The Influence of Eyewitness Age, Type of Descriptor Inconsistencies, and Familiarity with Defendant on Mock Jurors’ Perceptions of Eyewitness Testimony

by

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Abstract

Eyewitness evidence can play a key role in juror decision making. This study examines the influence of eyewitness age (10 vs. 20 years old), type of descriptor inconsistencies (no descriptor inconsistencies, inconsistencies related to easy-to-change ‘non-permanent’ features or inconsistencies related to difficult-to-change, ‘permanent’ features), and familiarity with the defendant on participants acting as mock jurors’ assessments of eyewitness and defendant integrity, continuous guilt ratings, and dichotomous verdicts. Participants were asked to read one of 12 versions of a trial transcript and then answered a self-report questionnaire. Eyewitness age did not have a significant effect on any dependent variables. Familiarity had a marginal effect on guilt assessments, both continuous and dichotomous. The presence of any descriptor inconsistencies led jurors to believe the eyewitness more, defendant less, and assign more guilt to the defendant. However, the type, i.e. non-permanent or permanent, did not differentially impact assessments.
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The Influence of Eyewitness Age, Familiarity with Defendant, and Type of Descriptor Inconsistencies on Mock Jurors’ Perceptions of Eyewitness Testimony

Eyewitnesses to a crime are often called upon by police to provide a description of the criminal (Pozzulo, Dempsey, O’Neill, & Grech, 2009). If the police later apprehend a suspect, eyewitnesses may be asked to view a lineup containing the suspect (Brewer & Wells, 2011; Pozzulo et al., 2009). Witnesses who make a positive identification of the suspect may be asked to testify at trial, provided the case makes it to that stage (Goodman & Reed, 1986; Wells & Olson, 2003). In such situations, eyewitness testimony often plays a key role in juror decision-making, and may be the most convincing evidence provided in the eyes of the jury (Brewer & Wells, 2011). One problem associated with eyewitness testimony being so persuasive is that jurors are not always good at knowing when eyewitness testimony is accurate (Bradfield & Wells, 2000). In fact, mistaken identification has been found to be the most prevalent factor involved in wrongful convictions from those cases examined (The Innocence Project, n.d.). The current study examined the influence of three eyewitness factors, as well as their interactions, on mock jurors’ perceptions of eyewitness testimony and verdict: 1) the eyewitness’s age, 2) the type of descriptor inconsistencies between the eyewitness’s description and the defendant, and 3) the eyewitness’s prior familiarity with the defendant.

Context

There are numerous ways to assess mock jurors’ perceptions of an eyewitness. For example, Bruer and Pozzulo (2012) measured eyewitness credibility, accuracy, and reliability. However, these variables were highly correlated and therefore combined into
a composite measure called integrity. Pozzulo, Dempsey, and Fox (2011) found identification decision significantly influenced perceptions of witness accuracy but not witness credibility, indicating the two were not perceived to be identical. Furthermore, truthfulness has been found to be perceived differently than credibility in some situations (e.g. Ross, Jurden, Lindsay, & Keeney, 2003). Therefore, while the term credibility is used throughout the current paper to mean ‘reliability, accuracy, credibility, truthfulness, believability, and honesty’, these items were assessed separately in the current study.

Jurors’ credibility and guilt assessments appear to be influenced by various factors related to an eyewitness’s testimony (Lieberman, 2002). It is important to understand how factors that are prevalent in eyewitness testimony may influence jurors, and whether the assumptions jurors are making are accurate. Three relevant factors are eyewitness age, type of descriptor inconsistencies, and familiarity with the defendant (e.g. Berman & Cutler, 1996; Flowe, Mehta, & Ebbeson, 2011; Goodman, Golding, Helgeson, Haith, & Michelli, 1987). These factors may be interactive to exert an influence on jurors’ assessments.

Children are often the only witnesses to a crime, either as victims (e.g. childhood sexual abuse cases), or as eyewitnesses (e.g. domestic abuse cases) (Goodman et al., 1987); it is critical to understand what assumptions mock jurors appear to make based on an eyewitness’s age. In general, research has suggested that mock jurors assume that adult witnesses are more believable than children when the witnessed crime is not a sexual assault (e.g. McCauley & Parker, 2001; Nightingale, 1993). This assumption may be somewhat valid. Coxon and Valentine (1997) found that children aged 7 to 9 years old, when compared to young adults aged 16 to 18 years old, gave fewer correct answers
and more incorrect answers to questions about a mock kidnapping they had ‘witnessed’.

However, mock jurors’ assumptions related to an eyewitness’s age appear to interact with other factors of the crime, such as whether it is a sexual assault or the child is a victim versus bystander. The current study investigated whether witness age influences mock jurors’ assumptions about child versus adult witnesses.

Similar to age, mock jurors appear to make assumptions based on the presence of descriptor inconsistencies by an eyewitness (Berman & Cutler, 1996). A descriptor inconsistency is a difference or mismatch between the eyewitness’s initial description of the criminal and the appearance of the suspect at the time of arrest. It is very important to investigate how descriptor inconsistencies appear to affect the assessments made by mock jurors; during cross-examination of an eyewitness, the opposing counsel will usually make every effort to point out inconsistencies (Berman & Cutler, 1996). Research has suggested that mock jurors, in general, assume that inconsistent testimony is not as believable as consistent testimony (e.g. Berman & Cutler, 1996; Brewer, Potter, Fisher, Bond, & Luszcz, 1999). O’Neill and Pozzulo (2012) found that mock jurors’ perceptions regarding the accuracy of a witness’s description of the criminal decreased as the number of descriptor inconsistencies increased.

The current study was the first to examine whether the type of descriptor inconsistencies impacts mock jurors’ assessments differentially. Do mock jurors perceive inconsistencies related to non-permanent, i.e. easy to change, features (e.g., hair colour, facial hair, or glasses) to be more or less serious than inconsistencies related to more permanent, i.e. difficult or impossible to change, features (e.g., eye colour, nose shape, or facial structure)? If a juror is informed that only non-permanent features were
described inconsistently as opposed to permanent features, a juror might find the discrepancies less problematic. Prior to conducting the current study, a pilot study tested whether mock jurors appeared to discriminate between permanent and non-permanent descriptor inconsistencies, using the same manipulation that was later used in the trial transcript.

As with age and inconsistent descriptions, jurors also may make assumptions based on whether the eyewitness is familiar with the defendant; it is critical to understand whether this occurs because eyewitnesses are familiar with the defendant in approximately half of all trials (Flowe et al., 2011). Unfortunately, there is insufficient research available to understand what assumptions jurors may make based on the familiarity of an eyewitness with the defendant. It is quite possible that jurors may be more likely to believe an eyewitness’s testimony if the eyewitness claims to have seen the defendant prior to the crime. A search for literature in this area revealed only one prior study examining this type of familiarity, by Pozzulo, Pettalia, Bruer, and Javaid (2014). Pozzulo et al. did not find that familiarity affected mock jurors’ perceptions of eyewitness testimony. Given that non-significant differences were found based on familiarity by Pozzulo et al., the familiarity manipulation was also pilot tested in the current study to ensure it was salient. The current study investigated what assumptions jurors may be making based on an eyewitness’s familiarity with the defendant, due to the prevalence of this type of familiarity.

Finally, the influence of the interactions between eyewitness age, familiarity with the defendant, and testimonial inconsistencies are important to investigate, because these factors are commonly present in crimes involving eyewitnesses (e.g. Berman & Cutler,
1996; Flowe et al., 2011; Goodman et al., 1987). When two or more factors are all present in the same trial, it is possible they may differentially influence jurors’ perceptions. Although mock jurors may not believe a child is as credible as an adult, perhaps they would be more persuaded by a child’s familiarity with the defendant than an adult’s familiarity. Leippe and Romanczyk (1989) found that mock jurors assumed inconsistencies made by child witnesses were more damaging to the witnesses’ credibility than those made by adult witnesses. However, the type of descriptor inconsistencies was not manipulated. The current study was the first study that examined how age, familiarity, and type of descriptor inconsistencies may individually, and in combination with each other, influence mock jurors’ perceptions of eyewitness testimony. Prior juror research related to each of these factors is reviewed in greater detail in the following sections.

**Eyewitness Age**

Eyewitness age is an extensively studied factor in relation to mock jurors’ evaluations of eyewitness testimony (e.g. Pozzulo & Dempsey, 2009b; Pozzulo et al., 2006). Age-related differences in mock jurors’ perceptions may be related to the mock jurors’ inherent stereotypes (i.e. unfair beliefs attributed to all members of the same group, based on age, sex, race…) that children do not have as good of a memory as adults (Bruer & Pozzulo, 2012; Pozzulo et al. 2006). Children also tend to display traits that are related to lower credibility, such as reduced confidence and a less forceful manner of speaking (Goodman et al., 1987). It has also been found that children are more suggestible than adults (e.g. Ceci & Bruck, 1993; Lepore & Sesco, 1994; Robinson & Briggs, 1997), meaning that if great care has not been taken to avoid influencing them,
their testimony may not be as accurate as adults’ under the same conditions. Children over the age of 5 years have been found to have similar correct identification rates in comparison to adults, i.e. when the suspect presented in a lineup is actually guilty, children are just as likely to select him or her (Goodman & Reed, 1986; Pozzulo & Lindsay, 1998; Pozzulo et al., 2006). However, children are more likely to incorrectly select somebody in the lineup than an adult (Pozzulo et al., 2006). Therefore, it appears to be justified for jurors to be somewhat more skeptical of a child eyewitness’s testimony under some conditions.

**Age and mock jurors’ evaluations.** There has been a great deal of research into how the age of an eyewitness affects mock jurors’ perceptions of eyewitness credibility (e.g. Goodman et al., 1987; Ross et al., 1990). One factor that appears to differentially influence mock jurors’ age-related assessments of a witness is whether the case involves a sexual assault. While a great deal of research has found that ratings of witness credibility increase for adults in comparison to child eyewitnesses (e.g. Bruer & Pozzulo, 2012; Goodman et al., 1987), the mock trials or scenarios depicted in these studies generally involve non-sexual crimes such as murder or robbery. In cases describing childhood sexual assault as the crime, children have been found to be perceived at least as, or even more, credible than adults (e.g. Bottoms & Goodman, 1994; Duggan et al., 1989; Holcomb & Jacquin, 2007).

In the current study, sexual assault was not involved, so the focus of this review is on non-sexual assault studies. As mentioned above, in such cases child witnesses (as opposed to victims) often appear to be perceived as less credible than adults (e.g. Bruer & Pozzulo, 2012; Goodman et al., 1987). Goodman et al. (1987) conducted three
experiments using three different trial formats: 1) a written trial transcript of a vehicular homicide, 2) a written trial transcript of a murder, or 3) a mock video of a vehicular-homicide trial. The witness age presented in all three trials was manipulated to be 6, 10, or 30 years old. Goodman et al. consistently found that mock jurors perceived the child eyewitnesses as being less credible than the adult. However, the age of the eyewitness was not found to influence the perceived guilt of the defendant. Pozzulo et al. (2006) also found that an adult eyewitness was rated as more credible than a child eyewitness. Similarly, Bruer and Pozzulo (2012) manipulated the age of the eyewitness as 4, 12, or 20 years old and found that older eyewitnesses were perceived as having more integrity, which they defined to be a combination of accuracy, reliability, and credibility, than younger eyewitnesses.

Victims vs. bystanders. It is important to note that children portrayed as being the victims of a crime rather than simply bystanders to the crime have been found to be perceived as more credible than adult victims (e.g. Goodman et al., 1987; Pozzulo & Dempsey, 2009b). In the current study, the child was a bystander eyewitness, not a victim. There have also been some exceptions in which children have not been perceived as less credible even when the case does not involve a sexual crime and the child is a bystander witness. Pozzulo et al. (2011) found that age had no effect on ratings of witness credibility. However, they also had type of identification decision as a factor in their study, and their results may have been influenced by identification. Ross et al. (1990) found that, contrary to their hypothesis, an 8-year-old was perceived as being more credible than a 21-year-old. This result was found with either a videotaped mock trial or a written trial transcript. However, when Ross et al. (1990) conducted a survey,
they found that people expected a child witness to be as honest as but less accurate and more susceptible than an adult. The estimated age of competency to testify was 16 years old. These survey results were not consistent with their other findings, so it is possible it was something specific to their transcript that made the child appear more credible.

**Two-factor model of child witness credibility.** It has been proposed that jurors may view child witness’s credibility as having two separate factors: 1) cognitive ability and 2) honesty. Ross et al. (2003) referred to this model as the two-factor model of child witness credibility. Ross et al. (2003) conducted two experiments in order to test this model. In their first experiment, mock jurors were asked to view a re-creation of a sexual abuse trial and provide ratings of the child witness’s honesty and cognitive ability, as well as a verdict. Ross et al. found that while honesty predicted verdict, cognitive ability did not. In their second experiment, only the testimony of the child witness was viewed, and the findings from Experiment 1 were reproduced.

Ross et al. (2003) found the factor ‘cognitive ability’ was related to perceived general memory accuracy, specific memory accuracy, relative intelligence in relation to peers, ability to think, remember, and answer questions, and consistency of testimony. ‘Honesty’ related to perceived suggestibility, believability, truthfulness, knowledge of what breasts were, likelihood to fabricate story, ability to tell the difference between innocent affection and sexual abuse, likelihood to misinterpret behavior, believability even though the victim changed her story, and influence of the testimony on their belief the defendant was guilty. Therefore, accuracy and reliability in the current study appear to relate to cognitive ability in Ross et al.’s study, while believability, truthfulness, and honesty appear to relate to honesty.
Ross et al. (2003) studied the assessment of children’s credibility in the context of a sexual abuse trial. As mentioned previously, children in cases involving sexual abuse may be perceived differently by mock jurors than those in cases that do not involve sexual abuse. Nunez, Kehn, and Wright (2011) conducted a study to examine whether ratings of cognitive ability and honesty were dependent on whether the trial was for childhood sexual abuse (CSA). Nunez et al. found that while children were considered more honest and cognitively able in cases involving CSA versus cases that did not, honesty and cognitive ability were rated differently in comparison to each other, regardless of the context. While older children and teenagers were considered to be less honest than younger children, ratings of cognitive ability for children over the age of 8 were relatively stable.

Wright, Hanoteau, Parkinson, and Tatham (2010) also examined people’s perceptions of child witnesses’ honesty and memory reliability, for children from 3 to 18 years old (note that ages 11, 13, 14, 16, and 17 were not included), and had similar findings to Nunez et al. (2011). Wright et al. found that perceptions of memory reliability increased significantly only from ages 3 until age 6; afterwards, perceptions of memory reliability remained steady. However, perceptions of honesty rose until age 11, after which honesty ratings began to decline rather than remaining constant. Therefore, perceptions of honesty appear to vary more from children to adults, and should perhaps be assessed separately from other credibility ratings. This is not unreasonable, as it has been found that child witnesses are at least as honest as adult witnesses, and might even have less motivation to lie (Burton & Strichartz, 1991).
Brimacombe (1998) studied the perceptions of accuracy, source monitoring (ability to determine what is real from what is imaginary), suggestibility, and honesty for children aged 4, 8, or 13. Brimacombe concluded that while children were perceived as more accurate and superior at source monitoring as they got older, the 13-year-old was considered significantly less honest than the 4- and 8-year-olds. Similarly, judges and magistrates appear to perceive children as at least as honest as adults (Cashmore & Bussey, 1996; Connolly, Price, & Gordon, 2010). These results also support the notion that honesty assessments may decline with age while other aspects of credibility may increase or remain constant.

Based on these findings, there appears to be support for a two-factor model of child witness credibility. Therefore, credibility was included in the current study by asking for separate ratings of credibility, reliability, accuracy, truthfulness, believability, and honesty, to determine whether honesty and truthfulness were rated differently.

**Defendant guilt and verdict decisions.** In some cases, as the credibility of an eyewitness increases, a corresponding increase in the degree of guilt assigned to the defendant has been found (e.g. Bottoms & Goodman, 1994). However, there is often no difference in guilt ratings associated with age even when credibility has been affected (e.g. Goodman et al., 1987; Pozzulo et al., 2014). Goodman et al. (1987) suggested that this could be due to the fact that a highly credible eyewitness may not be considered enough evidence for a juror to change their viewpoint regarding a defendant’s guilt.

