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### Competence is in the Eye of the Beholder: Perceptions of intellectually disabled child witnesses

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## Competence is in the Eye of the Beholder: Perceptions of intellectually disabled child witnesses

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This study examines mock jurors' perceptions of a young witness according to whether or not he was described as having an intellectual disability. Our study examined perceptions of a child witness younger (five or seven years) than previously studied. Mock jurors ( $n = 71$ ) viewed a short video excerpt of a boy recalling a personally experienced event, and then rated him across nine domains of eyewitness ability. The boy was described as either having an intellectual disability or typically developing. Participants rated the child more negatively on dimensions relating to cognitive competence, but not trustworthiness, when he was presented as having an intellectual disability. Participants also watched the child answer a series of suggestive questions; when described as having an intellectual disability he was rated as less accurate in responding to these. The findings have implications for the involvement of children with intellectual disabilities within the legal system.

**Keywords:** child maltreatment; children; children with intellectual disabilities; credibility; eyewitness testimony; intellectual disability; jury perceptions; suggestibility

### Introduction

Children with intellectual disabilities (CWID) are much more likely than their typically developing (TD) counterparts to witness or experience several types of abuse (neglect, physical, emotional, and sexual abuse) (Crosse, Kaye, & Ratnofsky, 1993; Sullivan & Knutson, 1998). Despite an inflated risk of experiencing or witnessing abuse, CWID are paradoxically less likely to have their complaints investigated or reach court. This reflects, in part, perceptions that they are incapable of providing reliable evidence (Westcott & Jones, 1999).

Research has shown that eyewitness testimony makes an important contribution to trial outcomes. Further, any testimony that raises doubt as to the witness' credibility exerts a significant impact on juror decision-making (Sigler & Couch, 2002). Child witnesses have been viewed as particularly unreliable (Ceci & Bruck, 1998), and studies surveying various legal professionals, psychologists and lay people have suggested a two-factor model for how testimony is evaluated. One factor—accuracy—tends to be associated with negative perceptions of children's competency, whilst the other—truthfulness—tends to be associated with positive perceptions of children (Buck & Warren, 2009).

Important advances have been made identifying the capacities and vulnerabilities of child witnesses, and factors that may enhance or detract from their reliability (Brown,

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Lamb, Pipe, & Orbach, 2008). The profile of child witnesses has been raised considerably, in part due to the media attention that often accompanies cases of child abuse, particularly those occurring in care settings (e.g., daycare centres). Thus, it may be that there has been a concomitant shift in public perception of the capacities of child witnesses to provide reliable evidence about their experiences.

Although survey data indicate negative stereotypes of child witnesses, studies of mock jurors' assessments of actual child witnesses have produced contradictory findings. When comparing younger with older children and adults, findings have encompassed the entire spectrum of possible outcomes; some studies reveal no differences in perceived credibility (for example, Bottoms & Goodman, 1994; Leippe & Romanczyk, 1989), others reveal positive perceptions relative to adults (for example, Ross, Dunning, Toglia, & Ceci, 1990), whilst still others demonstrate negative perceptions relative to older children and adults (for example, Goodman, Golding, & Haith, 1984; Nightingale, 1993; Wright, Hanoteau, Parkinson, & Tatham, 2010) (Table 1 summarises existing studies).

Credibility ratings may vary according to which aspect of eyewitness testimony is especially salient for that context. The dimensions of truthfulness and accuracy were identified as contributing to evaluations of witness credibility (Miller & Burgoon, 1982). These have also been described as cognitive ability and honesty (for example, Leippe & Romanczyk, 1987; Ross, Jurden, Lindsay, & Keeney, 2003; Ross, Miller, & Moran, 1987) and as trustworthiness and (cognitive) competency (for example, Bottoms & Goodman, 1994; Goodman, Bottoms, Herscovici, & Shaver, 1989; Nikonova & Ogloff, 2005; Schmidt & Brigham, 1996). Such dimensions have been applied to explain how evaluations of child witness credibility may vary according to the context of the trial. Where expertise, accuracy and competency in remembering an event (e.g., as a bystander witness) are salient, then children may be evaluated more negatively than when trustworthiness is emphasised (for example, McCauley & Parker, 2001). In cases of child sexual abuse, for example, juries may presume that the child has no motivation to lie and is cognitively incapable of fabricating their testimony because of immature sexual knowledge (for example, Bottoms, Nysse-Carris, Harris, & Tyda, 2003). They may therefore perceive children as more trustworthy than adults in a similar context (e.g., a sexual assault case) and thus more credible (Goodman et al., 1984).

