-1.053	2.189	[-5.399 – 3.293]	-.040	-.48
Age*Condition	.655	1.117	[-1.561 – 2.872]	.069	.59
$R^2$	.341				
<i>Adjusted R<sup>2</sup></i>	.313				
<i>F</i>	12.404***				

<b>Regression 3</b>		Comprehension			
Constant	70.372***	4.766	[60.912 – 79.831]	14.77	
Verbal IQ	.536***	.117	[.304 - .768]	.393	4.59
Age	3.799**	1.086	[1.643 – 5.954]	.418	3.50
Condition	-3.949	3.007	[-9.919 – 2.021]	-.110	-1.31
Age*Condition	1.067	1.534	[-1.978 – 4.112]	.082	.70
$R^2$	.341				
<i>Adjusted R<sup>2</sup></i>	.314				
<i>F</i>	12.441***				
<b>Regression 4</b>		Vocabulary			
Constant	81.581***	3.131	[75.635 – 87.797]	26.06	
Verbal IQ	.214**	.076	[.063 - .366]	.265	2.81
Age	2.383**	.761	[.872 – 3.894]	.429	3.13
Condition	-4.080*	1.972	[-7.995 - -.165]	-.191	-2.07
Age*Condition	-.831	1.039	[-2.894 – 1.232]	-.108	-.80
$R^2$	.201				
<i>Adjusted R<sup>2</sup></i>	.167				
<i>F</i>	5.974***				
<b>Regression 5</b>		Cued Recall			
Constant	39.820***	5.241	[29.417 – 50.223]	7.60	
Verbal IQ	.494***	.128	[.239 - .748]	.363	3.84
Age	2.575*	1.194	[.204 – 4.945]	.285	2.16
Condition	5.400	3.307	[-1.165 – 11.965]	.151	1.63

Age*Condition	-.074	1.687	[-3.423 – 3.274]	-.006	-.044
$R^2$	.194				
Adjusted $R^2$	.163				
$F$	5.874***				

Note. CI = Confidence Interval. \*  $p < .05$  (two-tailed). \*\*  $p < .01$  (two-tailed). \*\*\*  $p < .001$  (two-tailed).