While research has generally found that eyewitness age does not appear to predict whether jurors will be more likely to vote guilty in cases that do not involve sexual assault (e.g. Bruer & Pozzulo, 2012; Pozzulo & Dempsey, 2009b; Pozzulo et al., 2011),
some research has suggested that mock jurors may place more emphasis on the testimony of adult eyewitnesses in comparison to that of children when making their verdict decisions (e.g. Goodman et al., 1987; Leippe & Romanczyk, 1989). Goodman et al. (1987) studied the impact of witness age on mock jurors’ decision-making and found that jurors appeared to use adult’s testimony (30-year-old) in their decisions regarding verdict while a child’s testimony (6-year-old) was primarily used as corroborative evidence only. Leippe and Romanczyk (1989) concluded that a child witness only influences jurors’ verdict decision when he or she is the only witness testifying for the prosecution. This is another example of age appearing to interact with other factors in a trial on jurors’ decision-making.

Descriptor Inconsistencies

Research has suggested that the more detailed an eyewitness’s description of the criminal and crime scene, the more convincing his or her testimony appears to be to mock jurors (e.g. Bell & Loftus, 1988; Bell & Loftus, 1989). Attorneys often attempt to undermine detailed testimony provided by a witness through pointing out any inconsistencies in that testimony (Berman & Cutler, 1996). An inconsistency in the current study refers to a difference between the descriptions of the criminal by the eyewitness in comparison to the actual appearance of the suspect at the time of his arrest. While no studies appear to have examined the effect of the type of descriptor inconsistencies, several have looked at the effect, on mock jurors’ perceptions, of other types of eyewitness inconsistency, including inconsistencies involving descriptors in general.
**Relationship between description consistency and identification accuracy.** Is it valid that mock jurors may view inconsistent testimony as less credible than consistent testimony? It does not appear that all inconsistencies are related to a greater chance of an inaccuracy in identification. Research has found that an eyewitness’s memory for details not related to the criminal (generally referred to as peripheral details) appears to, in fact, be inversely related to an eyewitness’s identification accuracy of the criminal (Cutler, Penrod, & Martens, 1987; Wells & Leippe, 1981).

Fisher and Cutler (1995) were particularly intrigued as to whether this ‘inconsistent means inaccurate’ assumption was, in fact, accurate. In their study involving four experiments, they found that inconsistent statements did not appear to be strongly indicative of inaccuracy. In all four experiments, a minimum of one confederate entered a university class in progress and stole a valuable item, such as a wallet. Within a few hours or days, the students that witnessed the event were informed about the deception and asked to answer some questions about the confederate(s) they had seen; in the first two experiments the students wrote answers to pre-printed questions, and in the final two experiments an interactive interview took place. A few days later, the students were again to describe the confederate(s) and then were asked to identify each confederate in a lineup. Fisher and Cutler found that there were very low correlations between the consistency of the student answers and the accuracy of their descriptions as well as the accuracy of their eyewitness identifications.

Brewer et al. (1999) conducted two separate experiments to examine the roles of consistency and accuracy in eyewitness testimony. Experiment 1 examined how eyewitness behaviors on the stand were perceived to indicate inaccuracy in testimony.
Testimony that contradicted a previous statement made by the eyewitness was deemed to be the most indicative of inaccuracy. In Experiment 2, Brewer et al. showed participants a 2-minute video, gave them a filler task for one hour, and then asked them questions about what they had seen in the video. Participants were asked to either answer all questions even if they had to guess, or to answer only questions to which they felt sure of the answer. Two weeks later, the same participants were asked to answer questions, again either by guessing when they did not know, or by ignoring such questions. There were more correct and more incorrect answers produced when participants were always forced to answer the questions. During the second interview, there were fewer correct responses. Brewer et al. found that almost all of the participants produced at least one inconsistency between the first and second interview. Brewer et al. (1999) found that there was only a weak relationship between consistency and accuracy, and that even if an eyewitness made a mistake describing one aspect of the crime or criminal, it did not mean they would be more likely to make mistakes in different areas. These results provide further evidence that one should not necessarily consider inconsistent testimony to be inaccurate. Even though it appears to be common sense that somebody who can accurately identify a criminal would be more likely to give an accurate and detailed description of them, this is not necessarily the conclusion that should be made.

**Inconsistency and mock jurors’ evaluations.** Many studies have demonstrated that testimony inconsistency appears to have a negative influence on mock jurors’ assessments of eyewitness testimony (e.g. Berman & Cutler, 1996; Brewer et al., 1999; Pozzulo & Dempsey, 2009a; Bruer & Pozzulo, 2012). Brewer et al. (1999) determined that mock jurors considered inconsistent testimony by an eyewitness to be particularly
indicative of inaccuracy. In their study, testimony inconsistency was considered to be contradictions between interviews with the eyewitness, or by the amount of agreement in descriptions from one interview to the next. Brewer et al. (1999) found that jurors perceived a witness providing inconsistent testimony as being significantly less accurate than a witness that provided consistent testimony, even when the consistent witness was behaving in a nervous or distracted manner.

Pozzulo and Dempsey (2009a) also found that mock jurors paid attention to the consistency of eyewitness testimony. They manipulated testimony to be fully consistent, partially consistent, or not consistent at all. They concluded that witnesses who were fully consistent were considered to have higher credibility, as well as reliability, in comparison to those witnesses who had only some or no consistency at all in their testimony. They found that mock jurors determined inconsistency in testimony to be even more influential than the identification decisions made by the eyewitness.

Not only does experimental research suggest that testimonial inconsistency is potentially equated with testimonial inaccuracy, it appears these findings may be supported by members of the legal system. Fisher and Cutler (1995) conducted an informal survey of judges and attorneys and found that they also believed that testimonial inconsistency equated with testimonial inaccuracy. In fact, jurors are sometimes specifically asked to pay attention to testimonial inconsistency (Fisher & Cutler, 1995). This shows that it is not only expected but directed by some courts that jurors perceive inconsistent testimony as less credible.

Although much research has suggested that inconsistent testimony does impact jurors, some studies have found it does not play a role in jurors’ evaluations of testimony
Brewer and Burke (2002) looked at the role that inconsistent versus consistent testimony had on judgments made by mock jurors. They only used two levels of consistency; testimony was either consistent or inconsistent, in which case four contradictions were made by the prosecution witness and pointed out by the defense. Brewer and Burke found that testimonial consistency did not have a significant effect on mock-jurors’ judgments. Brewer and Burke suggested that their manipulation of testimony consistency may have been too weak to have an impact.

**Defendant guilt and verdict decisions.** Research has suggested that inconsistent testimony is associated with lower perceptions of defendant guilt and sometimes with a lower number of guilty verdicts (e.g. Berman & Cutler, 1996; Bruer & Pozzulo, 2012). Berman and Cutler (1996) conducted a study manipulating the consistency of eyewitness testimony. The witness in their experiment provided consistent testimony, new information that had not been provided before the trial, directly contradicted previously provided information, or directly contradicted statements already made during the course of the trial. They found that all forms of inconsistency were related to a lower rate of conviction and lower ratings of perceived guilt of the defendant as well as lower effectiveness of the eyewitness. Bruer and Pozzulo (2012) also found that inconsistent testimony was associated with lower ratings of perceived guilt.

Lindsay et al. (1986) also conducted a study that manipulated the consistency of eyewitness testimony but found that it did not influence verdict decisions. However, the only inconsistency presented by the eyewitness was related to the colour of the criminal’s
hair. It is possible that this was too weak a manipulation, particularly since hair colour can be readily changed from one day to the next.

**Type of descriptor inconsistencies.** Rather than inconsistent testimony in general, the current study is particularly interested in the influence of the type of descriptor inconsistencies on mock jurors’ assessments. Pozzulo et al. (2009) found that witnesses provided descriptions about a criminal’s clothing and accessories, i.e. non-permanent features, more frequently than they provided information related to the criminal’s face or body, i.e. permanent features. Other research has shown that estimates of age, weight, and height are extremely error prone (Pozzulo et al., 2009; Pozzulo & Warren, 2003). It appears that many permanent features, even though they are unlikely to change from time of crime to time of arrest, are not only less likely to be reported, but they are frequently reported accurately. Given there are differences between how these types of descriptors are reported, this study examined how mock jurors reacted to the two *types* of inconsistencies.

Borckhardt, Sprohge, and Nash (2003) looked at whether including ‘peripheral’ details influenced mock jurors, and how discrediting these details were perceived. Borckhardt et al. (2003) did not study inconsistencies in the testimony per se, but the fact that the presented information was later discredited is similar. Borckardt et al. considered peripheral details to be details that were not directly related to the accident that had been witnessed in their scenario, such as the witness’s motive for having been where the accident occurred. They found that jurors perceived discredited eyewitness testimony to be less credible.
Bruer and Pozzulo (2012) manipulated the number of descriptor inconsistencies made by an eyewitness. The eyewitness in their mock trial transcripts provided 0, 3, or 6 inconsistencies. Bruer and Pozzulo found that as the number of inconsistencies increased, the perceived credibility of the eyewitness decreased. Mock jurors also rated defendant guilt higher on a continuous scale, when the eyewitness’s testimony had no inconsistencies. The number of descriptor inconsistencies did not, however, influence the number of guilty verdicts. Bruer and Pozzulo (2012) speculated that the reason the number of descriptor inconsistencies had no significant effect on the number of guilty verdicts in their study may have been due to the type of inconsistencies they used. All inconsistencies were what Bruer and Pozzulo termed ‘peripheral’, meaning shoe colour or jacket colour as opposed to inconsistencies in height or weight.

In the current study, these easier to change, ‘peripheral’ features are referred to as non-permanent features. (This is the same terminology used in O’Neill and Pozzulo (2012), which is described in the following section.) This term is used to avoid confusion with the use of peripheral to mean details not related to the criminal (e.g. Borckhardt et al., 2003). For example, any clothing or accessories, such as shoes, hats or earrings, worn by a criminal were considered to be non-permanent features. Facial hair and hair colour were also considered non-permanent, given hair can be dyed and beards or moustaches can be shaved. More difficult to change features, again as in O’Neill and Pozzulo (2012), are referred to as permanent features and descriptors that are used to describe them are called permanent descriptors. Height, weight, age, and facial structure (such as a large nose or dimples) were considered permanent. Although some of these features can be changed by plastic surgery, it is not reasonable that they would have changed within the
short time between the crime and criminal apprehension that was used in the current study.

O’Neill and Pozzulo (2012) also looked at the impact of the number of descriptor inconsistencies, using 2, 4, or 8 inconsistencies. While they did not manipulate the type of inconsistencies being made, they did make sure to have equal numbers of permanent and non-permanent inconsistencies in each version of their trial transcript. They found that an eyewitness with only 2 or 4 testimonial inconsistencies was rated as more credible than an eyewitness with 8 inconsistencies. The defendant also was rated as more guilty, and more guilty verdicts were rendered, when the number of testimonial inconsistencies was lower. O’Neill and Pozzulo did not look specifically at permanent versus non-permanent inconsistency type; it is not possible to tell if it was only one type of inconsistency that was effecting the change in mock jurors’ perceptions.

**Familiarity**

Prior to discussing the role that an eyewitness’s familiarity with the defendant may have on mock jurors’ perceptions, it is important to explain what is meant by familiarity in the confines of the current study. The very concept of familiarity is difficult to unilaterally define. As it pertains to the current research, the best dictionary definition found was “reasonable knowledge or acquaintance, as with a subject or place” (Collins, 2013). This definition then leads to the question of what ‘reasonable knowledge’ means. Similar to reasonable doubt, the meaning of this will likely vary from person to person. However, for the purposes of the current study, the defendant was considered to be familiar with the eyewitness when he has engaged in brief conversation, i.e. “small talk”, with the witness on a weekly basis for a period of 8 weeks. This period
of exposure was derived by examining the results of Pozzulo et al. (2014). Pozzulo et al. presented a questionnaire asking participants how many exposures would be necessary to produce an accurate identification and the majority of respondents thought that at least 3 exposures would be necessary. However, Pozzulo et al. used 0, 3, or 6 exposures and did not find any effect of familiarity. Therefore, a ‘stronger’ manipulation was used by the witness having either 0 or 8 exposures to the defendant in the current study, in order to further explore a possible impact of familiarity on mock jurors’ assessments. Due to the extremely limited research that has been done in this area, the presumption that this amount of exposure will lead mock jurors to feel the witness and defendant are, in fact, familiar with each other was partially based on the authors’ personal judgments initially and then was pilot tested.

The familiarity that eyewitnesses have with the defendant in a trial may impact how mock jurors perceive their testimony. However, unlike eyewitness age, there has been very little research looking at the role that familiarity plays in mock jurors’ perceptions and verdict decisions. As mentioned previously, an eyewitness will have been familiar with the defendant before witnessing the crime in approximately half of trials involving eyewitness testimony (e.g. Flowe et al., 2011; Pozzulo et al., 2014), making it a very relevant topic to study, and one that has been largely ignored in research to date.

**Facial recognition.** Research has suggested that people are very accurate in their recognition of familiar faces (Bruce, Henderson, Newman, & Burton, 2001). This appears to hold true even after not seeing a face for a long time (Bruck, Cavanagh, & Ceci, 1991) or under poor or brief viewing conditions (e.g. Burton, Wilson, Cowan, &
Bruce, 1999; Hole, George, Eaves, & Rasek, 2002). Burton et al. (1999) conducted two experiments investigating recognition of familiar and unfamiliar people. They used a video surveillance tape that had captured footage from the university in which the study was conducted. Footage included psychology professors, who many of the students considered familiar. In their first experiment, Burton et al. presented video footage and informed participants that they would be asked to identify the people they saw in the footage. Participants were then presented with photographs and asked whether the people in the photographs had appeared in the video or not. Burton et al. found that participants were much better at recognizing people they were familiar with, despite the ‘fuzzy’ conditions of the surveillance tape footage. In a second experiment, Burton et al. confirmed that it was facial recognition that was primarily responsible for this superior performance with familiar people, that they tested by presenting footage with either bodies blurred out or faces blurred out.

Young, Hay, and Ellis (1985) found that it was rare to misidentify an unfamiliar person as a familiar person. Young et al. asked 22 participants to keep diaries over a period of 8 weeks, recording any problems they had in the recognition of other people. Facial features were found to play the most prominent role in recognition of a person. Young et al. concluded that in cases where an unfamiliar person was mistaken for a familiar person, hearing or viewing conditions were poor, such as dim lighting, and participants were quick to recognize this type of error very quickly, once conditions improved. Furthermore, participants had low confidence in these initial identifications, and were only prone to make them when the context suggested that the familiar person would have been present.
Steblay (2011) found that when an eyewitness knew the suspect, i.e. was acquainted with in some fashion, he or she was more likely to make a positive identification from a lineup than when the witness was not familiar with the suspect. (These results were from analyses of actual cases, and the manner in which the victim and criminal knew each other was not precisely defined.) On the other hand, the process of identifying an unfamiliar face has been found to be extremely error-prone (e.g. Burton et al., 1999; Henderson, Bruce, & Burton, 2001). Based on the results of the studies mentioned in this section, it would make sense for jurors to hold eyewitness testimony about identification in which the eyewitness is familiar with the defendant in higher regard than testimony in which the eyewitness is not familiar with the defendant.

**Familiarity and mock jurors’ evaluations.** The only study found that specifically examined the influence of familiarity with the defendant on mock jurors’ evaluations of eyewitness testimony was conducted by Pozzulo et al. (2014). Pozzulo et al. manipulated familiarity by using the eyewitness’s statement of seeing the defendant (a postman) deliver mail 0, 3, or 6 times before the crime. The mock crime was the murder by gunshot of a single mother, which was witnessed by the victim’s daughter. The eyewitness was described as being 4, 12, or 20 years old. While the 20-year-old was viewed as more credible than the younger witnesses, Pozzulo et al. did not find any influence of familiarity on mock jurors’ perceptions of testimony or on verdict decisions. It is possible this was due to the way that familiarity was manipulated; perhaps jurors did not see the eyewitness as being familiar *enough* with the defendant to influence her accuracy. Furthermore, the daughter was described as witnessing the criminal fleeing from the scene after being awakened by her mother screaming and the gunshot; perhaps
mock jurors did not feel that this would give her adequate viewing time to accurately identify the criminal. This perception by mock jurors would not be unrealistic, as Young et al. (1985) found that brief viewing conditions were sometimes responsible for the identification of an unfamiliar person as a familiar person. The current study allowed the witness to have a longer view of the criminal, so that the familiarity proposed by the witness might be taken more seriously by mock jurors. A pilot study was conducted to test the familiarity manipulation being used.