Ross et al. (2003) caution that although the two-factor model of child witness credibility appears to be robust for child sexual abuse cases it may not be predictive across a range of trial types. Indeed, conflicting findings have emerged from studies using trials that have varied in focus from witnessing a road accident (for example, Goodman et al., 1984) to a trial of drug possession charges (for example, Ross et al., 1990) to child sexual abuse cases (for example, Bottoms & Goodman, 1994; Schmidt & Brigham, 1996) (see Table 1). Ross et al. (1990) suggest that further systematic studies are needed to explore which factors relating to both the witness (e.g., witness confidence) and the trial (e.g., strength of the case, trial type) play a role in perceptions of credibility. Accordingly, Wright et al. (2010) demonstrated a complex relationship between child age and mock juror characteristics on ratings of child witness reliability. In this study we explore the impact of age and intellectual disability on evaluations of a child's testimony.

Little is known about how CWID are perceived by juries. Extant studies on eyewitness ability typically show that, when compared with children of a similar mental age (developmental level), CWID perform as well or better in the amount and accuracy of information freely reported in response to open questions, although suggestive and/or

Table 1. Summary of selected studies examining credibility of child witnesses.

Authors	Age evaluated (years)	Type of trial	Testimony presentation mode	Credibility ratings
Goodman et al. (1984)				
Experiment 1	6, 10, 30	Vehicle homicide	Written scenario	6 years < 10 years < 30 years
Experiment 2	6, 10, 30	Vehicle homicide	Video re-enactment	6 years < 30 years
Goodman, Golding, Helgeson, Haith, and Michelli (1987)				
Experiment 1	6, 10, 30	Vehicle homicide	Written scenario	6 years < 10 years < 30 years
Experiment 2	6, 10, 30	Murder	Written scenario	6 years < 30 years
Experiment 3	6, 10, 30	Vehicle homicide	Video re-enactment	6 years < 30 years
Leippe and Romanczyk (1987)	5-9, adults		Survey	Children more suggestible, more sincere, equally consistent and able to recall
Leippe and Romanczyk (1989)				
Experiment 1	5-6, 8-9, 12-13, 18-22	Description of staged event + interview	Written scenario	5-6 years < 8-9 years < 12-13 years; 12-13 years > 18-22 years
Experiment 2	6, 10, 30	Robbery/murder	Written summary	6 years < 30 years; 10 years = 30 years
Experiment 3	6, 10, 30	Robbery/murder	Written summary	No effect of age
Experiment 4	6, 30	Robbery/murder	Written summary	6 years > 30 years
Experiment 5	6, 30	Robbery/murder	Transcript vs. summary	Summary 6 years < 30 years; transcript 6 years = 30 years
Ross et al. (1990)				
Experiment 1	8, 21, 74	Drug possession	Video re-enactment	8 years > 74 years > 21 years
Experiment 2	8, 21, 74	Drug possession	Written scenario	8 years > 74 years > 21 years
Experiment 3	6, 8, 21, 74		Survey	Children rated negatively for accuracy and suggestibility, equal for honesty
Bottoms and Goodman (1994)				
Experiment 1	6, 14, 22	Child sexual abuse	Written scenario	6 years > 22 years, 10 years ns
Experiment 2	6, 10, 14	Child sexual abuse	Written scenario	No effect of age
Experiment 3	11, 14	Child sexual abuse	Video footage of trial	10 years > 14 years

(Continued)

Table 1. (Continued.)