Some research has looked at the time an eyewitness viewed a criminal during the crime and its role on mock jurors’ perceptions of how accurate eyewitnesses should be in their identification (Lindsay et al., 1986). In Experiment 4 of their study, Lindsay et al. (1986) presented participants an audiotape of a mock burglary, with varying viewing conditions. One-third of participants heard that the criminal was visible by the witness for less than 5 seconds whereas other participants were told the criminal was seen for either half an hour, and in half of these cases, the witness was conversing with the criminal. Lindsay et al. found that, while participants in the 5-second exposure condition found the witness had significantly less time to observe the criminal in comparison to the 30-minute condition, the amount of time the eyewitness had to see the criminal had no significant impact on final verdict decisions. In this experiment, however, the eyewitness had not seen the criminal on previous occasions. Actual familiarity with the defendant may induce different perceptions by mock jurors.

There also has been some research into how the relationship between the victim and criminal may impact their sentencing. While this is different from a witness-criminal relationship, it lends support towards the fact that familiarity can be an influential factor.
For example, Simon (1996) found that for cases where the victim and criminal were strangers, there was a lower likelihood of conviction and the crimes the criminals were convicted of were less serious; however, the sentence lengths were longer than if the criminal and victim were not strangers. Familiarity as used in the current study would only apply to some of these ‘non-stranger’ cases, since in some cases victims could know the criminal very well, such as being an ex-wife.

**Eyewitness Age and Descriptor Inconsistencies**

Pozzulo and Warren (2003) found that youth (aged 10 to 14) reported fewer descriptors than adults, and were less accurate in their estimates of weight and height as well as internal facial features (e.g. freckles and eye colour). However, they found that both children and adults were mainly accurate in their description of exterior facial features, e.g. hair colour and length. Ryan (2010) found that young adults were consistently superior to adolescents in their ability to remember details about a criminal’s appearance. If mock jurors were aware of these differences, it is possible they would forgive inconsistencies, at least those related to permanent descriptors, when provided by children versus adults. However, they could also be more skeptical of any descriptor inconsistencies made by children in comparison to adults.

Research has suggested that inconsistencies made by children may be more important to mock jurors than those made by adults (Leippe & Romanczyk, 1989). In Study 3, Leippe and Romanczyk manipulated testimony to have either zero or five inconsistencies. Leippe and Romanczyk found that the consistency of a witness’s testimony only impacted the witness’s perceived credibility when the witness’s age was 6 years old, versus 10 or 30 years old. Leippe and Romanczyk proposed that this may be
due to mock jurors’ holding negative stereotypes about children’s reduced credibility, which in turn would make evidence supporting those stereotypes, such as inconsistent testimony, more salient.

Bruer and Pozzulo (2012) also conducted a study that examined the interaction between the age of a witness and the number of inconsistencies made in describing the criminal in comparison to the defendant at time of apprehension. Unlike Leippe and Romanczyk (1989, Study 3), Bruer and Pozzulo did not find that the witness’s credibility based on the number of inconsistencies made was differentially affected by age. Due to the different conclusions reached, more research is necessary in this area before any generalizations can be made.

**Eyewitness Age and Familiarity**

Research has suggested that children appear to use the same mechanisms as adults in recognizing familiar faces (Bonner & Burton, 2004). Adults as well as children as young as 7 years old appear to use internal features, such as the eyes, nose, and mouth, to recognize people who are familiar to them (Bonner & Burton, 2004). This differs from the recognition of unfamiliar faces, in which case external features, such as hair colour and style, are much more important (Young et al., 1985). However, research also has found that younger children are not as accurate as older children and adults in recognizing faces, either familiar or unfamiliar (e.g. Cain, Baker-Ward, & Eaton, 2005; Flin, 1980). Pozzulo et al. (2014) found there was not a relationship between familiarity and age when it came to mock jurors’ evaluations of eyewitness testimony. Due to the fact that Pozzulo et al. found no overall effect of familiarity in their study, it is not
surprising they did not find an interaction between familiarity and age. This may have been due to the way that familiarity was manipulated in their study.

Descriptor Inconsistencies and Familiarity

Facial recognition research regarding familiar faces has found that people, at least after the age of 7, appear to recognize familiar faces using internal features, such as eyebrows, eye colour, or nose size, more than external features, such as the shape of somebody’s head or their hair style or length; conversely, external features are more important for the recognition of unfamiliar faces (e.g. Bonner & Burton, 2004; Bonner, Burton, & Bruce, 2003; Ellis, Shepherd, & Davies, 1979). When external features change between first seeing an unfamiliar face and later being asked to recognize it, there is a high rate of misidentification (Bruce et al. 1999; Frowd et al., 2012).

It would make sense that an eyewitness that is familiar with the defendant would be more consistent with respect to internal (and usually permanent) features of a person’s face in comparison with an eyewitness that was not familiar with the defendant. Research has not examined whether being familiar with the criminal might allow an eyewitness to focus on the criminal’s clothing in more detail due to not having to spend as much time looking at their face, given they will know what the person looks like prior to the crime. However, even if there is an influence, mock jurors’ may not perceive description inconsistencies differently based on whether the eyewitness is familiar with the defendant.

Common sense seems to dictate that inconsistencies should not be as salient to mock jurors when the eyewitness is familiar as when they are unfamiliar. Cutler, Penrod, and Dexter (1990) found that confidence was given a great deal of weight in determining
verdict but other factors were largely ignored. If the eyewitness says they know the defendant, this might indicate a greater sense of confidence in their identification than if they did not know the defendant, which might make the presence of inconsistencies (i.e. perceived inaccuracies) as less important to the mock juror. However, Bradfield and Wells (2000) did not find support for the hypothesis that confidence would trump other factors, and instead concluded that witness factors, such as certainty in identification and quality of view of the suspect, had a summative influence in influencing mock jurors.

The exact relationship between familiarity and description inconsistencies on mock jurors’ perceptions of testimony remains unclear.

The Current Study

The purpose of the current study was to assess the influence of eyewitness age, the type of descriptor inconsistencies made when describing the criminal, as well as the eyewitness’s familiarity with the defendant on mock jurors’ assessments of eyewitness credibility in a case involving a car theft. While eyewitness age (Pozzulo & Dempsey, 2009b) and descriptor inconsistencies (Bruer & Pozzulo, 2012) have both been suggested to influence mock jurors’ perceptions of witness credibility, little research has been done on the type of descriptor inconsistencies made or the role that familiarity of the eyewitness with the defendant might play in influencing jurors. This was the first study that examined all three of these factors in combination. A mock trial transcript was used to manipulate the variables of interest with participants acting as mock jurors.

Variables. Three independent variables (IVs) were manipulated in the current study. The first variable, the age of the eyewitness, was described in the trial transcripts as being either 10 or 20 years old. This choice was based on previous research that
indicates that mock jurors perceive the credibility of 10-year-olds and adults differently (Goodman et al., 1987).

The type of mismatches between the eyewitness’s description of the criminal and the appearance of the defendant upon apprehension were manipulated to be either no mismatches at all (to act as a control condition), six mismatches related to permanent features of the defendant, or six mismatches related to non-permanent features. The eyewitness reported twelve descriptors in total: six permanent and six non-permanent. The permanent descriptors will involve the criminal’s eye colour, prominent ears, birthmark, nose shape, height, and weight. The non-permanent descriptors involved the criminal’s hair colour, shoe colour, pants colour, pierced ears, facial hair, and jacket colour. The number of six inconsistencies was chosen because Lindsay et al. (1986) did not find any impact of zero versus one inconsistency, and Bruer and Pozzulo (2012) did not find many differences between two and four consistencies. Bruer and Pozzulo did not test a scenario with zero inconsistencies, so it is not known if four would have made a difference in comparison to zero; this will be addressed in the current study by having the control condition as well as the two different descriptor type conditions. Six was used in the pilot study, in order to test its effectiveness.

In order to manipulate the final independent variable, familiarity, the eyewitness was reported to either have had no prior interaction with the defendant at all, or to have interacted with the defendant on a weekly basis for approximately 5 minutes, over a period of 8 weeks. As mentioned previously, this was an increase in the amount of reported interaction with the defendant compared to the familiarity manipulation used in Pozzulo et al. (2014). Given Pozzulo et al. did not find any impact of familiarity, it is
possible that their manipulation was not strong enough; it was hoped that the increase in reported prior exposure between the witness and defendant would allow mock jurors in the familiarity conditions to have a true sense of the eyewitness being familiar with the defendant. The proposed manipulation was pilot tested along with the type of descriptor inconsistencies manipulation.

For dependent variables (DVs), the perceived credibility, reliability, accuracy, believability, and honesty of both the eyewitness and defendant overall was measured. While perceived overall credibility has generally been found to increase as the age of the witness increases, Wright et al. (2010) found, in their study examining perceived reliability and honesty for children between the ages of 3 and 18 years old, that perceived honesty appeared to peak at approximately age 11 and reduce afterwards. The current study measured honesty independently, in order to determine if any similar trends based on age were found between perceived credibility and honesty. A perceived guilt rating of the defendant, on a continuous scale, was obtained, along with a dichotomous verdict of guilty or not guilty.

**Hypotheses**

*Perceptions of eyewitness credibility.* For the eyewitness, it was predicted that credibility, reliability, accuracy, honesty, truthfulness, and believability would be highly correlated and therefore combined into one score. Therefore, credibility refers to a combination of these items for the following predictions.

1. Although there is no research to support a prediction in either direction, inconsistencies in non-permanent descriptors should usually be less diagnostic of a mistaken identification. It was therefore predicted that permanent descriptor
inconsistencies would result in lower perceptions of the eyewitness’s credibility than would non-permanent inconsistencies.

2. It was predicted that age and familiarity would interact; familiarity would have a greater positive impact on ratings of the child eyewitness than of the adult eyewitness, versus when the witness was not familiar with the defendant. Due to the lack of research in this area, this was primarily an exploratory hypothesis.

3. It was predicted that age and type of descriptor inconsistencies would interact; the presence of either type of descriptor inconsistencies would have a greater negative impact on mock jurors’ perceptions of the child versus the adult eyewitness, in comparison to when no inconsistencies were presented (consistent with Leippe and Romanczyk, 1989).

4. It was predicted that when the mock juror is familiar versus less familiar with the defendant, the impact of either type of descriptor inconsistencies would be reduced.

**Perceptions of eyewitness honesty.**

5. It was predicted that the child eyewitness would be perceived as being at least as honest as the adult eyewitness; this was a common finding in previous research (e.g. Brimacombe, 1998; Wright et al., 2010).

**Perceptions of defendant credibility.** For the defendant, it was anticipated that credibility, reliability, accuracy, honesty and believability would be highly correlated and therefore combined into one score. Therefore, credibility refers to a combination of these items for the following predictions.
6. It was predicted that ratings of eyewitness credibility and defendant credibility would be inversely related to each other.

**Perceptions of defendant guilt.**

7. It was predicted that when descriptor inconsistencies were presented, there would be more dichotomous guilty verdicts than when there were no descriptor inconsistencies (consistent with Berman & Cutler, 1996).

8. It was predicted that the continuous guilt scores would be higher when the eyewitness’s credibility was higher.

**Pilot Study**

**Method**

The purpose of the pilot study was to test whether the familiarity and type of descriptor manipulations planned for the main study would be effective.

**Participants.** Undergraduate students ($N = 60$) were recruited from Carleton University using an electronic research bulletin board (SONA) (Appendix A). Only jury-eligible students (18 years and older) were allowed to take part in the study. All participants received 0.5% course credit for their participation.

**Design.** This pilot study tested two one-way designs: 1) Familiarity: familiar versus unfamiliar, and 2) Type of Descriptor Inconsistencies: no inconsistencies versus 6 permanent versus 6 non-permanent. See Table 1 for a description of the exact descriptor inconsistencies presented under each condition. Each participant received both a Familiarity and a Type of Descriptor Inconsistencies vignette to complete. The variable levels themselves were tested between-subjects; participants were exposed to only one
level of each variable. Therefore, there were 30 participants per cell for testing Familiarity, and 20 per cell for Type of Descriptor Inconsistencies.

Table 1.

*Descriptors Presented*

<table>
<thead>
<tr>
<th>None (no inconsistencies)</th>
<th>Non-Permanent</th>
<th>Permanent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jacket</td>
<td>Blue</td>
<td>Black</td>
</tr>
<tr>
<td>Pants</td>
<td>Blue jeans</td>
<td>Cargo pants</td>
</tr>
<tr>
<td>Shoes</td>
<td>Black shoes</td>
<td>Grey sneakers</td>
</tr>
<tr>
<td>Hair</td>
<td>Curly brown</td>
<td>Straight blonde</td>
</tr>
<tr>
<td>Piercings</td>
<td>Silver earrings</td>
<td>No earrings, or nose rings.</td>
</tr>
<tr>
<td>Facial hair</td>
<td>No</td>
<td>Beard</td>
</tr>
<tr>
<td>Height</td>
<td>6’3”</td>
<td>6’3”</td>
</tr>
<tr>
<td>Weight</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Birthmarks/moles</td>
<td>Large, red, on face</td>
<td>Large, red, on face</td>
</tr>
<tr>
<td>Nose</td>
<td>Large, crooked</td>
<td>Large, crooked</td>
</tr>
<tr>
<td>Eyes</td>
<td>Pale blue</td>
<td>Pale blue</td>
</tr>
<tr>
<td>Ears</td>
<td>Prominent</td>
<td>Prominent</td>
</tr>
</tbody>
</table>

**Materials.** Participants were provided with the following forms.

*Informed consent form.* This form was to ensure that participants were fully informed about the study, including the purpose, potential psychological risks, our rules for confidentiality of personal information, their right to withdraw at any point, and the appropriate contact information (see Appendix B).

*Vignette form.* There were five different vignettes. Two vignettes were used to manipulate Familiarity: one described the eyewitness as knowing the defendant from
seeing him at the corner store and the other described the eyewitness as being unfamiliar
with the defendant. Three vignettes were used to manipulate Type of Descriptor
Inconsistencies: one involved no descriptor inconsistencies in the eyewitness’s
description of the criminal, one involved six non-permanent inconsistencies in the
eyewitness’s description of the criminal, and one involved six permanent inconsistencies.
The order in which each participant received a Familiarity- versus Type of
Inconsistencies-related vignette was counterbalanced. The level of Familiarity and level
of Type of Inconsistencies presented to each participant was randomized.

After reading each vignette, participants were asked to answer three questions
(per vignette) to test if the manipulations were successful. All questions were answered
using a scale from 1 to 100. The questions asked with the familiarity vignette were:
“How reliable do you find the eyewitness’s identification?”, How familiar do you feel Keith
was with the suspect, Scott Smith?”, and How likely do you feel it would be for Keith to have
made a mistaken identification?”. The questions asked with the type of descriptor
inconsistencies vignette were: “How reliable do you find the eyewitness’s identification?”,
“How likely do you think it is that Phil Jones was the criminal, based on the eyewitness’s
description?”, and “How consistent was the eyewitness’s description?”. Please see
Appendix C for the vignettes.

**Debriefing form.** This form identified the purpose and value of the study and a
disclaimer confirming that the scenarios described in the vignettes were all fictitious. It
addressed ethical concerns and what to do if the participants experienced any sort of
discomfort and/or anxiousness due to the sensitivity of the study’s content. It
reconfirmed the contact information for the research personnel and thanked the
participants for their participation (see Appendix D).
**Procedure.** Upon entering the lab, each participant was provided with an informed consent form to read and, if they chose, sign to participate. All participants chose to continue. Participants were provided with two vignette forms, one manipulating Familiarity and one manipulating Type of Descriptor Inconsistencies as described above to complete, one at a time. The order that participants received the two forms in was randomized. After completing both vignette forms, participants were debriefed and thanked. All participants received 0.5% credit for participating in the study. There was no deception in this study. Data and consent forms were kept in the data room in the lab; the informed consent forms have been stored apart from the other data, for confidentiality purposes. The data room is kept locked and closed at all times and has restricted accessibility. After a period of 7 years, forms and data will be shredded and discarded.

**Results**

An independent samples *t*-test was conducted to determine if there was an effect of Familiarity on perceived familiarity of the eyewitness with the defendant. Levene’s test for homogeneity of variance passed, $F(1, 58) = .941, p = .336$, so equal variances were assumed. In the Unfamiliar condition, the eyewitness was perceived to be significantly less familiar with the defendant ($M = 30.48, SD = 23.34$) than in the Familiar condition ($M = 67.10, SD = 21.79$), $t(58) = -6.29, p < .001, d = 1.62$. Another independent samples *t*-test was performed to determine if Familiarity had an effect on perceived reliability of the eyewitness identification, with Levene’s test passing again, $F(1, 58) = .663, p = .419$. Participants in the Unfamiliar condition considered the eyewitness’s description to be significantly less reliable ($M = 54.86, SD = 19.65$) than in the Familiar condition ($M = 66.13, SD = 22.16$), $t(58) = -2.08, p = .04, d = 0.54$. Finally,
an independent samples t-test was conducted to determine if Familiarity had an effect on the perceived likelihood of a mistaken identification, and Levene’s test passed again, $F(1, 58) = .891, p = .349$. The results of the t-test approached significance, $t(58) = .891, p = .059, d = .50$. This indicates a medium effect size of Familiarity, with mistaken identifications appearing to be considered more likely (albeit not significantly) when the eyewitness was unfamiliar with the defendant ($M = 61.03, SD = 20.76$) than when he was familiar with the defendant ($M = 49.26, SD = 26.02$). There was therefore evidence to support the effectiveness of the Familiarity manipulation, so a decision to use it in the main study was made.

Three one-way ANOVAs were conducted to determine if there was an effect of Type of Descriptor Inconsistencies on the following three DVs, with Levene’s test for homogeneity of variance passing for each: 1) perceived eyewitness identification reliability, $F(2, 57) = .005, p = .995$, 2) perceived likelihood that the defendant was the criminal, $F(2, 57) = .500, p = .609$, and 3) perceived eyewitness description consistency, $F(2, 57) = .833, p = .440$. A significant effect of Type of Descriptor Inconsistencies was found for perceived eyewitness identification reliability, $F(2, 57) = 12.83, p < .001, \eta^2 = .31$, likelihood that the defendant was the criminal $F(2, 57) = 16.60, p < .001, \eta^2 = .37$, and eyewitness description consistency $F(2, 57) = 33.87, p < .001, \eta^2 = 54$.

Post-hoc tests using Bonferroni corrections were performed for each of the dependent variables. A significant difference between the non-permanent inconsistencies and permanent inconsistencies conditions was found for perceived eyewitness identification reliability, ($M_{\text{difference}} = 20.05, SE = 6.75, 95\% \text{ CI} [3.40, 36.70], p = .013$),

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1 Bonferroni-corrected p-values are provided.
likelihood that the defendant was the criminal, \( (M_{\text{difference}} = 17.55, SE = 6.21, 95\% \text{ CI } [2.25, 32.85], p = .019) \), and eyewitness description consistency, \( (M_{\text{difference}} = 16.75, SE = 6.65, 95\% \text{ CI } [.35, 33.15], p = .044) \). A significant difference was also found between the no inconsistencies and permanent inconsistencies conditions for all of the DVs: perceived eyewitness identification reliability, \( (M_{\text{difference}} = 34.00, SE = 6.75, 95\% \text{ CI } [17.35, 50.65], p < .001) \), likelihood that the defendant was the criminal, \( (M_{\text{difference}} = 35.75, SE = 6.21, 95\% \text{ CI } [20.45, 51.05], p < .001) \), and eyewitness description consistency, \( (M_{\text{difference}} = 53.50, SE = 6.65, 95\% \text{ CI } [37.10, 69.90], p < .001) \). Significant differences were only found between the no inconsistencies and non-permanent inconsistencies conditions for likelihood that the defendant was the criminal, \( (M_{\text{difference}} = 18.20, SE = 6.21, 95\% \text{ CI } [2.90, 33.50], p = .014) \), and eyewitness description consistency, \( (M_{\text{difference}} = 36.75, SE = 6.65, 95\% \text{ CI } [20.35, 53.15], p < .001) \). The difference between the no inconsistencies and non-permanent inconsistencies conditions for the perceived eyewitness identification reliability was not significant, \( (M_{\text{difference}} = 13.95, SE = 6.75, 95\% \text{ CI } [-2.70, 30.60], p = .130) \). Given the significant differences that were found, the Type of Descriptor Inconsistencies manipulation was used in the main study.

**Main Study**

**Method**

**Participants.** Undergraduate students \( (N = 384) \) were recruited from Carleton University using an electronic research bulletin board (SONA) (Appendix E). Only jury-eligible students (18 years old and older) were allowed to take part in the study. All participants received 1% course credit for their participation.
Of the 384 participants, data from 320 were used for analyses ($M_{\text{age}} = 20.65$; $SD_{\text{age}} = 4.54$; 203 female), due to the exclusion of any participant’s data who had failed at least one manipulation check. The participants self-identified their ethnicities as follows: 44.7% White, 17.8% Black, 14.4% West Asian, 8.1% South Asian, 5.3% East Asian, 2.8% Mixed Origin, 2.2% Latin American, 1.9% Aboriginal Canadian, 1.6% Other, and 1.3% Southeast Asian.

**Design.** A 2 (Eyewitness Age: 10 or 20 years old) x 2 (Familiarity: familiar or not familiar) x 3 (Type of Descriptor Inconsistencies: none (i.e., no inconsistencies) or permanent or non-permanent) between-subjects factorial design was used.

**Materials.** Participants were provided with the following forms.

**Informed consent form.** This form was provided to ensure that participants were fully informed about the study, including the purpose, potential psychological risks, rules for confidentiality of personal information, their right to withdraw at any point, and the appropriate contact information (see Appendix F).

**Trial transcript.** Twelve versions of a mock-trial transcript were created. The transcripts described a scenario involving a witnessed motor vehicle theft. The transcripts varied by the age of the eyewitness, the eyewitness’s familiarity with the criminal, and type of descriptor inconsistencies made by the eyewitness. The mock trials all began with an opening statement by the judge followed by opening statements from the Crown Attorney and the Defense team. Witnesses were brought forward to testify for or against the defendant, respectively. The transcripts concluded with closing statements by the Attorneys from both sides and the judge reminding the jury of the law and instructing them on their duties (see Appendix G).
Demographics form. Participants were asked to report their age, sex, primary language, and ethnicity (see Appendix H).

Verdict form. Mock jurors were asked to rate the defendant’s guilt on a 100-point continuous scale (1 = Not Guilty, 100 = Absolutely Guilty). Mock jurors then were asked to rate how sure they were of their guilt rating on a 100-point scale (1 = Not Confident, 100 = Absolutely Confident). Mock jurors also were asked to decide between the dichotomous verdict choices of guilty or not guilty according to the law and testimonies they read. Mock jurors were asked to rate how sure they were of their dichotomous verdict choice on a 100-point scale (1 = Not Confident, 100 = Absolutely Confident). Finally, the jurors were asked to provide their personal justifications for their choice of verdicts. The format was in the form of an open-ended question (see Appendix I).

Verdict sentencing form. Mock jurors who concluded that the defendant was guilty were asked to recommend a sentence based on the laws set out in the criminal code for motor vehicle theft. These jurors also were given the opportunity to select a sentence option, not necessarily based on the standards set out by the criminal code (see Appendix J).

Eyewitness ratings. Mock jurors were asked to rate the eyewitness’s testimony on a number of dimensions (i.e., believability, credibility, reliability, accuracy, and honesty) using a 100-point scale (1 = Not, 100 = Absolutely) (see Appendix K).

Defendant ratings. Mock jurors were asked to rate the defendant’s testimony on a number of dimensions (i.e., believability, credibility, reliability, accuracy, and honesty using a 100-point scale; 1 = Not, 100 = Absolutely) (see Appendix L).
**Other ratings.** Mock jurors were asked five questions related to the trial transcript, directly related to the independent variable manipulations, such as perceived familiarity and description inconsistencies (see Appendix M).

**Manipulation check.** Mock jurors were given a multiple choice questionnaire with five questions to determine the juror's comprehension of the transcript and the independent variables that were manipulated (see Appendix N). The three questions that had to be answered correctly were: “How old was the eyewitness, Keith Thomas?”, “How was the witness, Keith Thomas, familiar with the defendant, Dylan Jones?”, and “What type of inconsistencies with respect to Dylan Jones’ appearance were presented by Keith Thomas?”

**Debriefing form.** This form identified the purpose and value of the study, proposed hypotheses and predictions, a disclaimer confirming that the scenarios described in the trial transcripts/study are all fictitious. It addressed ethical concerns and what to do if the participants experienced any sort of discomfort and/or anxiousness due to the sensitivity of the study’s content. It reconfirmed the contact information for the research personnel and thanked the participants for their participation (see Appendix O).

**Procedure.** This study took place in the Laboratory for Child Forensic Psychology at Carleton University. Up to 12 participants were tested at a time, in sessions lasting approximately 45 minutes. Participants were first asked to read an informed consent form (Appendix H) that provided them with all of the essential details of their participation. The participants were informed of their right to withdraw without penalty at any time should the material be upsetting. All participants agreed to participate and were randomly assigned to one of the twelve conditions. They were
provided with a trial transcript to read (Appendix G), the demographic form to complete (Appendix H), and the Verdict Form (Appendix I). Participants were asked to complete the demographic form first. After reading the trial transcript, they were instructed to complete the verdict form. The trial transcript and verdict form were collected, and participants were provided with the eyewitness and defendant rating questionnaires (Appendices K and L). Additionally, participants that voted Guilty were asked to complete the Verdict Sentencing form (Appendix J). After completing and returning these questionnaires to the experimenter, participants were asked to complete the manipulation check questionnaire (Appendix N). Finally, they were debriefed (Appendix O) and thanked for their time. All participants received 1% credit for participating in the study. Data and consent forms are kept in the data room in the lab; the informed consent forms were stored apart from the other data, for confidentiality purposes. The data room is kept locked and closed at all times and has restricted accessibility. After a period of 7 years, forms and data will be shredded and discarded.

Results

**Manipulation awareness check.** In order for a participant’s data to be included in analyses, that participant had to correctly answer the three questions involving age, type of descriptor inconsistencies, and familiarity on the Manipulation Check Questionnaire (see Appendix M). Out of the 384 participants, 320 passed the manipulation check. Fourteen (3.6%) were excluded due to incorrectly answering the question related to the age of the eyewitness, 39 (10%) were excluded due to making a mistake when answering the type of descriptor inconsistencies that were presented, and
23 (6%) were excluded due to incorrectly answering the question related to the familiarity of the eyewitness with the defendant.

**Missing/out-of-range data.** As would be expected, some data were missing due to some participants not answering all questions. Percentages missing ranged from 0% to 3.5%, depending on the question. Little’s MCAR test passed, \( \chi^2 (92) = 78.98, p = .83 \). Therefore, data could be considered to be missing completely at random. Due to the fact that the composite scores were likely to be created from the eyewitness and defendant ratings, and these ratings were all highly correlated with each other (see Tables 2 and 3), mean substitution was used to replace these missing data values (Osborne, 2013, p. 121). Missing continuous and dichotomous verdict values were not modified and analyses were run with the missing data. No data were out-of-range.

Table 2.

*Correlations between Eyewitness Rating Variables*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Witness Reliability</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Witness Accuracy</td>
<td>.81**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Witness Credibility</td>
<td>.74**</td>
<td>.69**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Witness Truthfulness</td>
<td>.49**</td>
<td>.49**</td>
<td>.59**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Witness Believability</td>
<td>.68**</td>
<td>.67**</td>
<td>.79**</td>
<td>.65**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. Witness Honesty</td>
<td>.50**</td>
<td>.51**</td>
<td>.57**</td>
<td>.86**</td>
<td>.60**</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note:** *p < .01; **p < .001*
Table 3.

*Correlations between Defendant Rating Variables*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Defendant Reliability</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Defendant Accuracy</td>
<td>.76**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Defendant Credibility</td>
<td>.74**</td>
<td>.71**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Defendant Truthfulness</td>
<td>.72**</td>
<td>.71**</td>
<td>.76**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Defendant Believability</td>
<td>.70**</td>
<td>.66**</td>
<td>.79**</td>
<td>.82**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. Defendant Honesty</td>
<td>.71**</td>
<td>.71**</td>
<td>.77**</td>
<td>.92**</td>
<td>.83**</td>
<td>-</td>
</tr>
</tbody>
</table>

**Exploratory factor analyses.** In order to determine how many unique factors the ratings of eyewitness reliability, accuracy, truthfulness, credibility, honesty, and believability were measuring, an exploratory factor analysis (EFA) was performed. Another EFA was conducted for the corresponding defendant ratings. EFA, using principal axis factoring (PAF) extraction, was selected rather than Principle Components Analysis (PCA) because the goal of both analyses was to determine how many underlying factors were present, rather than common PCA goal of reduction of scale items (Worthington & Whittaker, 2006).

**Data suitability for EFA.** Prior to conducting the EFAs, the two sets of data, i.e. all eyewitness ratings and all defendant ratings, were screened to determine if they were suitable for the procedure.

**Sample size.** The sample size was greater than 300 for both analyses and all communalities exceeded .50 (all but one exceeded .60); therefore, this sample size was
considered very suitable for determining the number population factors for both EFAs (MacCallum, Widaman, Zhang, & Hong, 1999).

**Singularity/multicollinearity.** No variables were perfectly correlated (i.e. $r = 1$), so singularity was not an issue. The determinant of both the eyewitness rating and defendant rating correlation matrices were both greater than .00001, so multicollinearity was not a problem for the EFAs (Field, 2009).

**Outliers.** No univariate outliers were found, using a cut-off of $z = +/- 3.29^2$. The eyewitness ratings and defendant ratings were screened for multivariate outliers. There were six variables for each group of ratings, so a Mahalanobis distance cut-off value of 22.46 was used, i.e. the $\alpha = .001$ critical value for a $\chi^2$ distribution with 6 degrees of freedom. Seven outliers were found for the eyewitness ratings, and six were found for the defendant ratings. Examination of the multivariate outliers led to their deletion (for the EFAs only), as the scores did not make sense and did not appear representative. For example, a participant might rate defendant credibility as 10 and their believability as 100. Similar patterns were found for all multivariate outliers.

**Normality.** Due to the fact that the extraction method was PAF, it was not necessary for the data to be normally distributed, as statistical inferences are not involved in this extraction method (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Therefore normality was not assessed.

**Factorability.** Finally, the factorability of $R$ (the correlation matrix for the variables) for the eyewitness and defendant ratings was tested. The correlation coefficients for the eyewitness ratings and for the defendant ratings were significant at $p$

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$^2$ The values +/- 3.29 were used as the cut-off scores for all $z$-tests for normality and outliers.
< .001, indicating factorability (Tabachnick & Fidell, 2013, p. 619). Results from Bartlett’s Test of Sphericity were not included as a criterion; this test is not recommended for use with large sample sizes, due to the high likelihood of significance with such samples (Tabachnick & Fidell, 2013, p.619). The Kaiser-Meyer-Olkin measure of sampling adequacy was .84 for witness ratings and .91 for defendant ratings, exceeding Tabachnick and Fidell’s (2013, p. 620) recommendation of .60. Therefore, factorability of R was assumed for both the eyewitness and defendant ratings.

**EFA results.** Due to the fact that the assumptions were met, the EFAs were conducted. See Tables 4, 5, 6, and 7 for results from these analyses. Only factors with eigenvalues greater than 1 were retained at first (Kaiser, 1960), with a visual analysis of the scree plots also conducted to confirm the number of factors retained (Cattell, 1966). Finally, Monte Carlo PCA parallel analysis was performed (Watkins, 2006). Parallel analysis is considered to be an accurate way to determine the appropriate cut-off eigenvalues (Costello & Osborne, 2005; Fabrigar et al., 1999). All three types of analyses clearly pointed to the inclusion of one factor only for eyewitness ratings and one factor for defendant ratings. Reliability analyses also supported the use of one factor for both the six eyewitness ratings, Cronbach’s α = .92, and the six defendant ratings, Cronbach’s α = .95. These factors are referred to as eyewitness integrity and defendant integrity for the remainder of this document. Composite scores to represent these factors were created by combining and averaging the six rating variables for the eyewitness and defendant.

In order to test Ross’s (2003) two-factor model of child witness credibility, two subsequent EFAs were conducted on the eyewitness ratings, one for each eyewitness age.
condition. Again, using the same criteria, there was support for retention of one factor only, in both age conditions.

Table 4.

*Eigenvalues and Percentages of Variance Associated with Each Factor for Eyewitness Ratings*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>Percentage of Explained Variance</th>
<th>Accumulated Percentage of Explained Variance</th>
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<tbody>
<tr>
<td>1</td>
<td>4.22</td>
<td>70.25</td>
<td>70.25</td>
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<tr>
<td>2</td>
<td>.87</td>
<td>14.54</td>
<td>84.79</td>
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<td>3</td>
<td>.38</td>
<td>6.38</td>
<td>91.17</td>
</tr>
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<td>4</td>
<td>.22</td>
<td>3.650</td>
<td>94.82</td>
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<tr>
<td>5</td>
<td>.17</td>
<td>2.89</td>
<td>97.71</td>
</tr>
<tr>
<td>6</td>
<td>.14</td>
<td>2.29</td>
<td>100</td>
</tr>
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</table>
Table 5.