Authors	Age evaluated (years)	Type of trial	Testimony presentation mode	Credibility ratings
Schmidt and Brigham (1996)	5, 10, 15	Child sexual abuse	Video re-enactment	5 years more truthful, accurate than 15 years
Peled et al. (2004)	10, 15 (ID), 15	Child sexual abuse	Written scenario; survey	15 years (ID) = 10 years; 15 years (ID) < 10 + 15 years, 10 years < adult, 10 years < 15 years
Nikonova and Ogloff (2005)	7, 10, 23	Theft	Audio-taped testimony vs. written summary	7 + 10 years > 23 years
Castelli, Goodman, and Ghetti (2005)				
Experiment 1	4, 7	Child sexual abuse	Written scenarios	No effect of age
Experiment 2	4, 7	Child sexual abuse	Written scenarios	No effect of age
Nathanson and Platt (2005)	≤9 (ID), ≤9, adults		Survey of attorneys	Majority rated TD children as equally or more sincere; learning disabled children rated as less sincere than TD
Henry, Ridley, Perry, and Crane (2011)	11 (ID), 11 (TD)	Free recall of video clip of crime	Transcript	Children with ID rated < TD for credibility

specific questions may be problematic (for example, Agnew & Powell, 2004; Brown, Lewis, Lamb, & Stephens, 2012a; Henry & Gudjonsson, 2003). Thus, in terms of capability, it seems there is no evidence-based foundation for the exclusion of these children from judicial processes, if developmentally sensitive communication strategies are employed (Brown, Lewis, Lamb, & Stephens, 2012b).

Unfortunately, participation in the legal system reflects more than simple capability. Decisions are made, both formally and informally, at each stage of the investigative process that may influence whether a case that relies on the testimony of a child witness with an intellectual disability will proceed. For example, parents, social workers, police, investigative interviewers, lawyers and judges all make judgements of the capacity of a child witness and the contribution of their evidence to a case outcome, even if the case never reaches court. Nonetheless, CWID do participate in forensic interviews and court trials in a number of countries (for example, Cederborg & Lamb, 2006, 2008). Indeed, 4% of the children testifying as witnesses in New Zealand recently had an intellectual disability (Hanna, Davies, Henderson, Crothers, & Rotherham, 2010) and, between August 2009 and June 2011, 215 applications were made for registered intermediaries to support child witnesses in the United Kingdom (Connolly, personal communication, June 13, 2011). Even when cases involving CWID reach court, procedures seldom accommodate to witnesses' intellectual difficulties (Cederborg & Lamb, 2006; Kebbell, Hatton, & Johnson, 2004; O'Kelly, Kebbell, Hatton, & Johnson, 2003).

Negative perceptions of the reliability and suggestibility of witnesses with intellectual disabilities (ID) appear to be widespread amongst police officers (Aarons & Powell, 2003) and legal professionals (Nathanson & Platt, 2005), meaning that cases are less likely to be investigated because successful outcomes (i.e., guilty verdicts) are deemed unlikely (Aarons, Powell, & Browne, 2004). Four recent studies have also demonstrated a negative juror bias towards both adults with ID and CWID. Stobbs and Kebbell (2003) presented mock jurors with written transcripts that were described as being from an adult from the general population, from an adult with mild ID, or from an adult with mild ID in addition to expert evidence regarding his abilities. Jurors rated the witness with ID as less credible, competent, accurate, and “good [as] a witness”. Furthermore, they gave fewer “guilty” ratings of the perpetrator of the witnessed crime.

Peled, Iarocci, and Connolly (2004) examined perceptions of child witnesses with ID. Mock jurors were asked questions about: the general credibility and eyewitness ability of children and adults; and a particular witness’s credibility (presented in a written transcript). The witness was described as either: a 15-year-old with a mild ID (mental age of 10); or a 10-year-old TD child. Peled et al. (2004) found that when responding to the general questions about eyewitness ability, jurors rated the 15-year-old with an ID as less credible than both a 15-year-old TD and a 10-year-old TD child. When evaluating the written transcripts, however, no differences were found according to whether the testimony was presented as coming from a child with ID or a TD child. Peled et al. (2004) concluded that a general (negative) bias regarding the competency of witnesses with IDs may be ameliorated when jurors are presented with actual testimony.

Nathanson and Platt (2005) examined attorneys’ perceptions of CWID as witnesses. They showed that CWID were perceived as less sincere, accurate, or able to make accurate face identifications, and more suggestible and inconsistent than TD children. Finally, Henry, Ridley, Perry, and Crane (2011) examined ratings of the credibility of CWID and TD children’s (written) transcripts of their recall of a brief video clip depicting a minor crime. Mock jurors were blind to the cognitive ability of the child whose transcript they were evaluating. Transcripts from children with ID were rated as less credible than those from TD children across a range of credibility characteristics. Together these studies raise doubts, therefore, about the suitability of the two-factor model of credibility when examining perceptions of witnesses with ID.