_Eigenvalues and Percentages of Variance Associated with Each Factor for Defendant Ratings_

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>Percentage of Explained Variance</th>
<th>Accumulated Percentage of Explained Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.76</td>
<td>79.41</td>
<td>79.41</td>
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<td>2</td>
<td>.45</td>
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<td>.29</td>
<td>4.74</td>
<td>91.68</td>
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<td>4</td>
<td>.23</td>
<td>3.88</td>
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<td>5</td>
<td>.18</td>
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<td>6</td>
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Table 6.

_Factor Loadings – Eyewitness Ratings_

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor 1</th>
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<tbody>
<tr>
<td>Eyewitness Reliability</td>
<td>.81</td>
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<tr>
<td>Eyewitness Accuracy</td>
<td>.79</td>
</tr>
<tr>
<td>Eyewitness Credibility</td>
<td>.86</td>
</tr>
<tr>
<td>Eyewitness Truthfulness</td>
<td>.75</td>
</tr>
<tr>
<td>Eyewitness Believability</td>
<td>.86</td>
</tr>
<tr>
<td>Eyewitness Honesty</td>
<td>.74</td>
</tr>
</tbody>
</table>
Table 7.

*Factor Loadings – Defendant Ratings*

<table>
<thead>
<tr>
<th>Variable</th>
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<tbody>
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<td>Defendant Reliability</td>
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<tr>
<td>Defendant Accuracy</td>
<td>.80</td>
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<tr>
<td>Defendant Credibility</td>
<td>.86</td>
</tr>
<tr>
<td>Defendant Truthfulness</td>
<td>.92</td>
</tr>
<tr>
<td>Defendant Believability</td>
<td>.88</td>
</tr>
<tr>
<td>Defendant Honesty</td>
<td>.72</td>
</tr>
</tbody>
</table>
Descriptive statistics. Please see Table 8 for descriptive statistics related to the following analyses.

Table 8.

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Continuous Guilt</th>
<th>Eyewitness Integrity</th>
<th>Defendant Integrity</th>
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<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Age 10, Unfamiliar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>26</td>
<td>56.00</td>
<td>30.37</td>
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<td>Non-permanent</td>
<td>27</td>
<td>52.78</td>
<td>29.02</td>
</tr>
<tr>
<td>Permanent</td>
<td>27</td>
<td>52.12</td>
<td>26.27</td>
</tr>
<tr>
<td>Age 10, Familiar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>26</td>
<td>69.04</td>
<td>25.02</td>
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<tr>
<td>Non-permanent</td>
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<td>52.38</td>
<td>31.28</td>
</tr>
<tr>
<td>Permanent</td>
<td>27</td>
<td>52.12</td>
<td>28.37</td>
</tr>
<tr>
<td>Age 20, Unfamiliar</td>
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<td></td>
</tr>
<tr>
<td>None</td>
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<td>67.00</td>
<td>25.41</td>
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<tr>
<td>Non-permanent</td>
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<td>34.37</td>
<td>22.78</td>
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<tr>
<td>Permanent</td>
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<td>50.62</td>
<td>29.09</td>
</tr>
<tr>
<td>Age 20, Familiar</td>
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<tr>
<td>None</td>
<td>26</td>
<td>68.96</td>
<td>28.67</td>
</tr>
<tr>
<td>Non-permanent</td>
<td>27</td>
<td>50.48</td>
<td>32.52</td>
</tr>
<tr>
<td>Permanent</td>
<td>27</td>
<td>53.19</td>
<td>26.51</td>
</tr>
</tbody>
</table>

\(^a\) one case of missing data. \(^b\) two cases of missing data
ANOVA Assumptions. In order to test many of the hypotheses, a 3-way ANOVA was required. First, the assumptions for the ANOVA were tested.

Independence of data. As much as using SONA as a recruitment tool will allow, the assumption of independence of data was met. Participants were randomly assigned to conditions and answered all questions individually.

Normality. The witness integrity distributions and continuous guilt distributions were negatively skewed or platykurtic under some conditions, so square root of reverse score transformations were applied and successfully normalized the data. The defendant integrity distributions for each condition were normally distributed.

Outliers. No univariate outliers were found for the transformed witness integrity scores, or the defendant integrity scores. Multivariate outliers were not an issue as the defendant integrity ratings, witness integrity ratings, dichotomous verdicts, and continuous guilt ratings would be analyzed separately.

Homogeneity of Variance. Levene’s test passed for eyewitness integrity, $F(11, 308) = 1.77, p = .06$, defendant integrity, $F(11, 308) = .93, p = .51$, and continuous guilt, $F(11, 303) = 1.53, p = .12$, so equal variances were assumed for all ANOVAs.

Effects of IVs on eyewitness integrity. Hypotheses 1 to 4 all involved looking for a potential effect of one or more of the independent variables, or interactions between them, on eyewitness integrity. A 3-way ANOVA was performed, using the transformed eyewitness integrity scores. There were no significant main effects on eyewitness integrity of eyewitness age, $F(1, 308) = .03, p = .87$, $\eta^2 < .001$ or familiarity, $F(1, 308) = .99, p = .32$, $\eta^2 = .003$. There was a significant main effect of type of descriptor

---

3 The transformed data were used for eyewitness integrity and continuous guilt ratings.
inconsistencies (TODI) on eyewitness integrity, with a small effect size, $F(2, 308) = 14.07, p < .001, \eta^2 = .08$. No significant interactions were detected: $F_{\text{age} \times \text{familiarity}}(1, 308) = .25, p = .62, \eta^2 < .001; F_{\text{age} \times \text{TODI}}(2, 308) = .73, p = .49, \eta^2 = .004; F_{\text{familiarity} \times \text{TODI}}(2, 308) = .59, p = .56, \eta^2 = .003$; and $F_{\text{age} \times \text{familiarity} \times \text{TODI}}(2, 308) = 2.48, p = .09, \eta^2 = .01$.

Tukey post-hoc analyses for type of descriptor inconsistencies revealed no significant difference between the non-permanent and permanent conditions, $M_{\text{difference}} = .27^4, p = .44, 95\% \text{ CI} [-.79, .25]$. Significant differences were found between no inconsistencies and non-permanent inconsistencies, $M_{\text{difference}} = -1.14, p < .001, 95\% \text{ CI} [-1.66, -.61]$, and no inconsistencies and permanent inconsistencies, $M_{\text{difference}} = -.86, p < .001, 95\% \text{ CI} [-1.39, -.34]$. Due to the nature of the data transformation, i.e. the fact the eyewitness integrity values were reverse scored, these results indicate that when there were no descriptor inconsistencies, eyewitnesses were considered to have more integrity than when there were inconsistencies.

**Effect of eyewitness age on eyewitness honesty.** In order to test the effect of eyewitness age on eyewitness honesty for Hypothesis 5, an independent samples $t$-test was performed. Witness honesty ratings were used rather than witness integrity, given the hypothesis specifically to look at this variable. In order to normalize the data, it was first transformed using a square root reverse score transformation. No significant effect of eyewitness age on eyewitness honesty was found, $t(318) = -.76, p = .45, d = -.08$.

---

4 Mean differences and 95% CIs were calculated on the transformed data, as this is what was used for the ANOVA. The range of scores for this variable was from 1 to 10.
**Relationship between eyewitness and defendant integrity.** In order to test Hypothesis 6, the correlation between eyewitness integrity and defendant integrity was calculated and found to be significantly negative, \( r(318) = -.53, p < .001 \).

**Effects of IVs on defendant integrity.** A 3-way ANOVA was conducted to determine if the IVs had any influence on assessments of defendant integrity, with Levene’s test for homogeneity of variance passing, \( F(11, 308) = .93, p = .51 \). No main effects of eyewitness age, \( F(1, 308) = 2.28, p = .13, \eta^2 = .007 \), or familiarity, \( F(1, 308) = .93, p = .34, \eta^2 = .003 \), were found. However, a main effect of type of descriptor inconsistencies was found, with a small effect size, \( F(2, 308) = 10.71, p < .001, \eta^2 = .06 \). As with eyewitness integrity, Tukey post-hoc tests revealed differences between the no inconsistencies and non-permanent inconsistencies conditions, \( M_{\text{difference}} = -12.31, p < .001, 95\% \text{ CI} [-18.72, -5.91] \), and no inconsistencies and permanent inconsistencies conditions, \( M_{\text{difference}} = -8.40, p = .006, 95\% \text{ CI} [-14.82, -1.98] \). No differences were found between the non-permanent and permanent conditions, \( M_{\text{difference}} = 3.91, p = .32, 95\% \text{ CI} [-2.46, 10.29] \). No significant interactions were discovered: \( F_{\text{age\timesfamiliarity}}(1, 308) = .02, p = .88, \eta^2 < .001; F_{\text{age\timesTODI}}(2, 308) = .50, p = .61, \eta^2 = .003; F_{\text{familiarity\timesTODI}}(2, 308) = .38, p = .69, \eta^2 = .002; \) and \( F_{\text{age\timesfamiliarity\timesTODI}}(2, 308) = .33, p = .72, \eta^2 = .002 \).

**Dichotomous Verdict.** Descriptive statistics for dichotomous verdict are listed in Table 8. A binary logistic regression was conducted to test for effect of the IVs on dichotomous verdicts, in order to test Hypothesis 7. A hierarchical binary logistic regression was performed, with IVs added in Block 1, the 2-way interactions in Block 2, and the 3-way interaction in Block 3. The interactions were all non-significant, and neither Block 2 nor Block 3 significantly improved the overall model. Therefore, only
the results from Block 1 were retained. Including the relationships between the IVs and the verdict contributed significantly to the model in comparison to including only the constant, $\chi^2(4) = 22.02, p < .001$. Results are presented in Table 9 below. No significant effect of eyewitness age was found. There was a trend towards significance for familiarity with the defendant; when the eyewitness was familiar with the defendant there were more guilty verdicts. There was a significant main effect of type of descriptor inconsistencies on verdict, which supported Hypothesis 7. Mock jurors were more likely to render a guilty verdict when there were no inconsistencies in comparison to non-permanent or permanent inconsistencies. However, mock jurors were not more likely to render a guilty verdict when presented with non-permanent versus permanent inconsistencies, $p = .149$, $OR = 1.50$, 95% CI [.87, 2.61]\textsuperscript{5}.

Table 9.

*Logistic Regression of IVs on Verdict*

<table>
<thead>
<tr>
<th>IV</th>
<th>B (SE)</th>
<th>p</th>
<th>Lower Limit</th>
<th>OR (Exp(B))</th>
<th>Upper Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-.68 (.26)</td>
<td>.01</td>
<td>.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.19 (.23)</td>
<td>.41</td>
<td>.52</td>
<td>.82</td>
<td>1.30</td>
</tr>
<tr>
<td>Familiarity</td>
<td>.41 (.23)</td>
<td>.08</td>
<td>.95</td>
<td>1.50</td>
<td>2.37</td>
</tr>
<tr>
<td>Non-Permanent</td>
<td>1.12 (.29)</td>
<td>.00</td>
<td>1.88</td>
<td>3.31</td>
<td>5.81</td>
</tr>
<tr>
<td>Permanent</td>
<td>.79 (.28)</td>
<td>.01</td>
<td>1.26</td>
<td>2.20</td>
<td>3.83</td>
</tr>
</tbody>
</table>

*Note.* Dichotomous outcome was Verdict coded as 0 = Guilty, 1 = Not Guilty

\textsuperscript{5} These values are from a separate binary logistic regression in which Permanent was used as the reference group rather than None.
Continuous Guilt. Descriptive statistics for continuous guilt are presented in Table 8. In order to test Hypothesis 8, the correlation between the eyewitness integrity scores and continuous guilt ratings was examined. A significant positive correlation was found between eyewitness integrity and continuous guilt ratings, \( r(313) = .65, \ p < .001 \). In order to determine if any of the IVs had an effect on continuous guilt ratings, a 1-way ANOVA was performed. Age did not have a significant effect on continuous guilt ratings, \( F(1, 303) = .43, \ p = .51, \ \eta^2 = .001 \). The effect of Familiarity on continuous guilt approached significance, \( F(1, 303) = 3.51, \ p = .06, \ \eta^2 = .01 \). When the eyewitness was familiar with the defendant, the continuous guilt rating was higher (\( M = 57.58, \ SD = 29.50 \)) than when he was not familiar with the defendant (\( M = 52.13, \ SD = 28.53 \)). The type of descriptor inconsistencies had a significant effect on the continuous verdict, \( F(2, 303) = 11.68, \ p < .001, \ \eta^2 = .07 \). There were no significant interactions: \( F_{\text{age} \times \text{familiarity}}(1, 303) = .13, \ p = .72, \ \eta^2 < .001 \); \( F_{\text{age} \times \text{TODI}}(2, 303) = 1.90, \ p = .15, \ \eta^2 = .01 \); \( F_{\text{familiarity} \times \text{TODI}}(2, 303) = .55, \ p = .58, \ \eta^2 = .003 \); and \( F_{\text{age} \times \text{familiarity} \times \text{TODI}}(2, 303) = 1.52, \ p = .22, \ \eta^2 = .009 \).

Tukey post-hoc tests revealed that with no inconsistencies presented, the defendant was viewed as more guilty than when there were non-permanent inconsistencies, \( M_{\text{difference}} = -1.48, \ p < .001, \ 95\% \ CI [-2.24, -0.71] \), or permanent, \( M_{\text{difference}} = -1.21, \ p = .001, \ 95\% \ CI [-1.98, -0.44] \). The non-permanent and permanent conditions did not differ significantly, \( M_{\text{difference}} = .27, \ p = .68, \ 95\% \ CI [-.49, 1.03] \). Note that the negative values indicate an increase due to the reverse scoring performed as part of the data transformation to achieve normality.


Discussion

The purpose of the current study was to examine the influence of eyewitness age, familiarity with the defendant, and type of descriptor inconsistencies in eyewitness testimony on mock jurors’ perceptions of the eyewitness. It is important to understand how different eyewitness testimony factors may influence jurors, as eyewitness testimony can play a very persuasive role in influencing jurors’ verdicts (Brewer & Wells, 2011). This is particularly critical because jurors can be error-prone when determining whether to believe an eyewitness’s testimony (Bradfield & Wells, 2000). With better understanding of how jurors may interpret various aspects of eyewitness testimony, this may lead to procedural improvements enabling jurors to more accurately evaluate eyewitness testimony, and therefore reducing the number of wrongful convictions. The most common reason for wrongful conviction cases examined has been mistaken identification of the defendant by the eyewitness (The Innocence Project, n.d.); any aid in determining the accuracy of eyewitness identification could not only help guilty defendants be convicted, it could also play an important role in preventing the incarceration or execution of innocent people.

Eyewitness age has been extensively studied as a potential influence on mock jurors because children are often victims or witnesses to a crime (Goodman et al., 1987). It is important to continue to study the influence of eyewitness age in conjunction with other factors, in order to determine potential interactions. Inconsistent eyewitness testimony has also been studied and found to influence mock jurors. Studies have looked at how the number of inconsistencies between the eyewitness’s description of the perpetrator and the arresting officer’s description of the suspect might influence mock
jurors. However, this is the first study that examined whether the type of these inconsistencies, i.e. permanent/hard-to-change versus non-permanent/easy-to-change, would differentially influence mock jurors. Familiarity was also included because very little mock juror research has been performed involving familiarity, even though close to 50% of trials involve an eyewitness that is familiar with the defendant (Flowe et al., 2011). In fact, only one published study, Pozzulo et al. (2014), could be found in a search in PsycInfo. Therefore, the influence of eyewitness age, type of descriptor inconsistencies, and familiarity with the defendant, along with their interactions, on eyewitness credibility, defendant credibility, and verdict were assessed in the current study.

Prior to reviewing the results related to the influence of age, familiarity, and type of descriptor inconsistencies on mock jurors’ perceptions of the eyewitness, a discussion of the eyewitness ratings is necessary. Ross et al. (2003) proposed a two-factor model of child witness credibility in which cognitive ability and honesty were assessed as separate constructs for child witnesses. While cognitive ability ratings are lower for children versus adults according to this model, honesty ratings between the two groups are comparable. In the current study, Ross’s (2003) two-factor model of child witness credibility was not supported; all eyewitness ratings (i.e. reliability, accuracy, credibility, honesty, truthfulness, and believability) appeared to be measures of the same underlying construct, regardless of the age of the eyewitness. Therefore, ‘eyewitness integrity’ was used, similar to the way it was in Bruer and Pozzulo (2012), to represent a combination of these ratings.
Due to the fact that mock jurors did not appear to perceive eyewitness honesty any differently than the other eyewitness ratings, the hypothesis that eyewitness honesty ratings would not differ between the child and adult eyewitness could not be adequately tested. The reason that the two-factor model was not supported is not clear. The age 10 was chosen specifically for the current study because this is the same age of the witness that was used in Ross et al. However, Ross et al. used a 14 item questionnaire to assess the witness whereas the current study only asked for six ratings. Furthermore, their study involved sexual abuse rather than non-sexual crime as in the current study. Finally, the witness in Ross et al. (2003) was a victim rather than bystander. It is possible that the two-factor model of child witness credibility may only apply in certain situations.