This study evaluates potential jurors’ perceptions of a witness—presented as either TD or with an ID—in terms of credibility and competency in providing eyewitness testimony. Research with TD children has largely focused on eyewitness testimony in the preschool and elementary school years. Paradoxically the vast majority of studies of eyewitness testimony in CWID have included children older than 10 years (for exceptions see Agnew & Powell, 2004; Brown et al., 2012a; Dent, 1986; Young, Powell, & Dudgeon, 2003). The few available studies of jurors’ perceptions of CWID’s credibility have used a case example of an adolescent (Bottoms, Nysee-Carris, Harris, & Tyda, 2003; Peled et al., 2004) or written transcripts from children 11 years and older. Wright et al. (2010) recently demonstrated that perceptions of TD children’s memory reliability increased with age, with the rate of increase being particularly evident between three and six years. Thus, we extend previous work by examining whether a much *younger* child with an ID would be perceived as a more or less competent witness depending on whether he was presented as TD or with an ID, what the effect of labelling on comparisons with TD children of different ages (developmentally versus chronologically similar) would be, and whether differences would also be

observed when the description of the chronological age of the child was manipulated in the absence of information about an ID.

A further issue to be explored concerns the effects of jurors' perceptions of witnesses when their testimony is presented in different formats. In this study we examined evaluations of a child with an ID using a more "ecologically valid" procedure (via video rather than written format). The studies cited above rely upon mock jurors' assessments of the written testimony of children and adults with ID (with the exception of Bottoms et al., 2003). Peled et al. (2004) called for further research with CWID that more closely resembles the contexts in which jurors are called to evaluate eyewitnesses. Thus, this study involved participants watching a child reporting a personally experienced event in an interview using a protocol that incorporates best practice guidelines for forensic interviews with children, followed by a series of suggestive questions about aspects of the event. The suggestive questions included both leading (towards the truth) and misleading (away from the truth) questions about central and peripheral aspects of the event, much like those often employed by lawyers during cross-examination (Zajac, Gross, & Hayne, 2003).

We explored hypotheses relating to dimensions of credibility in child witnesses and the impact of an ID and age on perceptions of credibility. We expected that:

Hypothesis 1: A child presented as having an ID would be rated more negatively on dimensions relating to cognitive competency and suggestibility, but not trustworthiness, than when presented as being TD and of the same chronological age. We expected differences in estimated cognitive competency and suggestibility to reflect awareness of the cognitive limitations that characterise an intellectual disability. We did not expect any differences in trustworthiness given that the nature of the eye-witnessing event does not imply any potential motivation to lie and perceptions that CWID may lack the cognitive capacity for lying (Bottoms et al., 2003).

With respect to children of the same mental age there were two logical contrasting positions. One, the *mental age hypothesis*, would hold that:

Hypothesis 2a: A child presented as being of the same mental age would be equally competent, trustworthy and suggestible, irrespective of their chronological age and cognitive ability (CWID).

The contrasting view, the *disability bias hypothesis*, holds that:

Hypothesis 2b: A child presented as having an ID, due to cognitive delay or impairment, would be less able to encode and recall events and thus be less cognitively competent and more suggestible, but not less trustworthy than when presented as younger (same mental age) and TD.

## **Method**

The research was approved by the Departmental Ethics Committee in accordance with the guidelines of the British Psychological Society and American Psychological Association.

### ***Participants***

Seventy-one students (eight males, 63 females) participated in the study. Ages ranged from 18 to 30 years (mean = 19.46, standard deviation [*SD*] = 2.22). When asked to estimate the amount of contact that they had with children under the age of 10 years



(e.g., siblings or relatives, through work, through volunteer services) on a scale from one (none) to seven (regular), the modal score was six and the mean was 5.0 ( $SD = 1.68$ ). Thus, most participants had some contact with young children, which largely consisted of babysitting, contact with extended family or siblings, and work in afterschool programmes. Only two participants were parents. They were then asked to identify their contact with six special populations of children, including those with ID or behaviour problems. Seventy percent had no contact but the rest had at least one type of experience. Finally, 30% reported that they or a family member had contact with the courts as a defendant, a witness or a complainant.

## **Materials**

### ***Video Excerpt***

Participants were presented with a four-minute excerpt taken from an interview conducted for a different study. The video showed a young boy describing a staged event that had occurred at his school one week earlier. The event was a 40-min class-based interactive lesson about health and safety; children progressed around four stations in small groups and completed tasks (e.g., learning to care for a cut and apply a plaster, learning to tie a sling on their partner's arm; see Brown et al., 2012a, for more detail). The interviewer followed a modified version of the National Institutes of Child Health and Human Development interview protocol, which operationalises best practice guidelines for forensic interviews with children (Orbach et al., 2000). The protocol uses a flexible approach to interviewing that optimises the use of open-ended prompting throughout the entire interview, with inclusion of directive questions as required to clarify ambiguous details or elicit important information (Lamb, Hershkowitz, Orbach, & Esplin, 2008). At the conclusion of this excerpt, participants rated the child using the Post-Testimony Credibility Questionnaire (PTCQ) described below. Participants then viewed the child responding to a series of 16 suggestive questions that varied according to their structure (open versus closed) and leadingness (leading versus misleading).

### ***Child Label***

Pilot testing with 11 participants showed that naïve viewers were as likely to describe the child as being TD as having an ID, and estimates of his age varied from five to nine years, with the modal response ( $n = 6$ ) being six years. One-third of the participants were informed that the child on the video was seven years old and TD. One-third of participants were informed that he was seven years old with a mild ID that meant he was functioning at the level of a TD five-year-old. One-third of the participants were informed that he was five years old and TD.

### ***Post-Testimony Credibility Questionnaire***

The questionnaire assessed participants' ratings of the eyewitness abilities of the child presented in the video excerpt. The PTCQ was modelled on that used by Peled et al. (2004), but additional questions were added to ensure equal numbers of questions about each domain. The questions assessed accuracy, communicative ability, ability to answer questions, recall ability, completeness, credibility, suggestibility, confidence, and consistency. The PTCQ consisted of 27 rating scales (1 = not at all; 7 = very), with higher scores reflecting greater perceived credibility (reversed scoring for items relating to suggestibility). There were three items for each domain. The following instructions were given, with variations according to each condition indicated in parentheses:

You will now watch a short excerpt from a video interview with Joseph, who is 7 (5) years old. He is of average (below average) intelligence. This means he is functioning at a level that is consistent with (below) what would normally be expected for a child of his age. [for CWID: Joseph's IQ score of 65 indicates that his cognitive functioning is at a level that would be consistent with that of an average 5-year-old boy]. The interview was conducted as part of a separate study where children took part in a novel staged event at school and one week later were interviewed by a trained interviewer using a forensic interview protocol to elicit their eyewitness testimony of the event.

### ***Suggestibility Assessment***

After completing the PTCQ participants watched a second excerpt from the child's interview; this showed the child responding to a series of suggestive questions. The participants were given the following instructions:

You will now watch an excerpt from the last part of the interview. In this section the interviewer asks a series of suggestive questions about different aspects of the staged event. Some of the questions are about events or details that did not happen or ask Joseph to provide or confirm information that is not true. Some of the questions are about events or details that did happen, or ask Joseph to provide or confirm information that is true. For each question please select the number that most closely corresponds to your views ...

The suggestibility assessment consisted of four questions using the same seven-point rating scale as the PTCQ and asked about the degree to which Joseph agreed with the suggestions made (acquiescence), resisted the suggestions made, the accuracy of his responses, and his overall level of suggestibility in this part of the interview. No information was provided to participants about Joseph's "actual" accuracy in responding to these questions; participant ratings therefore reflected subjective perceptions rather than objective evaluations.

### ***Procedure***

Participants were randomly assigned to condition (labelling of child on the video). Participants began by completing a pre-test questionnaire assessing the amount and type of contact they had previously had with children (TD and those with developmental disorders), and involvement (personally or through a family member) in a court case (either as a defendant, complainant or witness) in which a child had been a witness. Participants then watched the video clip and completed the PTCQ. Finally they watched the excerpt of Joseph responding to the suggestibility questions and completed the suggestibility assessment.