Eyewitness age did not influence jurors’ perceptions of eyewitness’s integrity as anticipated (although not explicitly hypothesized). Age has been found to influence the perception of the eyewitness in other studies (e.g. Bruer & Pozzulo, 2012; Pozzulo et al., 2014). However, the age of the youngest eyewitness in Pozzulo et al. (2014) was 4 years old, and in Bruer and Pozzulo it was 6 years old. In both of these studies, only the youngest witness was perceived as having significantly less integrity than the older witnesses, but 12 year old witnesses in both studies were perceived to have equivalent integrity to the adult witness. The age of 10 might have been too old to have an effect. Additionally, the crimes involved in those studies were violent, i.e. involved physical assault or murder, whereas the crime in the current study did not involve any violence. It is possible that the involvement of violence in the crime may also differentially influence mock jurors.
In contrast to the factor of age, the type of descriptor inconsistencies had a clear impact on the mock jurors’ assessments of the eyewitness’s integrity. A difference was found between there being no inconsistencies versus any inconsistencies. The pilot study suggested that mock jurors would easily perceive the differences between the permanent and non-permanent consistencies. This was not the case in the current study. Even if participants were aware of the differences, they did not attribute differential importance to the two inconsistency types. Therefore, Hypothesis 1, which predicted that there would be differences in eyewitness integrity ratings related to permanent versus non-permanent inconsistencies, was not supported. This may be due to the fact that the pilot study did not involve reading an entire transcript, only a brief vignette; this may have allowed mock jurors to attend more closely to the types of inconsistencies in the vignette. Also, while in the vignette the descriptions by the eyewitness and by the police officer were both provided, but only the eyewitness’s description along with an explanation of what he got wrong (e.g. colour of jacket) and how many items were wrong were included in the trial transcript. This was done to minimize confusion and keep transcripts as close to each other as possible. It is possible that mock jurors might think that making mistakes in height and weight would be relatively common, and focused on the fact that these were included in the list of permanent inconsistencies; therefore, they might have considered the permanent inconsistencies not particularly bothersome. Additionally, it was not specifically stated at what time the arrest of the suspect was made. Mock jurors may have assumed it was immediately after the crime, and therefore would give more weight to the non-permanent inconsistencies than might be appropriate if the suspect was arrested at a later time.
It was predicted that type of descriptor inconsistencies would significantly interact with the age of the eyewitness; Leippe and Romanczyk (1989) found that inconsistent testimony presented by children lowered evaluations of eyewitness credibility more than inconsistent testimony presented by adults. However, in the current study no significant interaction was found. Leippe and Romanczyk (1989) did not manipulate the type of inconsistencies in their study. Furthermore, Leippe and Romanczyk’s youngest eyewitness was 6 years old, and this was the only condition in which credibility ratings were lower. A 10 year old eyewitness in the same study was rated equivalently to the 30 year old eyewitness. If the age of the youngest eyewitness in the current study had been younger than 10, it is possible that an interaction may have been found.

As with eyewitness age, familiarity with the defendant did not significantly influence ratings of eyewitness integrity. This construct has been studied very limitedly; it is possible that despite the pilot testing indicating that the familiarity manipulation would have the desired effect of making the eyewitness appear not familiar or familiar with the defendant, a stronger manipulation might be required to make mock jurors believe that the eyewitness’s familiarity with the defendant should impact the eyewitness’s integrity.

The hypothesis that familiarity with the defendant would be more beneficial to the eyewitness when he was 10 versus 20 years old was not supported. However, this was an exploratory hypothesis, so was not based on the findings of previous research. Similarly, the hypothesis that familiarity would differentially influence eyewitness ratings based on the type of descriptor inconsistencies presented was not supported. Again, this was an exploratory hypothesis, as no previous study has examined familiarity with type of
descriptor inconsistencies. These hypotheses may have been supported with a stronger familiarity manipulation, or perhaps mock jurors do not place a great deal of emphasis on familiarity with the defendant when judging eyewitnesses.

Similarly to eyewitness integrity, a composite measure referred to as defendant integrity was created, given all defendant ratings appeared to measure the same underlying construct. Not surprisingly, eyewitness integrity and defendant integrity were, as predicted, found to inversely relate to each other – as eyewitness integrity ratings increased, defendant credibility ratings decreased. It was therefore not surprising when further investigation revealed that, similar to eyewitness integrity, type of descriptor inconsistencies affected defendant integrity ratings, while age and familiarity did not. When there were no descriptor inconsistencies, the defendant was considered to have significantly less integrity than when there were descriptor inconsistencies. As with eyewitness integrity, there were no significant difference in perceptions of defendant integrity when the type of descriptor inconsistencies were non-permanent versus permanent.

Eyewitness age did not have an effect on dichotomous verdict. However, familiarity had a marginal effect on verdicts; when the eyewitness was familiar with the defendant, more guilty verdicts were obtained. This is surprising given that eyewitness integrity ratings were not impacted by familiarity. Research has shown a mismatch between ratings of eyewitness integrity and dichotomous verdict before, however; when eyewitness integrity ratings are affected, dichotomous guilt judgments are not necessarily impacted (e.g. Bruer & Pozzulo, 2012; Pozzulo et al., 2014). There appears to be a less
than straightforward relationship between judgments of witness integrity and guilt determination.

Type of descriptor inconsistencies significantly influenced dichotomous verdict decisions, as predicted. When there were no inconsistencies, more guilty verdicts were given in comparison to when there were non-permanent or permanent inconsistencies. Consistent with other findings in the current study, non-permanent and permanent inconsistencies were not perceived differently.

As predicted, ratings of eyewitness integrity increased in conjunction with continuous ratings of the defendant’s guilt. While age did not significantly affect these continuous guilt ratings, familiarity had a marginal effect, similar to the dichotomous verdict. When the eyewitness was familiar with the defendant, ratings of the defendant’s guilt were noticeably higher than when the eyewitness was not familiar. Type of descriptor inconsistencies was significantly predictive of continuous guilt ratings. Again, this difference only occurred between no inconsistencies and any inconsistencies, be they non-permanent or permanent.

Generally, the presence rather than type of descriptor inconsistencies was the factor that most strongly influenced mock jurors with respect to eyewitness and defendant evaluations. As mentioned previously, it may be that this was due to the design of the current study, as type of descriptor inconsistencies has not been previously studied; there was no previous research on which to base the type of descriptor inconsistencies manipulation. Other potential issues with the current study, and ideas for future research resulting from it, are presented in the following section.

**Limitations and Future Research**
One threat to generalizability that is present in all mock juror as opposed to jury studies is that only individual opinions are captured. In actual jury cases, deliberation is performed before coming to a final conclusion. However, understanding how factors that may influence jurors individually is still an important part of providing insight into why juries arrive at their particular verdicts. An individual juror’s opinions are used as part of the jury decision-making process, particularly when that individual is the jury foreperson or has a high social status (Devine, Clayton, Dunford, Seying, & Price, 2001). Research investigating how group verdicts may be impacted by age, familiarity, and/or type of descriptor inconsistencies would be beneficial as well.

Eyewitness age did not exert any influences in the current study. It may be that in the case of non-sexual abuse, eyewitnesses must be younger than 10 to be perceived as less credible. The age of the adult eyewitness (i.e. 20 years old) was perhaps too young; Nikonova and Ogloff (2005) found differences between perceptions of a 10- and 23-year-old eyewitness, and Goodman et al. (1987, Experiment 1) found differences between a 10- and 30-year-old eyewitness. Despite the amount of research that has been conducted involving eyewitness age, it appears that there is still further research that is warranted in this area, particularly in conjunction with other factors such as type of crime.

As this was the first study to examine type of descriptor inconsistencies, it is not surprising that after completion, potential limitations/recommended improvement have been found. For example, the complete description provided by the eyewitness and police officer should both be provided in a future study, rather than just describing the items that differed, in order to make the inconsistencies potentially more salient. The time of the suspect’s arrest should also be included, so that jurors do not assume that the suspect was
arrested immediately after the crime, which was a potential limitation of the current study.

The influence of familiarity on mock jurors’ assessments of guilt was only approaching significance in the current study. However, the influence of an eyewitness’s familiarity with the defendant has only begun to be studied, with only one previously published paper, Pozzulo et al. (2014), as found in PsycInfo. Pozzulo et al. (2014) did not find any influence of familiarity on mock jurors’ guilt assessments and proposed that their familiarity manipulation was perhaps not sufficient to make mock jurors believe the eyewitness was familiar enough with the defendant that it should improve their testimonial integrity. The pilot study in the current study indicated that the familiarity rating was strong enough to enable mock jurors’ to perceive different levels of familiarity with the defendant based on the manipulation, but perhaps an even stronger manipulation would further influence mock jurors’ guilt assessments.

Intriguingly, familiarity seemed to be more influential in determining the guilt of the defendant, both continuous and dichotomous, in comparison to assessing either the eyewitness’s or defendant’s integrity. It is possible, as proposed by Pozzulo et al. (2014) that mock jurors might not believe that an eyewitness’s familiarity with the defendant should greatly influence the integrity of the eyewitness. However, it is also possible that an even stronger familiarity manipulation would have an effect on integrity ratings. Therefore, it would be beneficial for a future studies are conducted that involve different familiarity manipulations, particularly due to the dearth of research in this area despite the prevalence of eyewitness familiarity with the defendant in actual trials (Flowe et al., 2011).
Conclusion

The current study was the first study to examine the influence of age, familiarity, and type of descriptor inconsistencies together. Despite the limitations mentioned in the preceding section, it has contributed important knowledge to how mock jurors attend to the three factors studied. Mock jurors did not evaluate the 10 and 20 year old eyewitness differently in the current study. However, the current study further supports the idea that the presence of descriptor inconsistencies impact assessments of eyewitness testimony, as well as judgments of defendant guilt. The fact that mock jurors did not discern between permanent and non-permanent descriptor inconsistencies is concerning; if suspects are not arrested immediately after the crime, it is possible they would change their clothing or hair colour to hinder their apprehension, but it would not be easy for them to change their height or weight. Therefore, it would be more desirable for jurors to place less emphasis on non-permanent inconsistencies in such instances. The current study also suggested that familiarity with the defendant may play a role, particularly during assessments of guilt. Due to the fact that familiar faces are easily recognized (Bruce et al., 2001), this line of reasoning by jurors would be appropriate, and perhaps lead to more accurate assessments of defendant guilt.
References


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Appendix A: SONA Recruitment Notice: Pilot Study

Study Name: Juror Decision Making: Motor Vehicle Theft Pilot Study

Description: Participation in this study will require that you read the two vignettes and answer a few opinion questions for each of them.

Eligibility Requirements: Must be 18 years old or older and fluent in reading English.

Duration: Approximately 30 minutes

Location: Social Sciences Research Building (SSRB) 111, Carleton University

Compensation: 0.5% in PSYC 1001, PSYC 1002, PSYC 2001, PSYC 2002, NEUR 2001 or NEUR 2002

Researchers:

Primary Investigator: Jennifer Reed

Phone: (613) 520-2600 ext. 3695

Email: jennifer_reed2@carleton.ca

Faculty Advisor: Dr. Joanna Pozzulo

This study has received clearance by the Carleton University Psychology Research Ethics Board (13-148).
Appendix B: Informed Consent Form: Pilot Study

The purpose of informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. Informed consent must provide sufficient information such that you have the opportunity to determine whether or not you wish to participate in the study. This consent form will be stored for seven years prior to being destroyed.

Present study: Juror Decision-Making: Motor Vehicle Theft Pilot Study

Research personnel: The following people will be involved in this research project and may be contacted at any time: Jennifer Reed (Principal Investigator, 613-520-2600, ext. 3695) and Dr. Joanna Pozzulo (Faculty Advisor, 613-520-2600, ext. 1412).

Concerns: If you should have any ethical concerns about this study please contact Dr. Shelley Brown (Chair, Carleton University Research Ethics Committee for Psychological Research, 613-520-2600, ext. 1505). Should you have any other concerns please contact Dr. Anne Bowker (Chair, Department of Psychology, 613-520-2600, ext. 8218).

Purpose: The present study is a pilot study for a future jury study. It is testing manipulations regarding the relationship between the eyewitness and defendant as well as how consistently the eyewitness describes the defendant, in order to see if these manipulations are adequately salient.

Task requirements: You will be asked to read 2 vignettes and answer a few questions.

Duration and locale: Testing will take place in Room 111, Social Sciences Research Building, Carleton University. This study will be completed in one testing session that will last approximately 30 minutes.

Remuneration: You will receive a 0.5% increase in your final grade of PSYC 1001, PSYC 1002, PSYC 2001, PSYC 2002, NEUR 2001 or NEUR 2002 for participating in this study.

Potential risk/discomfort: There are no potential physical risks involved in this experiment.

Right to withdraw: Your participation is strictly voluntary. Should you experience any unease, you have the right to withdraw from the study at any time without penalty. You will also be given some contact information for resources in dealing with such issues.

Anonymity/Confidentiality: All the information you provide will be strictly confidential. Data will only be used for research at Carleton University. Your answers will NOT be linked to your name or signature (i.e., consent form) and your responses will be coded in such a way that you cannot be identified.
**Ethics Approval:** This study has received clearance from the University Ethics Committee for Psychological Research (13-148).

**Signatures:** I have read the above form and hereby consent to participate in this study, which examines issues surrounding television programs targeted at children. The data in this study will be used for research publications and/or teaching purposes. I am aware that the data collected in this study will be kept strictly confidential and anonymous. My signature indicates that I understand the above and wish to participate in this study:

Participant’s Name (print): _________________________________
Participant’s Signature: ___________________________________
Researcher’s Name (print): _________________________________
Researcher’s Signature: ___________________________________
Date: __________________________
Appendix C: Vignette Form

Vignette 1. *(Unfamiliar)*

Keith Thomas was walking to his friend’s house when he saw a stranger break into and his friend’s car and drive away. Keith went into the house, told his friend what he had witnessed, and called the police immediately. The police arrived and Keith provided his description of the criminal.

Two days later, Keith was asked to view a lineup by police, based on the description he had provided. He identified the suspect, Scott Smith, as the criminal.

Vignette 2. *(Familiar)*

Keith Thomas was walking to his friend’s house when he saw somebody break into his friend’s car and drive away. Keith went into the house, told his friend what he had witnessed, and called the police immediately. The police arrived and Keith provided his description of the criminal.

Keith mentioned that he recognized the man as being the cashier at the corner store, where Keith had been going every Friday for about 8 weeks to buy weekend snack food.

Two days later, Keith was asked to view a lineup by police, based on the description he had provided. He identified the suspect, Scott Smith, as the criminal.

Questions asked for Vignettes 1 and 2:

1. How *reliable* do you find the eyewitness’s identification?

1……10…….20…….30…….40…….50…….60…….70…….80…….90…….100
Not Reliable   Moderately Reliable   Absolutely Reliable

2. How *familiar* do you feel Keith was with the suspect, Scott Smith?

1……10…….20…….30…….40…….50…….60…….70…….80…….90…….100
Not Familiar   Moderately Familiar   Extremely Familiar

3. How *likely* do you feel it would be for Keith to have made a mistaken identification?

1……10…….20…….30…….40…….50…….60…….70…….80…….90…….100
Not Likely    Moderately Likely   Extremely Likely
Vignette 3. *(No Inconsistencies)*

John was walking home when he saw somebody break into his mother’s car and steal it. John went into his house and called the police immediately. John provided police with the following description of the criminal: “6 feet 1 inch, 210 pounds, strawberry birthmark on right cheek, prominent ears, full head of hair, small beady eyes, a blue jacket, black pants, brown loafers, black hair, no piercings, and no facial hair.”

A couple of days later, John was shown a lineup and identified the suspect, Phil Jones. At the time of arrest, the police officer had written down the following description of Phil:

“6 feet 1 inch, 210 pounds, strawberry birthmark on right cheek, prominent ears, full head of hair, small beady eyes, a blue jacket, black pants, brown loafers, black hair, no piercings, and no facial hair.” The descriptions were completely consistent.