### **Results**

A series of analyses was performed on constructed scales (described below) on a larger dataset ( $N = 144$ ), including this one, to examine whether contact with children, experience with children in special populations, or involvement of themselves or a family member in the court system had an influence on the assessments made of the child's eyewitness ability. As only one out of 30 correlations (fewer than would be expected by statistical chance) was significant (if they had been in court as a defendant the child was seen as less trustworthy) and the correlation was so low ( $\rho = 0.17$ ), we did not pursue these measures any further.

In the following analyses of variance, degrees of freedom with decimal points indicate the use of the Greenhouse–Geisser correction where the distributions of dependent measures suggested a need for conservatism.

**Video Questions (Post-Testimony Credibility Questionnaire)**

To reduce the amount of data and enable comparisons between the different types of questions, two scales were constructed to fit Miller and Burgoon’s (1982) distinction between cognitive competency and trustworthiness. Cognitive competency consisted of the mean score of items concerning accuracy, communicative ability, ability to answer questions, recall ability and completeness ( $\alpha = 0.93$ ). The trustworthiness scale involved questions concerning credibility, suggestibility, confidence and consistency ( $\alpha = 0.8$ ). These values of Cronbach’s alpha were sufficiently high for us to conclude that each group of questions formed uniform scales.

How the child was labelled on each of the various domains of eyewitness ability was first examined in a mixed-design analysis of variance (ANOVA) with scale type (cognitive competence versus trustworthiness) as the within-participants factor and child label as the between-participants factor. This demonstrated a significant main effect of scale ( $F(5.82, 395.82) = 49.72, p < 0.001, \eta_p^2 = 0.42$ ) and child label ( $F(2, 68) = 3.27, p < 0.05, \eta_p^2 = 0.09$ ), and a significant interaction between the two ( $F(11.64, 395.82) = 2.11, p < 0.05, \eta_p^2 = 0.06$ ). Tukey tests ( $\alpha = 0.05$ ) revealed that when the child was labelled as having an ID he was seen as less cognitively competent than when labelled as a TD seven-year-old (Tukey,  $p = 0.018$ ) (Table 2). There was no difference in ratings when the child was labelled as a TD five-year-old from either of the other two conditions. There was no effect of how the child was labelled on ratings of trustworthiness ( $F(2, 68) = 1.46$ ).

Table 2. Mean (standard deviation) ratings of child on the PTCQ and suggestibility assessment.

	Child Label		
	TD five-year-old	TD seven-year-old	ID seven-year-old
Cognitive competence scale	4.77 (0.86)	4.94 (0.88)	4.24 (0.87)
Accuracy	5.15 (1.02)	5.00 (0.90)	4.31 (1.00)
Communicative ability	4.83 (0.91)	4.71 (0.98)	4.10 (1.07)
Ability to answer questions	5.03 (0.92)	5.31 (0.90)	4.67 (1.12)
Recall ability	4.11 (1.04)	4.83 (1.21)	4.01 (1.03)
Completeness	4.71 (1.09)	4.85 (1.27)	4.11 (1.10)
Trustworthiness scale	4.80 (0.61)	4.98 (0.79)	4.62 (0.82)
Credibility	5.38 (0.95)	5.80 (0.94)	5.31 (1.10)
Suggestibility	3.42 (1.24)	3.84 (1.58)	3.52 (1.08)
Confidence	5.77 (0.89)	5.97 (0.87)	5.22 (1.31)
Consistency	4.61 (0.66)	4.31 (0.66)	4.43 (0.66)
Overall assessment (recall)			
Reliability	5.09 (1.27)	5.32 (1.22)	4.71 (1.20)
Credibility	5.41 (1.14)	5.60 (1.08)	5.29 (1.12)
Suggestibility	3.82 (1.18)	4.36 (1.35)	4.50 (1.47)
Suggestive questions			
Acquiescence	4.24 (1.15)	3.96 (1.10)	4.00 (1.18)
Resistance	4.88 (1.27)	4.76 (1.23)	4.17 (1.40)
Accuracy of responses	4.65 (1.22)	4.88 (0.88)	3.88 (1.54)
Overall suggestibility	3.65 (1.22)	3.44 (1.36)	3.75 (1.59)