Vignette 4. *(Permanent Inconsistencies)*

John was walking home when he saw somebody break into his mother’s car and steal it. John went into his house and called the police immediately. John provided police with the following description of the criminal: “5 feet 10 inches, 170 pounds, no moles or birthmarks, average ears, nondescript eyes, receding hair line, a blue jacket, black pants, brown loafers, black hair, no piercings, and no facial hair.”

A couple of days later, John was shown a lineup and identified the suspect, Phil Jones. At the time of arrest, the police officer had written down the following description of Phil:

“6 feet 1 inch, 210 pounds, strawberry birthmark on right cheek, prominent ears, full head of hair, small beady eyes, a blue jacket, black pants, brown loafers, black hair, no piercings, and no facial hair.” Six items differed between the two descriptions.

Vignette 5. *(Non-permanent Inconsistencies)*

John was walking home when he saw somebody break into his mother’s car and steal it. John went into his house and called the police immediately. John provided police with the following description of the criminal: “6 feet 1 inch, 210 pounds, strawberry birthmark on right cheek, prominent ears, full head of hair, small beady eyes, a black jacket, blue jeans, running shoes, brown hair, nose ring, and a beard.”

A couple of days later, John was shown a lineup and identified the suspect, Phil Jones. At the time of arrest, the police officer had written down the following description of Phil:

“6 feet 1 inch, 210 pounds, strawberry birthmark on right cheek, prominent ears, full head of hair, small beady eyes, a blue jacket, black pants, brown loafers, black hair, no piercings, and no facial hair.” Six items differed between the two descriptions.
Questions for Vignettes 3 4, and 5:

1. How *reliable* do you find the eyewitness’s identification?
   1……10……20……30……40……50……60……70……80……90……100
   Not Reliable     Moderately Reliable     Absolutely Reliable

2. How *likely* do you think it is that Phil Jones was the criminal, based on the eyewitness’s description?
   1……10……20……30……40……50……60……70……80……90……100
   Not Likely     Moderately Likely     Absolutely Likely

3. How *consistent* was the eyewitness’s description?
   1……10……20……30……40……50……60……70……80……90……100
   Not Consistent     Moderately Consistent     Absolutely Consistent
Appendix D: Debriefing Form – Pilot Study

Purpose of this Research:
The purpose of this study is to determine if the manipulations in the vignettes work as they are intended, or expected to. Will the eyewitness being familiar with the suspect make a difference? Will non-permanent descriptor inconsistencies (i.e. easy-to-make changes, such as different clothing colour or hair colour) be viewed differently than permanent descriptor inconsistencies (i.e. difficult-to-make changes, such as height or weight changes)? This is a pilot study for a future jury study proposing the same types of manipulations.

Value of this Research:
This research is important to determine whether the proposed manipulations for a larger study will be effective or not. In turn, that study will allow us to see what eyewitness evidence may impact jurors’ perceptions of the eyewitness’s credibility. If jurors are found to be considering certain eyewitnesses to be more credible than others for reasons that are not grounded, legal proceedings might be changed in the future to compensate for this, which would possibly result in fairer trials.

Hypothesis/Predictions:
It is predicted familiarity with the defendant will increase jurors’ perceptions of witness credibility. It is also predicted that permanent descriptor inconsistencies will be related to lower eyewitness credibility in comparison to non-permanent descriptor inconsistencies.

Vignettes:
The depictions of the crime were fictional in all vignettes and were created for use in this study. Subsequently, there is no right or wrong verdict because no actual verdict was ever handed out in a court of law.

If you have questions at a later date...
Research Personnel: You may contact the researcher or academic supervisor at any time if you have any further concerns or questions: Jennifer Reed (Principal Investigator, 520-2600, Ext. 3695); Dr. Joanna Pozzulo (Faculty Advisor, 526-2600, Ext. 1412)
Ethical Concerns: If you have any ethical concerns regarding this study please contact Shelley Brown (Chair, Carleton University Research Ethics Committee for Psychological Research, 520-2600, Ext. 1505).

If you have any other concerns: Please contact Dr. Anne Bowker (Chair, Dept. Of Psychology, 520-2600, Ext. 8218).

What to do if I found the experiment to be emotionally upsetting: If you find that you are uncomfortable, anxious, embarrassed, etc., it is important that you visit the Health and Counseling Services at Carleton University, or your family doctor or counselor. Health and Counseling Services can be located by phone at (613) 520-6674 or by email at hcs@carleton.ca. Please do not hesitate to contact them after this study if you require assistance. Thank you for your participation in this study!
Appendix E: SONA Recruitment Notice – Main Study

Study Name: Juror Decision Making: Motor Vehicle Theft Pilot Study

Description: Participation in this study will require that you read the two vignettes and answer a few opinion questions for each of them.

Eligibility Requirements: Must be 18 years old or older and fluent in reading English.

Duration: Approximately 30 minutes

Location: Social Sciences Research Building (SSRB) 111, Carleton University

Compensation: 0.5% in PSYC 1001, PSYC 1002, PSYC 2001, PSYC 2002, NEUR 2001 or NEUR 2002

Researchers:

Primary Investigator: Jennifer Reed

Phone: (613) 520-2600 ext. 3695

Email: jennifer_reed2@carleton.ca

Faculty Advisor: Dr. Joanna Pozzulo

This study has received clearance by the Carleton University Psychology Research Ethics Board (13-xxx).
Appendix F: Informed Consent Form – Main Study

The purpose of informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. Informed consent must provide sufficient information such that you have the opportunity to determine whether or not you wish to participate in the study. This consent form will be stored for seven years in a secure location prior to being destroyed.

Present study: Did he do it? You decide!

Research personnel: The following people will be involved in this research project and may be contacted at any time: Jennifer Reed (Principal Investigator, 613-520-2600, ext. 3695) and Dr. Joanna Pozzulo (Faculty Advisor, 613-520-2600, ext. 1412).

Concerns: If you should have any ethical concerns about this study please contact Dr. Shelley Brown (Chair, Carleton University Research Ethics Committee for Psychological Research, 613-520-2600, ext. 1505). Should you have any other concerns please contact Dr. Anne Bowker (Chair, Department of Psychology, 613-520-2600, ext. 8218).

Purpose: The purpose of this study is to examine mock jurors’ assessment of an eyewitness and defendant, and their subsequent verdict, based on information presented in a trial transcript.

Task requirements: You will be asked to read a transcript of a trial involving a motor vehicle theft. You will be asked to complete some questionnaires requesting your demographic information, thoughts and opinions related to the case you read, and to determine a verdict in the case. You can refuse to answer any questions without academic penalty.

Duration and locale: Testing will take place in Room 111, Social Sciences Research Building, Carleton University. This study will be completed in one testing session that will last approximately 60 minutes.

Remuneration: You will receive a 1% increase in your final grade of PSYC 1001, PSYC 1002, PSYC 2001, PSYC 2002, NEUR 2001 or NEUR 2002 for participating in this study.

Potential risk/discomfort: There are no potential physical risks involved in this experiment. Given that the trial involves a crime, even though it is not violent in nature, it is possible that you may experience slight psychological discomfort.

Protection of Personal Information: This Informed Consent Form will be kept in the Lab for seven years. It will be placed in a room that has restricted access and is kept locked and closed at all times. At the seven year mark, it will be shredded and disposed of.
Right to withdraw: Your participation is strictly voluntary. At any point during the study you have the right not to complete certain questions or to withdraw from the study without any penalty whatsoever.

Anonymity/Confidentiality: All the information you provide will be strictly confidential. Data will only be used for research at Carleton University. Your answers will NOT be linked to your name or signature (i.e., consent form) and your responses will be coded in such a way that you cannot be identified.

Ethics Approval: This study has received clearance by the Carleton University Psychology Research Ethics Board (13-163).

Signatures: I have read the above form and hereby consent to participate in this study. The data in this study will be used for research publications and/or teaching purposes. I am aware that the data collected in this study will be kept strictly confidential and anonymous. My signature indicates that I understand the above and wish to participate in this study.

Participant’s Name (print): ________________________________

Participant’s Signature: __________________________________

Researcher’s Name (print): Jennifer Reed ________________

Researcher’s Signature: __________________________________

Date: ________________________________________________
This is an excerpt from a trial involving a motor vehicle theft. This theft was committed at approximately 7:00 p.m. on June 7th, 2012. Roughly one week later, 22-year-old Dylan Jones was charged with section 333.1 of the Criminal Code: motor vehicle theft.

Please read through the facts of this case as they were presented at the trial of Dylan Jones. You will be asked to make a decision of the defendant’s guilt.

Judge: Mr. Jones has been charged with section 333.1 of the Criminal Code: motor vehicle theft. Under Canadian law, the Crown has the burden of proving that the defendant is guilty of this charge beyond a reasonable doubt. It is your responsibility to listen to all the evidence presented in this case, to decide the facts, and then to apply the law that I will give to you at the end of this trial. This case will begin with the Crown and Defense presenting their opening statements. These statements are summaries of what will be presented throughout the trial, and are not evidence. Each attorney then will present and question witnesses and law enforcement personnel and these witnesses also will be cross-examined. Please listen to the following proceedings carefully. Following the testimonies you will be asked to make a decision as to whether the defendant is guilty or not guilty.

The Crown makes their opening statement.

Crown: Mr. Jones is a 25-year-old male with a criminal record of two prior automobile thefts. On the evening of June 7th, 2012, [10/20]-year-old Keith Thomas was walking home from a friend’s house. He spotted a man approaching the Honda Civic belonging to his mother, Ms. Deborah Thomas, which was parked in front of the house where Keith and his mother lived. The thief then entered and started the car and drove away quickly. Keith positively identified the thief as Mr. Jones.

The Defense makes their opening statement.

Defense: Ladies and gentlemen of the jury, my client Dylan Jones most certainly did not commit the theft of Deborah Thomas’s automobile on the evening of June 7th, 2012. The theft of a motor vehicle is indeed a very serious crime, but it was not committed by Dylan Jones. The only reason that Mr. Jones is here today is that he roughly matches the limited description provided by Keith Thomas, who was several feet away at the time of the theft. There is no other evidence of any sort that Mr. Jones committed the crime. Therefore, to accuse Mr. Jones of motor vehicle theft is unfair and outrageous, and it is your duty to consider all of the facts accordingly and ultimately decide that my client is indeed not guilty.

The Crown calls their first witness, Deborah Thomas, to the stand.
Crown: Please state your full name to the court.
Witness: My name is Deborah Lynn Thomas.
Crown: Where were you on the evening of June 7th, 2012?
Witness: I got home from work at about 5:30 that evening. Keith was at his friend’s house nearby and we had arranged to eat a later dinner at about 8 p.m. after he got home. It was a tiring day at work - I decided to take a quick nap on the couch.
Crown: Can you tell me about the incident that happened that evening?
Witness: At about 7:00 p.m. or so, Keith came running into the house yelling that somebody just drove away in the car. He asked if I had lent it to anybody and I said no. Of course I was very shocked and called the police right away.
Crown: Did you see any suspicious individuals outside your house when you got home that evening?
Witness: No, there was nothing out of the ordinary when I arrived home.
Crown: What did you do after calling the police?
Witness: Well, with no car I could not really do that much. We just sat in the front room and peeked out the curtains in case we saw anything else abnormal going on, and waited for the police to arrive. We were kind of hoping the thief would bring the car back to us after driving it around a bit.
Crown: Thank-you Deborah. No further questions Your Honour.

The Defense cross-examines the witness, Deborah Thomas.

Defense: Ms. Thomas, have you ever met the defendant, Dylan Jones?
Witness: No, I don’t think so.
Defense: Ms. Thomas, is there any reason why you believe Dylan Jones would have had a reason to steal your car?
Witness: No, but I don’t know why anybody else would have, either.
Defense: Thank you Ms. Thomas. No further questions, your Honour.

The witness is excused.

The Crown calls their second witness, Detective John Scott, to the stand.

Crown: Please state your name and occupation for the court.
Witness: My full name is John James Scott. I have been a detective with the local police for 5 years.
Crown: How did you come to be involved with this case Detective Scott?
Witness: On the evening of June 7th, 2012, I responded to a 911 call from Deborah Thomas at 5 Oak Street. I was happy to discover that there was a [boy/young man] who had actually seen the thief’s face. I asked the witness for a detailed description of the car thief. [He also mentioned that he thought the thief worked at the convenience store on the corner of Ash and Maple.] Using this information, I constructed a lineup. When I presented the lineup to the witness, he identified Mr. Jones as the robber.
Crown: How were you able to make a positive identification that it was Mr. Jones who had stolen Ms. Thomas’s car?
**Witness:** We put together a lineup which consisted of 6 photos, one of which was Mr. Jones. The men in the lineup all roughly matched the description provided by the eyewitness Keith Thomas, with none of them standing out in particular from one another. The five men other than Mr. Jones were known by police to be innocent of the crime. We then showed the lineup to Keith to see if he could identify the criminal. He made a positive identification of one of the photos – he pointed to number 4 and said “That is the man I saw stealing my mother’s car”. Number 4 was Mr. Jones’s photograph.

**Crown:** That is all the questions I have Your Honour. Thank you.

*The Defense cross-examines the witness, Detective Scott.*

**Defense:** Detective Scott, where did you show the lineup to Keith Thomas?

**Witness:** At the police station.

**Defense:** How long after the afternoon of the incident did you show the lineup to him?

**Witness:** It was two days after the incident.

**Defense:** Isn’t it true that Keith only briefly saw the thief as he was getting into Keith’s mom’s car, which might make his memory of the criminal somewhat unreliable?

**Witness:** Yes, that is possible I suppose. However, I find that unlikely since Keith positively and conclusively identified Mr. Jones as the car thief.

**Defense:** It is my understanding, Detective, that Keith provided you with a detailed description of the criminal on the afternoon of the incident.

**Witness:** Yes, that is correct.

**Defense:** Tell me, how did he describe the criminal to you?

**Witness:** Based on my notes from the time of the incident, Keith described the suspect as being *6 feet 1 inch tall, 210 pounds, with a strawberry birthmark on his right cheek, prominent ears, a full head of hair, small beady eyes, a blue jacket, black pants, brown loafers, black hair, no piercings, and no facial hair.* / 6 feet 1 inch tall, 210 pounds, with a strawberry birthmark on his right cheek, prominent ears, a full head of hair, small beady eyes, a black jacket, blue jeans, running shoes, brown hair, a nose ring, and a beard. / 5 feet 10 inches tall, 170 pounds, with no moles or birthmarks, average ears, nondescript eyes, receding hair line, a blue jacket, black pants, brown loafers, black hair, no piercings, and no facial hair.*

**Defense:** How many items exactly did the witness remember then?

**Witness:** 12 items in total.

**Defense:** Did Keith’s description of the criminal perfectly match Mr. Jones?

**Witness:** Yes, his description matched exactly, all 12 items were correct. / No, he was wrong about 6 items: Mr. Thomas’s jacket colour, pants colour, and type of shoes, hair colour, nose piercing, and facial hair. / No, he was wrong about 6 items: Mr. Thomas’s height, weight, birthmark, ear size, hairline, and eye shape.

**Defense:** Thank you. That concludes my questions Your Honour.

*The witness is excused.*

*The final witness for the Crown, eyewitness Keith Thomas, takes the stand.*

**Crown:** Can you please state your name for the court.
Witness: Keith Thomas.
Crown: How old are you?
Crown: Can you tell the court where you were on the evening of June 7th, 2012, at approximately 7:00 p.m.?
Witness: I was walking home from my friend Bryan’s house.
Crown: Did anything out of the ordinary happen as you were walking home?
Witness: Well, as I turned onto my street I saw a guy walking up to the front door of my mom’s car, then getting in.
Crown: Did you get a good look at the man?
Witness: Yes. He was facing me at first since he was walking towards me – my mom’s car and our house were on my right hand side.
Crown: Do you remember what you told the police about what the man looked like?
Witness: Yes, of course.
Crown: Is that man in the courtroom today?
Witness: Yes.
Crown: Can you point him out?
Witness: Yes, he is right there. (Witness points to Mr. Jones).
Crown: Had you seen this man before the evening you saw him in stealing your mom’s car?
Witness: [No, I had never seen him before. / Yes, he worked at the Quik-Tyme store near my house for about 8 weeks. I saw him every Friday, because that is where I go to buy snacks for me and my friends when we get together and play video games on the weekend.]
Crown: Thank you Keith. That’s all my questions.

The Defense cross-examines the witness, Keith Thomas.

Defense: Hi Keith, how are you today?
Witness: Good.
Defense: How far away were you when you saw the man opening your mother’s car?
Witness: I don’t know – I was only a house or so away. It was pretty easy to see him.
Defense: Was the lighting bad when you were looking towards your house?
Witness: No, it was good. The sun had not started going down yet.
Defense: Are you sure you got a good look at the robber? Wasn’t it kind of fast?
Witness: I saw him long enough to see what he looked like.
Defense: Why do you believe it was Mr. Jones that committed the crime?
Witness: I saw him in the lineup.
Defense: Thanks, Keith. No further questions, Your Honour.

The Defense calls their first witness, Jackson Wall, to the stand.

Defense: Can you please state your name and relation to the defendant for the Court.
Witness: My name is Jackson Wall. I am Dylan’s best friend.
Defense: Okay, Mr. Wall. How long have you known Mr. Jones?
Witness: We met in high school, so around 10 years.
Defense: Where were you on the evening of June 7th, 2012?
Witness: I was hanging out with Dylan, just relaxing at the park.
Defense: What time was that?
Witness: From about 4 to 6:00 p.m. There is no way that Dylan stole that car. He never talked about anything like that. We were just both in good moods, relaxing, you know?
Defense: Why are you so sure Mr. Wall?
Witness: I have known him forever. I would know if he was thinking about doing anything like that. He has a job - he doesn’t need to steal anything! Plus the park we were at was Brookland Park – that is a couple of miles away from the Woodgrove neighbourhood where the car got stolen.
Defense: Thank you Mr. Wall. That is all your Honour.

The Crown cross-examines the witness, Jackson Wall.

Crown: Mr. Wall, you stated that you were ‘hanging out’ with Dylan on June 7th at Brookland Park from around 4 to 6 in the afternoon?
Witness: Yes, like we do a lot of days.
Crown: How far is that park from Oak Street?
Witness: Um, I think it is about two or three miles.
Crown: So really Dylan had plenty of time to commit the theft after he left you?
Witness: I guess it is possible, but really he is not a sprinter or anything. Two or three miles in an hour is pretty fast walking.
Crown: It is really only 1.5 miles from the park to Oak Street; we measured it. Plenty of time even for even a not-so-fast walker. What do you think now?
Witness: Dylan is a super slow walker. Plus I know he did not do it!
Crown: That’s all the questions I have your Honour.

The witness is excused.

The Defense calls their next witness, Maura Jones, to the stand.
Defense: Please state your name and relation to the defendant for the court.
Witness: Maura Jones. I am Dylan’s sister.
Defense: Maura, did you spend time with Dylan on June 7th, 2012?
Witness: Yes, sir. We are roommates so we see each other every day.
Defense: Did you see him in the evening that day?
Witness: No, sir. I waitress full-time at a bar on Birch Street. He was at home sleeping when I got home at two o’clock in the morning.
Defense: Did Dylan talk about anything unusual the next morning?
Witness: No, he was just normal as always.
Defense: Thank you. That’s all your Honour.

The Crown cross-examines the witness, Maura Jones.
Crown: Ms. Jones, do you know that Dylan has stolen cars in the past?
Witness: Yeah, but he has cleaned himself up now. He is committed to never doing that again. He knows a third theft would mean a mandatory jail sentence. He got a job at a corner store and works full-time.
Crown: Still, you never saw Dylan that evening, did you?
**Witness:** No, sir.

**Crown:** That is all your Honour.

*The witness is excused.*

*The Defense calls the defendant, Dylan Jones, to the stand.*

**Defense:** Please state your full name and age for the court.

**Defendant:** Dylan Jones. I am 25 years old.

**Defense:** Where were you the evening of June 7th, 2012?

**Defendant:** I was super sleepy that day. I had been working the overnight shift at the store the night before. I hung out with Jack for a while, but then I was so bagged, I had to go home to sleep. I passed out right away and did not wake up til morning – I was even too tired to eat much for supper. June 8th was a Friday, so I would be working the noon to midnight shift - I knew I needed some sleep.

**Defense:** Dylan, did you steal the Honda Civic in question?

**Defendant:** No – those days are long over for me now.

**Defense:** Thank you. That's all the questions I have Your Honour.

*The Crown cross-examines the defendant, Dylan Jones.*

**Crown:** Mr. Jones, why do you think you were identified as the thief when you claim it was not you?

**Defendant:** I guess the [boy/guy] just didn’t see the thief very good.

**Crown:** Don’t you think that is quite a coincidence since you have stolen cars before.

**Defendant:** That is all behind me now.

**Crown:** Nothing further Your Honour.

*The defendant is excused.*

*The Crown makes their closing statements.*

**Crown:** Ladies and gentlemen of the jury, you have heard testimony from a number of witnesses about the motor vehicle theft on June 7th, 2012. As jurors, it is your job to determine based on this information whether or not Dylan Jones is guilty beyond a reasonable doubt of the crime of motor vehicle theft; please remember that Mr. Jones is known to the police department as being an automobile thief. He does not have an alibi for the time of the theft. Furthermore, the key eyewitness has positively identified the thief as Dylan Jones. With this compelling evidence presented to you, I urge you to find the accused Dylan Jones guilty of motor vehicle theft. Thank you.

*The Defense makes their closing statements.*

**Defense:** The evidence provided by the prosecution is questionable at best. Their key piece of evidence is from eyewitness testimony of a [10/20]-year-old [child/man] walking down the street, who only saw the thief briefly. This testimony cannot possibly
lead you to conclude that Mr. Jones is guilty beyond a reasonable doubt. No other compelling evidence was provided. The only proper conclusion that you can come to is that my client Mr. Jones is not guilty. I trust that you will do that.

The Judge provides the law and instructions for the jury.

Judge: Members of the jury, it is now my responsibility to provide you with the law. Dylan Jones has been charged under section 333.1 (1a) of the Criminal Code, which states that everyone who commits theft is, if the property stolen is a motor vehicle, guilty of an offence and liable on proceedings by way of indictment, to imprisonment for a term of not more than 10 years, and to a minimum punishment of imprisonment for a term of six months in the case of a third or subsequent offence under this subsection.

When deciding on a verdict, please take into consideration all of the information you have heard today, and do not let any biases you may have come into your decision making process.
Appendix H: Demographics Form

Your Age: ______________

Your Sex: ______________

Your Primary Language: ____________________________

Ethnicity: Please indicate which ethnic group you would consider yourself to belong to (Optional):

☐ White (e.g., European)

☐ Black (e.g. African, African American, African Canadian, Caribbean)

☐ East Asian (e.g. Chinese, Japanese, Korean, Polynesian)

☐ South Asian (e.g. Indian, Pakistani, Sri Lankan, Bangladeshi)

☐ Southeast Asian (e.g. Burmese, Cambodian, Filipino, Laotian, Malaysian, Thai, Vietnamese)

☐ West Asian (e.g. Arabian, Armenian, Iranian, Israeli, Lebanese, Palestinian, Syrian, Turkish)

☐ Latin American (e.g. Mexican, Indigenous Central and South American)

☐ Aboriginal Canadian/Native Canadian/First Nations

☐ Mixed origin, please specify: ________________________________

☐ Other: ________________________________
Appendix I: Verdict Form

1. Based on the information provided in the transcript, how do you find the defendant with respect to the motor vehicle theft? Please indicate a number between 1 and 100, with 1 being “Not Guilty” and 100 being “Guilty.”

Verdict Number: _______________

2. How confident are you in the guilt rating you just made?

1…….10…….20…….30…….40…….50…….60…….70…….80…….90…….100
Not Confident Moderately Confident Absolutely Confident

3. Based on the information provided in the transcript, how do you find the defendant with respect to the motor vehicle theft? Please check one of the following boxes below:

Not Guilty Guilty

4. How confident are you in the verdict decision you just made?

1…….10…….20…….30…….40…….50…….60…….70…….80…….90…….100
Not Confident Moderately Confident Absolutely Confident

5. In your own words, please describe in the space below how you made your final verdict decision (i.e., what factors did you consider in reaching your verdict of not guilty or guilty?).

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Please turn over if you need more space and then proceed to the next set of questions
Appendix J: Verdict Sentencing

If you have checked the GUILTY box, please answer the questions below with regards to sentence recommendations for motor vehicle theft. These sentences are based on the Criminal Code.

Please check one (sentences allowed by Criminal Code)

10 years imprisonment: _________________ (maximum sentence allowed)
5 years imprisonment: _________________
2 years imprisonment: _________________
6 months imprisonment: _______________ (minimum sentence allowed)

If you could ignore the Criminal Code, what do you think would be the appropriate sentence and duration of time, if any, for the defendant? (You may refer to the list of sentences available in Canada below to assist you in your answer).

Sentence: _________________________________________
Duration: _________________________________________
Amount (if imposing a fine): __________________________

Absolute Discharge: A sentence that releases him or her into the community with no conditions, and no criminal record.

Conditional Discharge: A sentence that releases him or her into the community with a set of conditions, and no criminal record.

Conditional Sentence of Imprisonment: A prison sentence served in the community, under the watch of a supervisor. Conditions can be punitive, and usually involve house arrest.

Probation: Offender is released on conditions prescribed in a probation order. Conditions are rehabilitative, not punitive, and directly relate to the offenders needs. Can be combined with imprisonment.

Fine: A fee made payable to Her Majesty, the province in which the crime is committed. Can be combined with imprisonment.

Imprisonment: A sentence served in an institution. Two years less a day is served in a provincial jail, two years or more is served in a federal penitentiary.
Appendix K: Eyewitness Ratings

Please answer the following questions based on the trial transcript you have read. Circle your answer. Note: all definitions are from www.thefreedictionary.com.

Please answer the following questions in relation to the eyewitness, Keith Thomas.

1. Reliable means ‘capable of being relied on; dependable’. How reliable do you find the eyewitness’s testimony?
   1……10……20……30……40……50……60……70……80……90……100
   Not Reliable   Moderately Reliable   Absolutely Reliable

2. Accurate means ‘conforming exactly to fact; errorless’. How accurate do you find the eyewitness’s testimony?
   1……10……20……30……40……50……60……70……80……90……100
   Not Accurate   Moderately Accurate   Absolutely Accurate

3. Credible means ‘capable of being believed; plausible’. How credible do you find the eyewitness’s testimony?
   1……10……20……30……40……50……60……70……80……90……100
   Not Credible   Moderately Credible   Absolutely Credible

4. Truthful means ‘telling or expressing the truth; honest’. How truthful do you find the eyewitness’s testimony?
   1……10……20……30……40……50……60……70……80……90……100
   Untruthful      Moderately Truthful   Absolutely Truthful

5. Believable means ‘capable of eliciting belief or trust’. How believable do you find the eyewitness’s testimony?
   1……10……20……30……40……50……60……70……80……90……100
   Not Believable   Moderately Believable   Absolutely Believable

6. Honest means ‘free of deceit and untruthfulness; sincere’. How honest do you find the eyewitness’s testimony?
   1……10……20……30……40……50……60……70……80……90……100
   Not Honest      Moderately Honest   Absolutely Honest
Appendix L: Defendant Ratings

Please answer the following questions based on the trial transcript you have read. Circle your answer. Note: all definitions are from www.thefreedictionary.com.

Please answer the following questions in relation to the defendant, Dylan Jones.

1. Reliable means ‘capable of being relied on; dependable’. How reliable do you find the defendant’s testimony?

1……10……20……30……40……50……60……70……80……90……100
Not Reliable     Moderately Reliable       Absolutely Reliable

2. Accurate means ‘conforming exactly to fact; errorless’. How accurate do you find the defendant’s testimony?

1……10……20……30……40……50……60……70……80……90……100
Not Accurate      Moderately Accurate       Absolutely Accurate

3. Credible means ‘capable of being believed; plausible’. How credible do you find the defendant’s testimony?

1……10……20……30……40……50……60……70……80……90……100
Not Credible      Moderately Credible       Absolutely Credible

4. Truthful means ‘telling or expressing the truth; honest’. How truthful do you find the defendant’s testimony?

1……10……20……30……40……50……60……70……80……90……100
Untruthful        Moderately Truthful       Absolutely Truthful

5. Believable means ‘capable of eliciting belief or trust’. How believable do you find the defendant’s testimony?

1……10……20……30……40……50……60……70……80……90……100
Not Believable   Moderately Believable       Absolutely Believable

6. Honest means ‘free of deceit and untruthfulness; sincere’. How honest do you find the defendant’s testimony?

1……10……20……30……40……50……60……70……80……90……100
Not Honest        Moderately Honest          Absolutely Honest
Appendix M: Other Ratings

*Please answer the following questions based on the trial transcript you have read. Circle your answer.*

1. How familiar would you rate the eyewitness as being with the defendant?

1……10……20……30……40……50……60……70……80……90……100
Not Familiar Moderately Familiar Absolutely Familiar

2. How consistent do you find the eyewitness’s description of the defendant?

1……10……20……30……40……50……60……70……80……90……100
Not Consistent Moderately Consistent Absolutely Consistent

3. How likely do you think it would be for the presented description inconsistencies to occur if the defendant was the criminal?

1……10……20……30……40……50……60……70……80……90……100
Not Likely Moderately Likely Extremely Likely

4. How reliable do you believe eyewitness testimony to be, in general?

1……10……20……30……40……50……60……70……80……90……100
Not Reliable Moderately Reliable Absolutely Reliable

5. How do you think the eyewitness’s age affected the believability of their testimony?

1……10……20……30……40……50……60……70……80……90……100
Less Believable No Impact More Believable
Appendix N: Manipulation Check

Please circle the best answer for each of the following questions.

1. How old was the eyewitness Keith Thomas?
   a) 10 years old
   b) 15 years old
   c) 20 years old
   d) 30 years old

2. What make was the stolen car?
   a) Toyota Corolla
   b) Honda Civic
   c) Ford Mustang
   d) Nissan Sentra

3. How was the witness, Keith Thomas, familiar with the defendant, Dylan Jones?
   a) he did not know the defendant
   b) the defendant delivered his mail
   c) from the convenience store where the defendant worked
   d) he was friends with the defendant

4. What type of inconsistencies with respect to Dylan Jones’ appearance were presented by Keith Thomas?
   a) no errors/inconsistencies
   b) height, weight, birthmark-related, ear description, amount of hair, eye description
   c) jacket and pant colour, shoe type, hair colour, piercings, facial hair description
   d) The entire description was inaccurate

5. What time of day did the theft occur?
   a) 5:00 p.m.
   b) 7:00 p.m.
   c) 9:00 p.m.
   d) 11:00 a.m.
Appendix O: Debriefing Form – Main Study

Purpose of this Research:
The purpose of this study is to determine if jurors perceive eyewitnesses as more or less credible depending on their age, their familiarity with the defendant, and the type of descriptor inconsistencies presented.

Value of this Research:
This research is important to determine what and how eyewitness evidence may impact jurors’ perceptions of eyewitness credibility. If jurors are found to consider certain eyewitnesses to be more credible than others for reasons that are not appropriate, legal proceedings might be changed in the future to compensate for this, which would possibly result in fairer trials.

Hypothesis/Predictions:
It is predicted that mock jurors will perceive the adult eyewitness as more credible than the child eyewitness but both will be considered equally honest. It is also predicted that familiarity with the defendant will increase jurors’ perceptions of eyewitness credibility. Finally, it is predicted that the presence of permanent descriptor inconsistencies (e.g. hard to change items such as height, weight, and birthmarks or moles) will indicate a lack of credibility more than non-permanent inconsistencies (e.g. easy to change items such as clothing or hair colour), which will in turn indicate less credibility than no inconsistencies at all.

Trial Transcripts:
The depictions of the crime were fictional in all transcripts and were created for use in this study. Subsequently, there is no right or wrong verdict because no actual verdict was ever handed out in a court of law.

If you have questions at a later date...
Research Personnel: You may contact the researcher or academic supervisor at any time if you have any further concerns or questions: Jennifer Reed (Principal Investigator, 520-2600, Ext. 3695); Dr. Joanna Pozzulo (Faculty Advisor, 526-2600, Ext. 1412)

Ethical Concerns: If you have any ethical concerns regarding this study please contact Shelley Brown (Chair, Carleton University Research Ethics Committee for Psychological Research, 520-2600, Ext. 1505).

If you have any other concerns: Please contact Dr. Anne Bowker (Chair, Dept. Of Psychology, 520-2600, Ext. 8218).

What to do if I found the experiment to be emotionally upsetting: If you find that you are uncomfortable, anxious, embarrassed, etc., it is important that you visit the Health and Counseling Services at Carleton University, or your family doctor or counselor. Health and Counseling Services can be located by phone at (613) 520-6674 or by email at hcs@carleton.ca. Please do not hesitate to contact them after this study if you require assistance.

Thank you for your participation in this study!