To examine the above interaction a multivariate ANOVA on the individual levels of each scale was conducted, with child label as a between-participants factor. The multivariate ANOVA was significant ( $F(18, 120) = 1.74, p < 0.05, \eta_p^2 = 0.21$ ). Univariate analyses of each item on each scale indicated significant main effects of child label on ratings of accuracy ( $F(2, 68) = 5.04, p < 0.01, \eta_p^2 = 0.13$ ), confidence ( $F(2, 68) = 3.67, p < 0.05, \eta_p^2 = 0.09$ ), communicative ability ( $F(2, 68) = 3.65, p < 0.05, \eta_p^2 = 0.10$ ), and recall ability ( $F(2, 68) = 3.98, p < 0.05, \eta_p^2 = 0.11$ ). Tukey tests ( $p < 0.05$ ) indicated that when the child was described as having an ID he was rated lower on accuracy ( $p = 0.04$ ), confidence ( $p = 0.037$ ) and recall ability ( $p = 0.032$ ) than if he was described as a TD child of the same age, and lower on communicative ability than a younger TD child (see Table 2).

The ratings of the child's acquiescence, resistance, accuracy of responses, and overall suggestibility when posed with a series of suggestive questions were examined in a multivariate ANOVA with the same structure as the one above. The effect of the label that the child was given approached significance ( $F(6, 120) = 1.85, p < 0.07, \eta_p^2 = 0.11$ ). One univariate effect was observed; a significant main effect of child label was evident for accuracy of responses to the suggestive questions ( $F(2, 63) = 4.29, p < 0.05, \eta_p^2 = 0.12$ ). Tukey tests ( $p = 0.048$ ) showed that when the child was presented as having an ID he was rated as less accurate than if described as TD and of the same age.

## Discussion

The results of this study lend support to the idea that perceptions of CWID may vary according to the dimension of testimony that is evaluated. In addition they suggest that CWID are perceived as particularly unreliable in their ability to recall and report past experiences. When participants assessed a child described as having an ID they rated him as less accurate and less able to recall his experiences, both domains of cognitive competence, than when he was described as TD and of the same age, and less able to communicate them than a younger TD child. No differences emerged relative to the overall trustworthiness scale, although ratings of confidence were lower when the child was presented as having an ID than for an older TD child. This division seems to be compatible with the two-factor model of witness credibility (Miller & Burgoon, 1982; Ross et al., 2003).

These findings provide both a partial replication and a point of difference from previous studies of juror perceptions of CWID credibility. For example, Henry et al. (2011) demonstrated that older CWID were rated more negatively on credibility characteristics equivalent to both cognitive competence and trustworthiness. Whilst we found a similar pattern in an evaluation of a much younger CWID for abilities relating to cognitive processes, we did not see the same concerns regarding trustworthiness or credibility. In contrast, Peled et al. (2004) demonstrated no differences between evaluations of a witness described as TD or having an ID across any aspect of eyewitness ability and credibility when written statements were evaluated, but showed a bias against older CWID when general perceptions of their abilities were assessed. Whether the differences in our findings reflect a more positive perception of younger CWID or differences in methodology (e.g., viewing a video of the child rather than a written summary, age of the child evaluated, characteristics of the participant sample) requires further study. For example, Peled et al. (2004) suggest that viewing actual testimony

from a witness may ameliorate any negative preconceptions held, and this effect may have been accentuated when the testimony was watched rather than read.

The lack of differentiation between when the child was described as having an ID versus TD and younger suggests participants adopted a developmental approach (Hypothesis 2a) in evaluating the child and judged according to mental age rather than the presence of a disability. This is encouraging given the emerging evidence of the capacities of CWID when compared with their developmentally similar TD counterparts (for example, Brown et al., 2012a).

What may have contributed to our participants rating a CWID as positively as a TD younger child? The instructions given to them at the outset of the task may have gone some way to ameliorating any negative biases held towards CWID. In these instructions the mention of the level of the child's cognitive functioning was presented in the context of a developmentally equivalent level of functioning—providing a clear anchor from which to evaluate the child. Given that the observed child was reasonably eloquent, particularly for a five-year-old, this might suggest that he was perceived as particularly competent for this age (as seen in the equivalence of the TD groups). It may be that what was most salient to the participants in this description of the witness was the mention of developmental level of functioning rather than chronological age or cognitive ability, and thus participants were primed to view the child in a more positive fashion. It is possible that if such anchoring information was not provided, then jurors may have evaluated the child described as having an intellectual disability more negatively due to a lack of knowledge as to how he ought to act or respond.

Previous analyses suggest that credibility ratings may be affected by the degree to which preconceived notions or stereotypes regarding the ability of children to give testimony are upheld or challenged when faced with actual testimony (Leippe & Romanczyk, 1989). For example, if juries hold negative perceptions of intellectually disabled children as witnesses and are then presented with a child who appears competent, their expectation will be violated—this may produce a “contrast effect” and thus positively inflated ratings (Jussim, Coleman, & Lerch, 1987). This same explanation may hold for our failure to demonstrate differences in ratings of the child when age, rather than cognitive ability, was manipulated (i.e., comparisons between the child described as TD and five years versus TD and seven years). Previous studies have provided evidence for an increase of credibility ratings with age (for example, Nightingale, 1993), with Wright et al. (2010) demonstrating particularly dramatic increases across the age range we manipulated. Once again, it may be that such differences are less apparent when participants view a video of a witness rather than read a statement, as factors other than the labelling may come into play.

These findings have direct relevance to the issue of how witnesses are described to the members of the court and any warnings or explanations that may be offered to the jury prior to their testimony. Further research is needed to examine how the information provided by a researcher or lawyers may influence jurors' evaluations. To date the evidence suggests that courts do not pay attention to the need to view CWID from a developmentally sensitive perspective rather than considering them as equivalent to TD children of the same chronological age. In Sweden only 13 of 41 cases involving a CWID included a psychological assessment of the children's disability, but 11 of these were assessments previously produced as general educational or social welfare reports, and were thus not tailor-made for the courts or the particular case (Cederborg & Lamb, 2006). The lack of detail allowed judges simply to dismiss the validity of the child's account of events. Similarly, examinations of court transcripts of testimony

involving adult witnesses with and without ID in the United Kingdom demonstrated no difference in the types of questions asked by lawyers or the degree of intervention by judges—neither were adjusting their practice to accommodate the abilities and/or vulnerabilities of witnesses with ID (Kebbell et al., 2004; O’Kelly et al., 2003).

In some jurisdictions the courts have recently taken more pains to represent the views of individuals with ID. In the United Kingdom, for example, a new system of witness intermediaries was established in 2004 to help such witnesses to understand proceedings and be understood in court. These are appointed because of their experience in specialist communication facilitation skills. The evidence provided in this study suggests that additional intervention may well be required to help juries and court officials overcome negative stereotypes held toward eyewitness ability in CWID, and emphasise their equivalence to children of a similar developmental level. Further research is needed to explore the content and effectiveness of jury instructions in ameliorating biases that may diminish the contribution of CWID’s testimony to the verdict reached.

Of course, the processes that underlie jury deliberations and impression formation are more complex than captured in this study. As with all juror perception research, a compromise must be made between reality and experimental control. Our “jury” sample was restricted in age and gender and thus did not represent the diversity that would be encountered in reality. A number of other important factors that may in themselves influence juror perceptions were not examined here (e.g., the consequences associated with a real trial, more extensive information and types of evidence, no group-based deliberation). The extent to which these variables systematically influence outcomes appears to be variable, however. It is the convergence of evidence from studies using different types of methodology that allows for an understanding of how CWID may be perceived by jurors (for a discussion of mock juror study methodology, see Golding, Dunlap, & Hodell, 2009). We showed participants the child responding to suggestive questions, but these were not as challenging or confrontational as those likely to be posed in cross-examination. Research is also needed to determine the extent to which CWID’s responses to cross-examination unduly influence perceptions of the reliability and credibility of their testimony. Finally, our stimulus was restricted to one video and there may have been something idiosyncratic about this video that biased perceptions. We feel this is unlikely, however, given that group differences were found with this video as a function of how the child was described.

## **Conclusion**

Having information about a child’s cognitive ability appears to influence how they are evaluated with respect to their ability to recall and report their experiences, although not to how trustworthy they are in doing so. The current study adds to the emerging body of literature examining the involvement of CWID in the legal system, and provides evidence from which to develop education and intervention materials to support better access to justice for this very vulnerable group.

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